

Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 196359 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196359 has 135 members, 20 are drafts.

Phages represented in each track:

- Track 1 : Hedwig_18
- Track 2 : Bowser_17
- Track 3 : BackstagePass_17
- Track 4 : Eyes_17
- Track 5 : GEazy_17, HannahD_17
- Track 6 : BBQValindra_17
- Track 7 : Kiko_18
- Track 8 : TaronosaurusRx_17
- Track 9 : ZAYM_17
- Track 10 : Bunker_17
- Track 11 : Schnabeltier_17, MagicMan_17
- Track 12 : Opie_17
- Track 13 : DirtyBoi_18
- Track 14 : VanDeWege_32
- Track 15 : Togo_29, Portcullis_29, Shinji_29, SmokingBunny_29
- Track 16 : Savbucketdawg_29, Jambalaya_29, PinkCoffee_31, CoveyB_32
- Track 17 : ClamChowder_31, Gezellig_30, Halo3_30, PullumCavea_29, KimmyK_31, Fugax_31, Barb_31, Salvador_29, Phlop_29, Evamon_29, Wizard_29, Twister6_31, Arri_32, Danyall_31
- Track 18 : TillyBobJoe_29
- Track 19 : YungMoney_31
- Track 20 : Fireball_30
- Track 21 : RogerDodger_32
- Track 22 : Nubi_29
- Track 23 : Valary_32
- Track 24 : Bakery_30
- Track 25 : Mutzi_31
- Track 26 : Clown_33
- Track 27 : Belphegor_31
- Track 28 : Nordenberg_27
- Track 29 : ChadMasterC_33
- Track 30 : LilHam_30, Ashertheman_33, SchottB_31, Baumdotcom_32
- Track 31 : Bizzy_33
- Track 32 : Brandonk123_34
- Track 33 : Shivanishola_34
- Track 34 : Lennon_33, Sitar_33
- Track 35 : Geodirt_30

- Track 36 : Love_36
- Track 37 : RiverRaider_33
- Track 38 : Gaea_32
- Track 39 : Angelicage_31, Affeca_31
- Track 40 : McKinley_35
- Track 41 : BobBob_30, Tangent_33
- Track 42 : Kewpiedoll_32
- Track 43 : Fosterous_31
- Track 44 : Fitzgerald_31
- Track 45 : Ribeye_33, Derg_30, Baddon_32
- Track 46 : YorkOnyx_33
- Track 47 : Saronaya_32, Gustavo_32
- Track 48 : Sedona_33, Keitabear_33
- Track 49 : Galadriel_33
- Track 50 : Charming_33
- Track 51 : Jabberwocky_31, Sanjuju_31
- Track 52 : Barsten_33
- Track 53 : Flatwoods_33
- Track 54 : Tangerine_32
- Track 55 : Kamashten_32, Thing3_32
- Track 56 : Rofo_33, Paries_35
- Track 57 : JKSyngboy_30
- Track 58 : Kroos_33
- Track 59 : Kwobi_33
- Track 60 : Stultus_31
- Track 61 : MoontowerMania_32
- Track 62 : Ailee_31
- Track 63 : Bibwit_32
- Track 64 : Tycho_32
- Track 65 : Vivi2_35
- Track 66 : StorminNorm_32
- Track 67 : Leonard_31, Phinally_31
- Track 68 : Inspectinfecti_32
- Track 69 : Hans_33, Phauci_24
- Track 70 : Ali17_29
- Track 71 : EMoore_29
- Track 72 : MelBins_32
- Track 73 : Kwekel_30
- Track 74 : Twonlo_28, Chickadee_30, Tiamoceli_31
- Track 75 : RoadKill_28
- Track 76 : GTE6_30
- Track 77 : Dxdert_31
- Track 78 : EdmundFerry_29
- Track 79 : Scioto_33, Natkenzie_33, Abblin_33, Sampson_33
- Track 80 : DoctorFroggo_32, Verity_32, Delrey21_32
- Track 81 : ViaConlectus_33, APunk_34
- Track 82 : Zipp_32
- Track 83 : Tardus_34
- Track 84 : Zitch_34
- Track 85 : Lilbeanie_28
- Track 86 : Morgana_17
- Track 87 : ModicumRichard_17
- Track 88 : ObLaDi_17

- Track 89 : Cafasso_17
- Track 90 : Aleemily_17
- Track 91 : VanLee_18

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 22, it was called in 60 of the 115 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- APunk_34, Abblin_33, Affeca_31, Ailee_31, Angelicage_31, Ashertheman_33, Baddon_32, Barsten_33, Baumdotcom_32, Bibwit_32, Bizzy_33, BobBob_30, Brandonk123_34, ChadMasterC_33, Charming_33, Chickadee_30, Delrey21_32, Derg_30, Dextert_31, DoctorFroggo_32, EdmundFerry_29, Fitzgerald_31, Flatwoods_33, Fosterous_31, GTE6_30, Gaea_32, Galadriel_33, Geodirt_30, Gustavo_32, JKSyngboy_30, Jabberwocky_31, Kamashten_32, Keitabear_33, Kewpiedoll_32, Kroos_33, Kwekel_30, Kwobi_33, Lennon_33, LilHam_30, Love_36, McKinley_35, MoontowerMania_32, Natkenzie_33, Nordenberg_27, Paries_35, Ribeye_33, RiverRaider_33, RoadKill_28, Rofo_33, Sampson_33, Sanjuju_31, Saronaya_32, SchottB_31, Scioto_33, Sedona_33, Shivanishola_34, Sitar_33, StorminNorm_32, Stultus_31, Tangent_33, Tangerine_32, Tardus_34, Thing3_32, Tiamoceli_31, Twonlo_28, Tycho_32, Verity_32, ViaConlectus_33, Vivi2_35, YorkOnyx_33, Zipp_32, Zitch_34,

Genes that have the "Most Annotated" start but do not call it:

-

Genes that do not have the "Most Annotated" start:

- Aleemily_17, Ali17_29, Arri_32, BBQValindra_17, BackstagePass_17, Bakery_30, Barb_31, Belphegor_31, Bowser_17, Bunker_17, Cafasso_17, ClamChowder_31, Clown_33, CoveyB_32, Danyall_31, DirtyBoi_18, EMOore_29, Evamon_29, Eyes_17, Fireball_30, Fugax_31, GEazy_17, Gezellig_30, Halo3_30, HannahD_17, Hans_33, Hedwig_18, Inspectinfecti_32, Jambalaya_29, Kiko_18, KimmyK_31, Leonard_31, Lilbeanie_28, MagicMan_17, MelBins_32, ModicumRichard_17, Morgana_17, Mutzi_31, Nubi_29, ObLaDi_17, Opie_17, Phauci_24, Phinally_31, Phlop_29, PinkCoffee_31, Portcullis_29, PullumCavea_29, RogerDodger_32, Salvador_29, Savbucketdawg_29, Schnabeltier_17, Shinji_29, SmokingBunny_29, TaronosaurusRx_17, TillyBobJoe_29, Togo_29, Twister6_31, Valary_32, VanDeWege_32, VanLee_18, Wizard_29, YungMoney_31, ZAYM_17,

Summary by start number:

Start 1:

- Found in 32 of 135 (23.7%) of genes in pham
- Manual Annotations of this start: 29 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arri_32 (DC1), Bakery_30 (DC1), Barb_31 (DC1), ClamChowder_31 (DC1), Clown_33 (DC2), CoveyB_32 (DC1), Danyall_31 (DC1), Evamon_29 (DC1), Fireball_30 (DC1), Fugax_31 (DC1), Gezellig_30 (DC1), Halo3_30 (DC1), Jambalaya_29 (DC1), KimmyK_31 (DC1),

Mutzi_31 (DC1), Nubi_29 (DC1), Phlop_29 (DC1), PinkCoffee_31 (DC1),
Portcullis_29 (DC1), PullumCavea_29 (DC1), RogerDodger_32 (DC1), Salvador_29
(DC1), Savbucketdawg_29 (DC1), Shinji_29 (DC1), SmokingBunny_29 (DC1),
TillyBobJoe_29 (DC1), Togo_29 (DC1), Twister6_31 (DC1), Valary_32 (DC1),
VanDeWege_32 (DC1), Wizard_29 (DC1), YungMoney_31 (DC1),

Start 4:

- Found in 15 of 135 (11.1%) of genes in pham
- Manual Annotations of this start: 12 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BBQValindra_17 (DB),
BackstagePass_17 (DB), Bowser_17 (DB), Bunker_17 (DB), DirtyBoi_18 (DB),
Eyes_17 (DB), GEazy_17 (DB), HannahD_17 (DB), Hedwig_18 (DB), Kiko_18 (DB),
MagicMan_17 (DB), Opie_17 (DB), Schnabeltier_17 (DB), TaronosaurusRx_17 (DB),
ZAYM_17 (DB),

Start 20:

- Found in 1 of 135 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lilbeanie_28 (DE5),

Start 22:

- Found in 72 of 135 (53.3%) of genes in pham
- Manual Annotations of this start: 60 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: APunk_34 (DE4), Abblin_33 (DE4),
Affeca_31 (DE1), Ailee_31 (DE1), Angelicage_31 (DE1), Ashertheman_33 (DE1),
Baddon_32 (DE1), Barsten_33 (DE1), Baumdotcom_32 (DE1), Bibwit_32 (DE1),
Bizzy_33 (DE1), BobBob_30 (DE1), Brandonk123_34 (DE1), ChadMasterC_33
(DE1), Charming_33 (DE1), Chickadee_30 (DE3), Delrey21_32 (DE4), Derg_30
(DE1), Dexdert_31 (DE3), DoctorFroggo_32 (DE4), EdmundFerry_29 (DE3),
Fitzgerald_31 (DE1), Flatwoods_33 (DE1), Fosterous_31 (DE1), GTE6_30 (DE3),
Gaea_32 (DE1), Galadriel_33 (DE1), Geodirt_30 (DE1), Gustavo_32 (DE1),
JKSyngboy_30 (DE1), Jabberwocky_31 (DE1), Kamashten_32 (DE1), Keitabear_33
(DE1), Kewpiedoll_32 (DE1), Kroos_33 (DE1), Kwekel_30 (DE3), Kwobi_33 (DE1),
Lennon_33 (DE1), LilHam_30 (DE1), Love_36 (DE1), McKinley_35 (DE1),
MoontowerMania_32 (DE1), Natkenzie_33 (DE4), Nordenberg_27 (DE1), Paries_35
(DE1), Ribeye_33 (DE1), RiverRaider_33 (DE1), RoadKill_28 (DE3), Rofo_33 (DE1),
Sampson_33 (DE4), Sanjuju_31 (DE1), Saronaya_32 (DE1), SchottB_31 (DE1),
Scioto_33 (DE4), Sedona_33 (DE1), Shivanishola_34 (DE1), Sitar_33 (DE1),
StorminNorm_32 (DE1), Stultus_31 (DE1), Tangent_33 (DE1), Tangerine_32 (DE1),
Tardus_34 (DE4), Thing3_32 (DE1), Tiamoceli_31 (DE3), Twonlo_28 (DE3),
Tycho_32 (DE1), Verity_32 (DE4), ViaConlectus_33 (DE4), Vivi2_35 (DE1),
YorkOnyx_33 (DE1), Zipp_32 (DE4), Zitch_34 (DE4),

Start 23:

- Found in 9 of 135 (6.7%) of genes in pham
- Manual Annotations of this start: 8 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ali17_29 (DE2), Belphegor_31 (DE),
EMoore_29 (DE2), Hans_33 (DE2), Inspectinfecti_32 (DE2), Leonard_31 (DE2),
MelBins_32 (DE2), Phauci_24 (DE2), Phinally_31 (DE2),

Start 35:

- Found in 7 of 135 (5.2%) of genes in pham
- Manual Annotations of this start: 5 of 115
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Aleemily_17 (DZ), Cafasso_17 (DZ), ModicumRichard_17 (DZ), Morgana_17 (DZ), ObLaDi_17 (DZ), VanLee_18 (singleton),

Summary by clusters:

There are 11 clusters represented in this pham: singleton, DE, DB, DE1, DE2, DE3, DE4, DE5, DZ, DC2, DC1,

Info for manual annotations of cluster DB:

- Start number 4 was manually annotated 12 times for cluster DB.

Info for manual annotations of cluster DC1:

- Start number 1 was manually annotated 28 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 1 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:

- Start number 22 was manually annotated 44 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 23 was manually annotated 8 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 22 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 22 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 20 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DZ:

- Start number 35 was manually annotated 4 times for cluster DZ.

Gene Information:

Gene: APunk_34 Start: 24307, Stop: 29232, Start Num: 22

Candidate Starts for APunk_34:

(Start: 22 @24307 has 60 MA's), (40, 24427), (44, 24439), (50, 24481), (56, 24505), (62, 24571), (63, 24580), (73, 24652), (80, 24685), (86, 24754), (88, 24763), (92, 24781), (103, 24847), (107, 24862), (111, 24871), (124, 24934), (126, 24940), (132, 24967), (135, 24997), (137, 25006), (147, 25069), (150, 25081), (159, 25168), (163, 25180), (173, 25303), (176, 25327), (177, 25345), (178, 25357), (185, 25417), (186, 25423), (188, 25435), (199, 25546), (201, 25582), (203, 25621), (205, 25633),

(209, 25675), (212, 25705), (218, 25747), (219, 25756), (220, 25759), (223, 25789), (227, 25822), (240, 25915), (244, 25936), (249, 25951), (265, 26038), (267, 26059), (270, 26080), (280, 26134), (286, 26167), (291, 26218), (303, 26266), (304, 26275), (310, 26335), (312, 26347), (316, 26368), (318, 26374), (330, 26416), (331, 26422), (333, 26437), (334, 26443), (346, 26524), (347, 26527), (349, 26548), (361, 26602), (370, 26665), (385, 26722), (402, 26809), (410, 26875), (438, 26932), (439, 26935), (443, 26959), (461, 27049), (466, 27097), (501, 27325), (504, 27343), (512, 27400), (527, 27490), (533, 27553), (546, 27634), (551, 27661), (562, 27733), (563, 27742), (571, 27802), (581, 27913), (606, 28141), (609, 28150), (613, 28177), (620, 28219), (626, 28279), (638, 28441), (642, 28468), (647, 28540), (652, 28579), (678, 28786), (692, 28858), (700, 28924), (719, 29059), (726, 29122), (727, 29125), (731, 29143), (734, 29158), (738, 29185), (743, 29197),

Gene: Abblin_33 Start: 24850, Stop: 29775, Start Num: 22

Candidate Starts for Abblin_33:

(Start: 22 @24850 has 60 MA's), (40, 24970), (44, 24982), (50, 25024), (56, 25048), (62, 25114), (63, 25123), (71, 25168), (73, 25195), (86, 25297), (88, 25306), (92, 25324), (103, 25390), (107, 25405), (111, 25414), (124, 25477), (126, 25483), (132, 25510), (135, 25540), (137, 25549), (145, 25597), (147, 25612), (150, 25624), (159, 25711), (163, 25723), (173, 25846), (176, 25870), (177, 25888), (185, 25960), (186, 25966), (188, 25978), (199, 26089), (201, 26125), (203, 26164), (205, 26176), (209, 26218), (212, 26248), (218, 26290), (219, 26299), (220, 26302), (223, 26332), (227, 26365), (240, 26458), (249, 26494), (259, 26551), (265, 26581), (270, 26623), (280, 26677), (281, 26683), (286, 26710), (291, 26761), (300, 26797), (303, 26809), (304, 26818), (310, 26878), (312, 26890), (316, 26911), (318, 26917), (330, 26959), (331, 26965), (333, 26980), (334, 26986), (340, 27031), (346, 27067), (347, 27070), (361, 27145), (370, 27208), (385, 27265), (401, 27346), (407, 27397), (429, 27454), (438, 27475), (439, 27478), (443, 27502), (466, 27640), (471, 27661), (501, 27868), (504, 27886), (512, 27943), (527, 28033), (533, 28096), (546, 28177), (551, 28204), (562, 28276), (563, 28285), (571, 28345), (581, 28456), (606, 28687), (609, 28696), (613, 28723), (620, 28765), (638, 28984), (642, 29011), (647, 29083), (652, 29122), (678, 29329), (692, 29401), (700, 29467), (719, 29602), (726, 29665), (727, 29668), (731, 29686), (734, 29701), (738, 29728), (743, 29740),

Gene: Affeca_31 Start: 24649, Stop: 29682, Start Num: 22

Candidate Starts for Affeca_31:

(Start: 22 @24649 has 60 MA's), (50, 24823), (56, 24847), (57, 24856), (59, 24889), (61, 24907), (63, 24922), (78, 25021), (86, 25096), (87, 25102), (88, 25105), (96, 25162), (98, 25180), (100, 25189), (102, 25204), (136, 25369), (140, 25387), (141, 25399), (147, 25438), (166, 25579), (169, 25639), (173, 25672), (177, 25714), (185, 25786), (187, 25801), (188, 25804), (199, 25915), (201, 25951), (205, 26002), (209, 26044), (212, 26074), (219, 26125), (223, 26158), (227, 26191), (228, 26203), (240, 26284), (244, 26305), (248, 26317), (266, 26413), (267, 26428), (270, 26449), (279, 26500), (281, 26509), (291, 26587), (303, 26635), (304, 26644), (310, 26704), (319, 26749), (322, 26758), (330, 26785), (334, 26812), (337, 26833), (343, 26869), (355, 26935), (361, 26971), (374, 27058), (375, 27061), (383, 27088), (401, 27139), (402, 27145), (419, 27271), (441, 27346), (449, 27373), (455, 27406), (463, 27469), (469, 27523), (475, 27586), (492, 27697), (499, 27724), (500, 27730), (516, 27832), (527, 27898), (530, 27925), (534, 27952), (538, 27991), (542, 28015), (551, 28057), (562, 28129), (563, 28138), (571, 28198), (573, 28243), (609, 28558), (610, 28564), (612, 28582), (627, 28678), (635, 28783), (645, 28882), (663, 29026), (672, 29101), (675, 29113), (685, 29197), (736, 29536), (745, 29575), (746, 29581), (748, 29587), (751, 29614), (755, 29650), (756, 29662),

Gene: Ailee_31 Start: 25358, Stop: 30172, Start Num: 22

Candidate Starts for Ailee_31:

(Start: 22 @25358 has 60 MA's), (50, 25532), (56, 25556), (91, 25694), (102, 25733), (104, 25739), (108, 25751), (113, 25769), (119, 25781), (123, 25808), (127, 25826), (131, 25838), (147, 25937), (166, 26078), (169, 26138), (173, 26171), (177, 26213), (185, 26285), (187, 26300), (188, 26303), (199, 26414), (201, 26450), (205, 26501), (209, 26543), (212, 26573), (219, 26624), (223, 26657), (227, 26690), (228, 26702), (240, 26783), (244, 26804), (248, 26816), (266, 26912), (267, 26927),

(270, 26948), (279, 26999), (281, 27008), (291, 27086), (303, 27134), (304, 27143), (318, 27242), (319, 27248), (321, 27254), (322, 27257), (334, 27311), (337, 27332), (341, 27362), (343, 27368), (347, 27395), (385, 27590), (398, 27623), (401, 27638), (402, 27644), (407, 27689), (408, 27698), (411, 27713), (413, 27731), (419, 27770), (421, 27776), (441, 27845), (449, 27872), (455, 27905), (463, 27968), (469, 28022), (499, 28223), (500, 28229), (516, 28331), (518, 28343), (527, 28397), (530, 28424), (534, 28451), (538, 28490), (546, 28529), (551, 28556), (562, 28628), (563, 28637), (571, 28697), (573, 28742), (609, 29057), (610, 29063), (612, 29081), (627, 29177), (635, 29282), (645, 29381), (663, 29525), (672, 29600), (675, 29612), (685, 29687), (736, 30026), (745, 30065), (746, 30071), (748, 30077), (751, 30104), (755, 30140), (756, 30152),

Gene: Aleemily_17 Start: 10958, Stop: 15649, Start Num: 35

Candidate Starts for Aleemily_17:

(Start: 35 @10958 has 5 MA's), (61, 11117), (81, 11240), (97, 11375), (117, 11462), (118, 11465), (121, 11492), (128, 11519), (129, 11525), (130, 11528), (162, 11747), (165, 11774), (202, 12149), (204, 12182), (206, 12191), (208, 12221), (210, 12233), (213, 12269), (220, 12314), (222, 12335), (223, 12344), (225, 12359), (233, 12407), (235, 12428), (250, 12503), (253, 12515), (258, 12548), (259, 12551), (262, 12569), (263, 12575), (267, 12602), (268, 12611), (269, 12614), (276, 12656), (278, 12665), (286, 12713), (294, 12776), (319, 12914), (322, 12923), (339, 13010), (342, 13022), (345, 13043), (347, 13049), (352, 13076), (353, 13079), (362, 13127), (364, 13136), (371, 13178), (373, 13190), (380, 13232), (387, 13253), (390, 13265), (404, 13307), (428, 13436), (452, 13535), (461, 13583), (465, 13619), (476, 13703), (477, 13706), (479, 13712), (487, 13784), (507, 13889), (509, 13895), (515, 13943), (521, 13979), (524, 14003), (556, 14198), (557, 14210), (590, 14435), (628, 14714), (632, 14792), (666, 15098), (669, 15143), (683, 15221), (684, 15227), (686, 15239), (693, 15284), (694, 15287), (714, 15461), (739, 15620),

Gene: Ali17_29 Start: 22538, Stop: 27427, Start Num: 23

Candidate Starts for Ali17_29:

(Start: 23 @22538 has 8 MA's), (40, 22658), (50, 22712), (56, 22736), (63, 22811), (64, 22814), (78, 22910), (86, 22985), (87, 22991), (89, 22997), (93, 23021), (95, 23030), (105, 23090), (107, 23096), (111, 23105), (119, 23135), (130, 23192), (135, 23231), (137, 23240), (138, 23243), (147, 23303), (148, 23306), (158, 23381), (159, 23390), (173, 23525), (174, 23534), (177, 23567), (179, 23591), (188, 23657), (193, 23720), (201, 23804), (203, 23843), (205, 23855), (210, 23903), (212, 23927), (219, 23978), (223, 24011), (230, 24062), (234, 24092), (242, 24149), (245, 24161), (249, 24173), (262, 24248), (270, 24302), (280, 24356), (286, 24389), (300, 24476), (303, 24488), (304, 24497), (310, 24557), (312, 24569), (316, 24590), (318, 24596), (319, 24602), (320, 24605), (321, 24608), (329, 24635), (330, 24638), (332, 24647), (333, 24659), (334, 24665), (340, 24710), (346, 24746), (347, 24749), (349, 24770), (370, 24887), (385, 24944), (402, 25031), (410, 25097), (438, 25154), (439, 25157), (443, 25181), (461, 25271), (466, 25319), (484, 25448), (495, 25517), (497, 25526), (501, 25547), (504, 25565), (507, 25583), (530, 25739), (531, 25742), (546, 25847), (563, 25955), (571, 26015), (572, 26045), (581, 26126), (607, 26357), (609, 26363), (616, 26411), (619, 26426), (626, 26492), (636, 26624), (647, 26753), (652, 26792), (700, 27119), (711, 27215), (731, 27338), (738, 27380), (743, 27392),

Gene: Angelicage_31 Start: 25066, Stop: 30099, Start Num: 22

Candidate Starts for Angelicage_31:

(Start: 22 @25066 has 60 MA's), (50, 25240), (56, 25264), (57, 25273), (59, 25306), (61, 25324), (63, 25339), (78, 25438), (86, 25513), (87, 25519), (88, 25522), (96, 25579), (98, 25597), (100, 25606), (102, 25621), (136, 25786), (140, 25804), (141, 25816), (147, 25855), (166, 25996), (169, 26056), (173, 26089), (177, 26131), (185, 26203), (187, 26218), (188, 26221), (199, 26332), (201, 26368), (205, 26419), (209, 26461), (212, 26491), (219, 26542), (223, 26575), (227, 26608), (228, 26620), (240, 26701), (244, 26722), (248, 26734), (266, 26830), (267, 26845), (270, 26866), (279, 26917), (281, 26926), (291, 27004), (303, 27052), (304, 27061), (310, 27121), (319, 27166), (322, 27175), (330, 27202), (334, 27229), (337, 27250), (343, 27286), (355, 27352), (361, 27388), (374, 27475),

(375, 27478), (383, 27505), (401, 27556), (402, 27562), (419, 27688), (441, 27763), (449, 27790), (455, 27823), (463, 27886), (469, 27940), (475, 28003), (492, 28114), (499, 28141), (500, 28147), (516, 28249), (527, 28315), (530, 28342), (534, 28369), (538, 28408), (542, 28432), (551, 28474), (562, 28546), (563, 28555), (571, 28615), (573, 28660), (609, 28975), (610, 28981), (612, 28999), (627, 29095), (635, 29200), (645, 29299), (663, 29443), (672, 29518), (675, 29530), (685, 29614), (736, 29953), (745, 29992), (746, 29998), (748, 30004), (751, 30031), (755, 30067), (756, 30079),

Gene: Arri_32 Start: 20088, Stop: 25619, Start Num: 1

Candidate Starts for Arri_32:

(Start: 1 @20088 has 29 MA's), (3, 20175), (6, 20262), (10, 20295), (12, 20319), (19, 20442), (25, 20463), (26, 20469), (30, 20493), (36, 20523), (47, 20562), (64, 20646), (72, 20682), (74, 20706), (82, 20745), (144, 21135), (166, 21303), (169, 21363), (177, 21435), (178, 21447), (181, 21483), (184, 21507), (195, 21606), (196, 21609), (199, 21639), (203, 21714), (205, 21726), (209, 21768), (212, 21798), (219, 21849), (237, 21990), (240, 22008), (242, 22020), (244, 22029), (265, 22131), (267, 22152), (270, 22173), (279, 22224), (280, 22227), (281, 22233), (291, 22311), (298, 22341), (303, 22359), (310, 22428), (316, 22461), (318, 22467), (320, 22476), (323, 22482), (334, 22536), (340, 22581), (344, 22608), (346, 22617), (348, 22638), (361, 22695), (366, 22731), (379, 22812), (380, 22815), (388, 22884), (395, 22956), (402, 23052), (410, 23118), (411, 23121), (414, 23145), (417, 23172), (418, 23175), (419, 23178), (421, 23184), (442, 23253), (445, 23262), (454, 23307), (459, 23316), (471, 23394), (476, 23448), (484, 23502), (491, 23559), (501, 23601), (507, 23637), (516, 23700), (523, 23751), (539, 23862), (548, 23901), (560, 23982), (577, 24156), (578, 24159), (583, 24192), (606, 24399), (609, 24408), (610, 24414), (642, 24726), (660, 24933), (676, 25071), (696, 25221), (707, 25332), (715, 25377), (716, 25386), (717, 25392), (725, 25428), (741, 25521), (744, 25533), (750, 25563), (752, 25596), (754, 25608),

Gene: Ashertheman_33 Start: 23943, Stop: 28961, Start Num: 22

Candidate Starts for Ashertheman_33:

(Start: 22 @23943 has 60 MA's), (34, 24030), (40, 24063), (50, 24117), (56, 24141), (59, 24183), (61, 24201), (63, 24216), (73, 24288), (78, 24315), (86, 24390), (88, 24399), (96, 24456), (98, 24474), (99, 24480), (147, 24732), (155, 24792), (169, 24933), (173, 24966), (177, 25008), (185, 25080), (187, 25095), (188, 25098), (199, 25209), (201, 25245), (205, 25296), (209, 25338), (212, 25368), (219, 25419), (223, 25452), (227, 25485), (228, 25497), (240, 25578), (248, 25611), (249, 25614), (259, 25671), (266, 25707), (267, 25722), (270, 25743), (279, 25794), (303, 25929), (304, 25938), (316, 26031), (318, 26037), (319, 26043), (322, 26052), (327, 26064), (329, 26076), (332, 26088), (334, 26106), (343, 26163), (361, 26265), (363, 26283), (367, 26307), (375, 26355), (385, 26385), (401, 26433), (402, 26439), (418, 26562), (419, 26565), (421, 26571), (440, 26628), (441, 26640), (447, 26661), (449, 26667), (455, 26700), (463, 26763), (469, 26817), (492, 26991), (499, 27018), (500, 27024), (516, 27126), (527, 27192), (551, 27351), (563, 27432), (571, 27492), (573, 27537), (606, 27843), (609, 27852), (613, 27879), (625, 27948), (635, 28077), (645, 28176), (663, 28320), (672, 28392), (673, 28398), (675, 28404), (685, 28479), (691, 28509), (707, 28647), (717, 28707), (725, 28743), (730, 28788), (736, 28815), (745, 28854), (746, 28860), (748, 28866), (751, 28893), (755, 28929), (756, 28941),

Gene: BBQValindra_17 Start: 10583, Stop: 15709, Start Num: 4

Candidate Starts for BBQValindra_17:

(Start: 4 @10583 has 12 MA's), (6, 10592), (28, 10865), (29, 10874), (31, 10904), (42, 10970), (63, 11126), (68, 11144), (85, 11297), (94, 11339), (106, 11426), (142, 11618), (157, 11735), (164, 11774), (169, 11858), (171, 11867), (173, 11891), (174, 11900), (175, 11909), (178, 11942), (179, 11954), (181, 11978), (188, 12023), (189, 12032), (190, 12068), (196, 12104), (198, 12116), (199, 12134), (201, 12170), (212, 12293), (219, 12335), (222, 12359), (237, 12470), (238, 12473), (239, 12476), (241, 12491), (252, 12545), (260, 12584), (273, 12665), (277, 12680), (280, 12701), (282, 12716), (284, 12728), (288, 12764), (295, 12800), (329, 12962), (350, 13019), (359, 13031), (360, 13034), (367, 13067), (368, 13073), (369, 13085), (387, 13160), (389, 13166), (390, 13172), (399, 13193),

(400, 13196), (401, 13199), (409, 13262), (414, 13298), (416, 13313), (421, 13337), (429, 13352), (430, 13355), (445, 13415), (463, 13514), (467, 13556), (476, 13634), (485, 13703), (488, 13721), (505, 13829), (506, 13832), (508, 13838), (510, 13856), (511, 13859), (514, 13880), (516, 13898), (517, 13901), (518, 13910), (534, 14015), (537, 14045), (541, 14063), (545, 14069), (555, 14129), (563, 14189), (570, 14237), (572, 14267), (576, 14315), (579, 14327), (588, 14387), (593, 14444), (599, 14462), (601, 14507), (603, 14534), (604, 14552), (605, 14582), (608, 14591), (614, 14630), (615, 14636), (617, 14645), (631, 14804), (633, 14846), (650, 15038), (651, 15041), (656, 15098), (657, 15107), (658, 15119), (661, 15140), (690, 15353), (698, 15392), (704, 15461), (709, 15515), (735, 15668), (738, 15692),

Gene: BackstagePass_17 Start: 10561, Stop: 15849, Start Num: 4

Candidate Starts for BackstagePass_17:

(Start: 4 @10561 has 12 MA's), (6, 10570), (28, 10843), (29, 10852), (31, 10882), (41, 10945), (44, 10957), (46, 10972), (50, 10999), (60, 11083), (63, 11104), (69, 11131), (71, 11143), (85, 11275), (94, 11317), (100, 11371), (106, 11404), (144, 11605), (153, 11683), (169, 11836), (173, 11869), (174, 11878), (175, 11887), (178, 11920), (179, 11932), (181, 11956), (188, 12001), (191, 12055), (195, 12079), (196, 12082), (198, 12094), (199, 12112), (201, 12148), (212, 12271), (219, 12313), (237, 12448), (239, 12454), (241, 12469), (259, 12559), (260, 12562), (265, 12586), (268, 12613), (274, 12646), (277, 12658), (280, 12679), (284, 12706), (295, 12778), (331, 12949), (332, 12952), (333, 12964), (335, 12973), (346, 13057), (356, 13102), (367, 13174), (369, 13192), (376, 13225), (378, 13237), (389, 13273), (401, 13306), (407, 13357), (414, 13405), (421, 13444), (429, 13459), (430, 13462), (432, 13468), (442, 13513), (463, 13621), (467, 13663), (476, 13741), (482, 13765), (485, 13810), (505, 13933), (506, 13936), (511, 13963), (514, 13984), (516, 14002), (517, 14005), (518, 14014), (534, 14119), (545, 14173), (574, 14398), (575, 14434), (588, 14524), (591, 14566), (601, 14647), (603, 14674), (604, 14692), (608, 14731), (614, 14770), (615, 14776), (617, 14785), (631, 14944), (633, 14986), (650, 15178), (651, 15181), (657, 15247), (658, 15259), (661, 15280), (662, 15283), (690, 15493), (698, 15532), (704, 15601), (709, 15655), (735, 15808),

Gene: Baddon_32 Start: 24743, Stop: 29758, Start Num: 22

Candidate Starts for Baddon_32:

(Start: 22 @24743 has 60 MA's), (33, 24818), (40, 24863), (50, 24917), (56, 24941), (59, 24983), (61, 25001), (63, 25016), (73, 25088), (78, 25115), (86, 25190), (88, 25199), (96, 25256), (98, 25274), (99, 25280), (102, 25298), (109, 25325), (140, 25481), (147, 25532), (150, 25544), (155, 25592), (169, 25733), (173, 25766), (177, 25808), (185, 25880), (187, 25895), (188, 25898), (199, 26009), (201, 26045), (205, 26096), (209, 26138), (212, 26168), (219, 26219), (223, 26252), (227, 26285), (228, 26297), (240, 26378), (248, 26411), (249, 26414), (259, 26471), (266, 26507), (267, 26522), (270, 26543), (279, 26594), (303, 26729), (310, 26798), (318, 26837), (319, 26843), (322, 26852), (330, 26879), (334, 26906), (337, 26927), (343, 26963), (346, 26987), (347, 26990), (354, 27026), (361, 27065), (375, 27155), (385, 27185), (401, 27233), (402, 27239), (418, 27362), (419, 27365), (421, 27371), (440, 27428), (441, 27440), (449, 27467), (455, 27500), (456, 27506), (463, 27563), (469, 27617), (475, 27680), (492, 27791), (499, 27818), (500, 27824), (516, 27926), (527, 27992), (546, 28124), (551, 28151), (563, 28232), (571, 28292), (573, 28337), (606, 28643), (609, 28652), (613, 28679), (625, 28748), (645, 28976), (663, 29120), (672, 29189), (673, 29195), (675, 29201), (685, 29276), (691, 29306), (707, 29444), (717, 29504), (725, 29540), (730, 29585), (736, 29612), (745, 29651), (746, 29657), (748, 29663), (751, 29690), (755, 29726), (756, 29738),

Gene: Bakery_30 Start: 19326, Stop: 24842, Start Num: 1

Candidate Starts for Bakery_30:

(Start: 1 @19326 has 29 MA's), (6, 19500), (10, 19533), (12, 19557), (19, 19680), (25, 19701), (26, 19707), (30, 19731), (36, 19761), (47, 19800), (72, 19920), (74, 19944), (82, 19983), (159, 20499), (166, 20541), (169, 20601), (177, 20673), (181, 20721), (189, 20775), (196, 20847), (199, 20877), (203, 20952), (205, 20964), (209, 21006), (212, 21036), (219, 21087), (231, 21180), (237, 21228), (240, 21246), (242, 21258), (244, 21267), (264, 21366), (265, 21369), (267, 21390), (270, 21411),

(279, 21462), (280, 21465), (291, 21549), (298, 21579), (303, 21597), (306, 21624), (310, 21666), (329, 21744), (330, 21747), (331, 21753), (334, 21774), (335, 21777), (344, 21846), (347, 21858), (361, 21933), (379, 22050), (380, 22053), (382, 22101), (402, 22290), (410, 22356), (411, 22359), (414, 22383), (418, 22413), (419, 22416), (421, 22422), (438, 22467), (442, 22491), (445, 22500), (454, 22545), (459, 22554), (462, 22566), (466, 22611), (467, 22614), (471, 22632), (476, 22686), (484, 22740), (501, 22839), (516, 22938), (523, 22989), (539, 23100), (548, 23139), (551, 23160), (560, 23220), (577, 23394), (578, 23397), (583, 23430), (606, 23640), (610, 23655), (660, 24165), (670, 24261), (676, 24294), (695, 24441), (696, 24444), (707, 24555), (716, 24609), (725, 24651), (741, 24744), (744, 24756), (750, 24786), (752, 24819), (754, 24831),

Gene: Barb_31 Start: 20106, Stop: 25637, Start Num: 1

Candidate Starts for Barb_31:

(Start: 1 @20106 has 29 MA's), (3, 20193), (6, 20280), (10, 20313), (12, 20337), (19, 20460), (25, 20481), (26, 20487), (30, 20511), (36, 20541), (47, 20580), (64, 20664), (72, 20700), (74, 20724), (82, 20763), (144, 21153), (166, 21321), (169, 21381), (177, 21453), (178, 21465), (181, 21501), (184, 21525), (195, 21624), (196, 21627), (199, 21657), (203, 21732), (205, 21744), (209, 21786), (212, 21816), (219, 21867), (237, 22008), (240, 22026), (242, 22038), (244, 22047), (265, 22149), (267, 22170), (270, 22191), (279, 22242), (280, 22245), (281, 22251), (291, 22329), (298, 22359), (303, 22377), (310, 22446), (316, 22479), (318, 22485), (320, 22494), (323, 22500), (334, 22554), (340, 22599), (344, 22626), (346, 22635), (348, 22656), (361, 22713), (366, 22749), (379, 22830), (380, 22833), (388, 22902), (395, 22974), (402, 23070), (410, 23136), (411, 23139), (414, 23163), (417, 23190), (418, 23193), (419, 23196), (421, 23202), (442, 23271), (445, 23280), (454, 23325), (459, 23334), (471, 23412), (476, 23466), (484, 23520), (491, 23577), (501, 23619), (507, 23655), (516, 23718), (523, 23769), (539, 23880), (548, 23919), (560, 24000), (577, 24174), (578, 24177), (583, 24210), (606, 24417), (609, 24426), (610, 24432), (642, 24744), (660, 24951), (676, 25089), (696, 25239), (707, 25350), (715, 25395), (716, 25404), (717, 25410), (725, 25446), (741, 25539), (744, 25551), (750, 25581), (752, 25614), (754, 25626),

Gene: Barsten_33 Start: 24490, Stop: 29313, Start Num: 22

Candidate Starts for Barsten_33:

(Start: 22 @24490 has 60 MA's), (50, 24664), (56, 24688), (91, 24826), (102, 24865), (104, 24871), (108, 24883), (113, 24901), (119, 24913), (123, 24940), (127, 24958), (131, 24970), (147, 25069), (164, 25189), (166, 25210), (169, 25270), (173, 25303), (177, 25345), (180, 25381), (185, 25417), (187, 25432), (188, 25435), (199, 25546), (201, 25582), (205, 25633), (209, 25675), (212, 25705), (219, 25756), (223, 25789), (227, 25822), (228, 25834), (240, 25915), (244, 25936), (248, 25948), (266, 26044), (267, 26059), (270, 26080), (279, 26131), (281, 26140), (291, 26218), (303, 26266), (304, 26275), (310, 26335), (319, 26380), (322, 26389), (330, 26416), (334, 26443), (337, 26464), (343, 26500), (355, 26566), (361, 26602), (374, 26689), (375, 26692), (377, 26701), (383, 26719), (401, 26770), (402, 26776), (419, 26902), (441, 26977), (449, 27004), (455, 27037), (463, 27100), (469, 27154), (475, 27217), (492, 27328), (499, 27355), (500, 27361), (516, 27463), (518, 27475), (527, 27529), (530, 27556), (534, 27583), (538, 27622), (542, 27646), (551, 27688), (562, 27760), (563, 27769), (571, 27829), (573, 27874), (609, 28189), (610, 28195), (612, 28213), (627, 28309), (635, 28414), (645, 28513), (663, 28657), (672, 28732), (675, 28744), (685, 28828), (736, 29167), (745, 29206), (746, 29212), (748, 29218), (751, 29245), (755, 29281), (756, 29293),

Gene: Baumdotcom_32 Start: 23558, Stop: 28582, Start Num: 22

Candidate Starts for Baumdotcom_32:

(Start: 22 @23558 has 60 MA's), (34, 23645), (40, 23678), (50, 23732), (56, 23756), (59, 23798), (61, 23816), (63, 23831), (73, 23903), (78, 23930), (86, 24005), (88, 24014), (96, 24071), (98, 24089), (99, 24095), (147, 24347), (155, 24407), (169, 24548), (173, 24581), (177, 24623), (185, 24695), (187, 24710), (188, 24713), (199, 24824), (201, 24860), (205, 24911), (209, 24953), (212, 24983), (219, 25034), (223, 25067), (227, 25100), (228, 25112), (240, 25193), (248, 25226), (249, 25229), (259, 25286), (266, 25322), (267, 25337), (270, 25358), (279, 25409), (303, 25544), (304, 25553), (316,

25646), (318, 25652), (319, 25658), (322, 25667), (327, 25679), (329, 25691), (332, 25703), (334, 25721), (343, 25778), (361, 25880), (363, 25898), (367, 25922), (375, 25970), (385, 26000), (401, 26048), (402, 26054), (418, 26177), (419, 26180), (421, 26186), (440, 26243), (441, 26255), (447, 26276), (449, 26282), (455, 26315), (463, 26378), (469, 26432), (492, 26606), (499, 26633), (500, 26639), (516, 26741), (527, 26807), (551, 26966), (563, 27047), (571, 27107), (573, 27152), (606, 27464), (609, 27473), (613, 27500), (625, 27569), (635, 27698), (645, 27797), (663, 27941), (672, 28013), (673, 28019), (675, 28025), (685, 28100), (691, 28130), (707, 28268), (717, 28328), (725, 28364), (730, 28409), (736, 28436), (745, 28475), (746, 28481), (748, 28487), (751, 28514), (755, 28550), (756, 28562),

Gene: Belphegor_31 Start: 24145, Stop: 29028, Start Num: 23

Candidate Starts for Belphegor_31:

(Start: 23 @24145 has 8 MA's), (39, 24262), (40, 24265), (46, 24292), (50, 24319), (56, 24343), (59, 24385), (62, 24409), (63, 24418), (64, 24421), (73, 24490), (83, 24553), (86, 24592), (87, 24598), (89, 24604), (95, 24637), (101, 24679), (105, 24697), (107, 24703), (111, 24712), (130, 24799), (147, 24910), (148, 24913), (158, 24988), (159, 24997), (160, 25000), (173, 25132), (177, 25174), (179, 25198), (186, 25252), (188, 25264), (199, 25375), (201, 25411), (203, 25450), (205, 25462), (210, 25510), (212, 25534), (219, 25585), (223, 25618), (230, 25669), (234, 25699), (242, 25756), (245, 25768), (249, 25780), (257, 25819), (262, 25855), (279, 25960), (286, 25996), (291, 26047), (304, 26104), (310, 26164), (312, 26176), (318, 26203), (319, 26209), (320, 26212), (321, 26215), (329, 26242), (330, 26245), (333, 26266), (334, 26272), (344, 26344), (349, 26377), (361, 26431), (370, 26494), (385, 26551), (393, 26584), (402, 26638), (438, 26761), (442, 26785), (443, 26788), (461, 26878), (466, 26926), (484, 27055), (495, 27124), (504, 27172), (507, 27190), (530, 27346), (534, 27376), (546, 27454), (562, 27553), (571, 27622), (572, 27652), (606, 27961), (607, 27964), (609, 27970), (619, 28033), (626, 28099), (636, 28231), (647, 28360), (652, 28399), (700, 28720), (709, 28804), (738, 28981), (743, 28993),

Gene: Bibwit_32 Start: 24677, Stop: 29500, Start Num: 22

Candidate Starts for Bibwit_32:

(Start: 22 @24677 has 60 MA's), (50, 24851), (56, 24875), (91, 25013), (104, 25058), (108, 25070), (113, 25088), (119, 25100), (123, 25127), (127, 25145), (131, 25157), (147, 25256), (164, 25376), (166, 25397), (169, 25457), (173, 25490), (177, 25532), (180, 25568), (185, 25604), (187, 25619), (188, 25622), (199, 25733), (201, 25769), (205, 25820), (209, 25862), (212, 25892), (219, 25943), (223, 25976), (227, 26009), (228, 26021), (240, 26102), (244, 26123), (248, 26135), (266, 26231), (267, 26246), (270, 26267), (279, 26318), (281, 26327), (291, 26405), (303, 26453), (304, 26462), (310, 26522), (319, 26567), (322, 26576), (330, 26603), (334, 26630), (337, 26651), (343, 26687), (355, 26753), (361, 26789), (374, 26876), (375, 26879), (377, 26888), (383, 26906), (401, 26957), (402, 26963), (419, 27089), (449, 27191), (455, 27224), (463, 27287), (469, 27341), (475, 27404), (492, 27515), (499, 27542), (500, 27548), (516, 27650), (527, 27716), (530, 27743), (534, 27770), (538, 27809), (542, 27833), (551, 27875), (562, 27947), (571, 28016), (573, 28061), (609, 28376), (610, 28382), (612, 28400), (627, 28496), (635, 28601), (645, 28700), (663, 28844), (672, 28919), (675, 28931), (685, 29015), (736, 29354), (745, 29393), (746, 29399), (748, 29405), (751, 29432), (755, 29468), (756, 29480),

Gene: Bizzy_33 Start: 23890, Stop: 28905, Start Num: 22

Candidate Starts for Bizzy_33:

(Start: 22 @23890 has 60 MA's), (33, 23965), (40, 24010), (50, 24064), (56, 24088), (59, 24130), (61, 24148), (63, 24163), (73, 24235), (78, 24262), (86, 24337), (88, 24346), (96, 24403), (98, 24421), (99, 24427), (102, 24445), (109, 24472), (147, 24679), (150, 24691), (155, 24739), (169, 24880), (173, 24913), (177, 24955), (185, 25027), (187, 25042), (188, 25045), (199, 25156), (201, 25192), (205, 25243), (209, 25285), (212, 25315), (219, 25366), (223, 25399), (227, 25432), (228, 25444), (240, 25525), (248, 25558), (249, 25561), (259, 25618), (266, 25654), (267, 25669), (270, 25690), (279, 25741), (303, 25876), (304, 25885), (316, 25978), (318, 25984), (319, 25990), (322, 25999), (329,

26023), (332, 26035), (334, 26053), (343, 26110), (361, 26212), (375, 26302), (385, 26332), (401, 26380), (402, 26386), (418, 26509), (419, 26512), (440, 26575), (441, 26587), (447, 26608), (449, 26614), (455, 26647), (463, 26710), (469, 26764), (475, 26827), (492, 26938), (499, 26965), (500, 26971), (516, 27073), (527, 27139), (546, 27271), (551, 27298), (563, 27379), (571, 27439), (573, 27484), (606, 27790), (609, 27799), (613, 27826), (625, 27895), (635, 28024), (645, 28123), (663, 28267), (672, 28336), (673, 28342), (675, 28348), (685, 28423), (691, 28453), (707, 28591), (717, 28651), (725, 28687), (730, 28732), (736, 28759), (745, 28798), (746, 28804), (748, 28810), (751, 28837), (755, 28873), (756, 28885),

Gene: BobBob_30 Start: 23955, Stop: 28781, Start Num: 22

Candidate Starts for BobBob_30:

(Start: 22 @23955 has 60 MA's), (50, 24129), (56, 24153), (91, 24291), (101, 24324), (104, 24336), (108, 24348), (113, 24366), (119, 24378), (127, 24423), (147, 24534), (164, 24654), (166, 24675), (169, 24735), (173, 24768), (177, 24810), (180, 24846), (185, 24882), (187, 24897), (188, 24900), (199, 25011), (201, 25047), (205, 25098), (209, 25140), (212, 25170), (219, 25221), (223, 25254), (227, 25287), (228, 25299), (240, 25380), (248, 25413), (266, 25509), (267, 25524), (270, 25545), (279, 25596), (281, 25605), (291, 25683), (303, 25731), (304, 25740), (310, 25800), (318, 25839), (319, 25845), (322, 25854), (330, 25881), (334, 25908), (337, 25929), (343, 25965), (355, 26031), (358, 26052), (361, 26067), (374, 26154), (375, 26157), (401, 26235), (408, 26295), (419, 26367), (449, 26469), (455, 26502), (463, 26565), (469, 26619), (475, 26682), (492, 26793), (499, 26820), (500, 26826), (516, 26928), (518, 26940), (527, 26994), (530, 27021), (534, 27048), (538, 27087), (542, 27111), (546, 27126), (551, 27153), (562, 27225), (563, 27234), (571, 27294), (573, 27339), (600, 27528), (609, 27657), (610, 27663), (612, 27681), (627, 27777), (635, 27882), (645, 27981), (663, 28125), (672, 28200), (675, 28212), (685, 28296), (736, 28635), (745, 28674), (746, 28680), (748, 28686), (751, 28713), (755, 28749), (756, 28761),

Gene: Bowser_17 Start: 10588, Stop: 15702, Start Num: 4

Candidate Starts for Bowser_17:

(Start: 4 @10588 has 12 MA's), (6, 10597), (28, 10870), (29, 10879), (31, 10909), (32, 10918), (42, 10975), (53, 11038), (60, 11110), (63, 11131), (68, 11149), (85, 11302), (94, 11344), (100, 11398), (143, 11626), (157, 11740), (164, 11779), (169, 11863), (173, 11896), (174, 11905), (175, 11914), (178, 11947), (179, 11959), (181, 11983), (188, 12028), (190, 12073), (196, 12109), (198, 12121), (199, 12139), (201, 12175), (212, 12298), (214, 12322), (219, 12340), (237, 12475), (239, 12481), (240, 12493), (241, 12496), (252, 12550), (260, 12589), (264, 12610), (265, 12613), (267, 12631), (268, 12640), (277, 12685), (280, 12706), (284, 12733), (296, 12811), (329, 12967), (350, 13024), (359, 13036), (360, 13039), (367, 13072), (369, 13090), (387, 13165), (389, 13171), (390, 13177), (399, 13198), (400, 13201), (401, 13204), (409, 13267), (414, 13303), (416, 13318), (421, 13342), (429, 13357), (430, 13360), (432, 13366), (442, 13411), (445, 13420), (463, 13519), (467, 13561), (478, 13645), (485, 13708), (488, 13726), (505, 13834), (508, 13843), (510, 13861), (511, 13864), (516, 13903), (517, 13906), (518, 13915), (537, 14050), (545, 14074), (563, 14194), (569, 14239), (572, 14272), (576, 14320), (579, 14332), (588, 14392), (601, 14512), (603, 14539), (604, 14557), (614, 14635), (615, 14641), (617, 14650), (629, 14770), (631, 14809), (633, 14851), (644, 14944), (650, 15037), (651, 15040), (656, 15097), (657, 15106), (658, 15118), (661, 15139), (674, 15244), (690, 15352), (698, 15391), (704, 15460), (709, 15514), (735, 15664),

Gene: Brandonk123_34 Start: 25024, Stop: 29847, Start Num: 22

Candidate Starts for Brandonk123_34:

(Start: 22 @25024 has 60 MA's), (50, 25198), (56, 25222), (91, 25360), (102, 25399), (104, 25405), (108, 25417), (113, 25435), (119, 25447), (123, 25474), (127, 25492), (131, 25504), (147, 25603), (164, 25723), (166, 25744), (169, 25804), (173, 25837), (177, 25879), (180, 25915), (185, 25951), (187, 25966), (188, 25969), (199, 26080), (201, 26116), (205, 26167), (209, 26209), (212, 26239), (219, 26290), (223, 26323), (227, 26356), (228, 26368), (240, 26449), (244, 26470), (248, 26482), (266, 26578), (267, 26593), (270, 26614), (279, 26665), (281, 26674), (291, 26752), (303, 26800),

(304, 26809), (310, 26869), (319, 26914), (322, 26923), (330, 26950), (334, 26977), (337, 26998), (343, 27034), (355, 27100), (361, 27136), (374, 27223), (375, 27226), (401, 27304), (408, 27364), (419, 27436), (440, 27499), (447, 27532), (449, 27538), (455, 27571), (463, 27634), (469, 27688), (475, 27751), (492, 27862), (499, 27889), (500, 27895), (516, 27997), (518, 28009), (527, 28063), (530, 28090), (534, 28117), (538, 28156), (551, 28222), (562, 28294), (563, 28303), (571, 28363), (573, 28408), (609, 28723), (610, 28729), (612, 28747), (627, 28843), (635, 28948), (645, 29047), (663, 29191), (672, 29266), (675, 29278), (685, 29362), (736, 29701), (745, 29740), (746, 29746), (748, 29752), (751, 29779), (755, 29815), (756, 29827),

Gene: Bunker_17 Start: 10580, Stop: 15829, Start Num: 4

Candidate Starts for Bunker_17:

(Start: 4 @10580 has 12 MA's), (6, 10589), (16, 10736), (28, 10862), (29, 10871), (Start: 35 @10934 has 5 MA's), (37, 10940), (38, 10946), (42, 10967), (46, 10991), (51, 11021), (53, 11030), (63, 11123), (67, 11135), (68, 11141), (85, 11294), (94, 11336), (100, 11390), (106, 11423), (144, 11624), (169, 11855), (173, 11888), (174, 11897), (175, 11906), (178, 11939), (179, 11951), (181, 11975), (188, 12020), (189, 12029), (196, 12101), (198, 12113), (199, 12131), (201, 12167), (212, 12290), (214, 12314), (232, 12431), (237, 12467), (239, 12473), (241, 12488), (252, 12542), (260, 12581), (264, 12602), (265, 12605), (267, 12623), (268, 12632), (277, 12677), (279, 12695), (280, 12698), (284, 12725), (296, 12803), (331, 12968), (333, 12983), (335, 12992), (346, 13076), (365, 13187), (367, 13193), (368, 13199), (376, 13244), (378, 13256), (389, 13292), (390, 13298), (399, 13319), (401, 13325), (402, 13331), (407, 13376), (409, 13388), (414, 13424), (421, 13463), (429, 13478), (430, 13481), (432, 13487), (442, 13532), (467, 13682), (476, 13760), (478, 13766), (485, 13832), (488, 13850), (505, 13958), (506, 13961), (510, 13985), (511, 13988), (516, 14027), (517, 14030), (518, 14039), (526, 14087), (537, 14174), (545, 14198), (555, 14258), (563, 14318), (572, 14396), (576, 14444), (579, 14456), (588, 14516), (601, 14633), (603, 14660), (614, 14756), (615, 14762), (617, 14771), (631, 14930), (633, 14972), (657, 15230), (658, 15242), (661, 15263), (662, 15266), (665, 15284), (690, 15476), (698, 15515), (709, 15638), (735, 15788), (738, 15812),

Gene: Cafasso_17 Start: 10946, Stop: 15646, Start Num: 35

Candidate Starts for Cafasso_17:

(Start: 35 @10946 has 5 MA's), (61, 11105), (81, 11228), (97, 11363), (117, 11450), (118, 11453), (121, 11480), (128, 11507), (129, 11513), (130, 11516), (162, 11735), (165, 11762), (202, 12137), (204, 12170), (206, 12179), (208, 12209), (210, 12221), (213, 12257), (220, 12302), (222, 12323), (223, 12332), (225, 12347), (233, 12395), (235, 12416), (250, 12491), (253, 12503), (258, 12536), (259, 12539), (262, 12557), (263, 12563), (267, 12590), (268, 12599), (269, 12602), (276, 12644), (278, 12653), (286, 12701), (294, 12764), (319, 12902), (322, 12911), (339, 12998), (342, 13010), (345, 13031), (347, 13037), (352, 13064), (353, 13067), (362, 13115), (364, 13124), (371, 13166), (373, 13178), (380, 13220), (387, 13241), (390, 13253), (404, 13295), (460, 13565), (461, 13571), (465, 13607), (477, 13694), (487, 13772), (494, 13820), (507, 13877), (509, 13883), (515, 13931), (521, 13967), (524, 13991), (542, 14114), (556, 14186), (564, 14225), (590, 14432), (628, 14711), (632, 14789), (659, 15047), (666, 15095), (669, 15140), (683, 15218), (684, 15224), (686, 15236), (693, 15281), (694, 15284), (714, 15458), (739, 15617),

Gene: ChadMasterC_33 Start: 25682, Stop: 30712, Start Num: 22

Candidate Starts for ChadMasterC_33:

(Start: 22 @25682 has 60 MA's), (50, 25856), (56, 25880), (57, 25889), (59, 25922), (61, 25940), (63, 25955), (78, 26054), (86, 26129), (87, 26135), (88, 26138), (96, 26195), (98, 26213), (100, 26222), (102, 26237), (136, 26402), (140, 26420), (141, 26432), (147, 26471), (166, 26612), (169, 26672), (173, 26705), (177, 26747), (185, 26819), (187, 26834), (188, 26837), (199, 26948), (201, 26984), (205, 27035), (209, 27077), (212, 27107), (219, 27158), (223, 27191), (227, 27224), (228, 27236), (240, 27317), (244, 27338), (248, 27350), (266, 27446), (267, 27461), (270, 27482), (279, 27533), (281, 27542), (291, 27620), (303, 27668), (304, 27677), (310, 27737), (319, 27782), (322, 27791), (330, 27818), (334, 27845), (337, 27866), (343, 27902), (355, 27968), (361, 28004), (374, 28091),

(375, 28094), (383, 28121), (401, 28172), (402, 28178), (419, 28304), (441, 28379), (449, 28406), (455, 28439), (463, 28502), (469, 28556), (475, 28619), (492, 28730), (499, 28757), (500, 28763), (516, 28865), (518, 28877), (527, 28931), (530, 28958), (534, 28985), (538, 29024), (542, 29048), (546, 29063), (551, 29090), (562, 29162), (563, 29171), (571, 29231), (573, 29276), (609, 29594), (610, 29600), (612, 29618), (627, 29714), (635, 29819), (645, 29918), (663, 30062), (672, 30131), (675, 30143), (685, 30227), (736, 30566), (745, 30605), (746, 30611), (748, 30617), (751, 30644), (755, 30680), (756, 30692),

Gene: Charming_33 Start: 24533, Stop: 29347, Start Num: 22

Candidate Starts for Charming_33:

(Start: 22 @24533 has 60 MA's), (50, 24707), (56, 24731), (91, 24869), (101, 24902), (104, 24914), (108, 24926), (113, 24944), (119, 24956), (127, 25001), (131, 25013), (147, 25112), (164, 25232), (166, 25253), (169, 25313), (173, 25346), (177, 25388), (180, 25424), (185, 25460), (187, 25475), (188, 25478), (199, 25589), (201, 25625), (205, 25676), (209, 25718), (212, 25748), (219, 25799), (223, 25832), (227, 25865), (228, 25877), (240, 25958), (244, 25979), (248, 25991), (266, 26087), (267, 26102), (270, 26123), (279, 26174), (281, 26183), (303, 26309), (304, 26318), (310, 26378), (319, 26423), (322, 26432), (330, 26459), (334, 26486), (337, 26507), (343, 26543), (355, 26609), (361, 26645), (374, 26732), (375, 26735), (401, 26813), (402, 26819), (419, 26945), (449, 27047), (455, 27080), (463, 27143), (469, 27197), (475, 27260), (492, 27371), (499, 27398), (500, 27404), (516, 27506), (527, 27572), (528, 27587), (530, 27599), (534, 27626), (538, 27665), (551, 27731), (563, 27812), (571, 27872), (573, 27917), (609, 28232), (610, 28238), (612, 28256), (627, 28352), (645, 28556), (663, 28700), (672, 28775), (685, 28862), (711, 29057), (736, 29201), (745, 29240), (746, 29246), (748, 29252), (751, 29279), (755, 29315), (756, 29327),

Gene: Chickadee_30 Start: 21428, Stop: 26545, Start Num: 22

Candidate Starts for Chickadee_30:

(Start: 22 @21428 has 60 MA's), (40, 21548), (50, 21602), (57, 21635), (62, 21692), (63, 21701), (64, 21704), (73, 21773), (76, 21785), (78, 21800), (83, 21836), (86, 21875), (87, 21881), (89, 21887), (95, 21920), (101, 21962), (103, 21971), (105, 21980), (107, 21986), (126, 22064), (130, 22082), (135, 22121), (145, 22178), (147, 22193), (161, 22286), (177, 22457), (185, 22529), (188, 22547), (195, 22625), (199, 22658), (201, 22694), (203, 22733), (205, 22745), (212, 22817), (219, 22868), (221, 22889), (223, 22901), (230, 22952), (234, 22982), (244, 23048), (265, 23150), (270, 23192), (280, 23246), (285, 23276), (286, 23279), (291, 23330), (297, 23357), (303, 23378), (309, 23444), (316, 23480), (318, 23486), (329, 23525), (332, 23537), (333, 23549), (334, 23555), (337, 23576), (349, 23660), (354, 23675), (358, 23699), (380, 23834), (381, 23846), (391, 23909), (392, 23912), (397, 24017), (399, 24035), (405, 24065), (411, 24116), (419, 24173), (425, 24248), (428, 24257), (431, 24266), (433, 24272), (438, 24323), (445, 24356), (448, 24368), (451, 24389), (453, 24401), (458, 24434), (461, 24455), (473, 24587), (482, 24641), (513, 24848), (530, 24962), (532, 24974), (550, 25100), (553, 25118), (565, 25196), (586, 25385), (589, 25415), (609, 25586), (613, 25613), (640, 25820), (641, 25823), (643, 25841), (668, 26090), (672, 26108), (677, 26120), (700, 26237), (722, 26393), (723, 26396), (727, 26438), (731, 26456), (734, 26471), (743, 26510),

Gene: ClamChowder_31 Start: 20106, Stop: 25637, Start Num: 1

Candidate Starts for ClamChowder_31:

(Start: 1 @20106 has 29 MA's), (3, 20193), (6, 20280), (10, 20313), (12, 20337), (19, 20460), (25, 20481), (26, 20487), (30, 20511), (36, 20541), (47, 20580), (64, 20664), (72, 20700), (74, 20724), (82, 20763), (144, 21153), (166, 21321), (169, 21381), (177, 21453), (178, 21465), (181, 21501), (184, 21525), (195, 21624), (196, 21627), (199, 21657), (203, 21732), (205, 21744), (209, 21786), (212, 21816), (219, 21867), (237, 22008), (240, 22026), (242, 22038), (244, 22047), (265, 22149), (267, 22170), (270, 22191), (279, 22242), (280, 22245), (281, 22251), (291, 22329), (298, 22359), (303, 22377), (310, 22446), (316, 22479), (318, 22485), (320, 22494), (323, 22500), (334, 22554), (340, 22599), (344, 22626), (346, 22635), (348, 22656), (361, 22713), (366, 22749), (379, 22830), (380, 22833), (388, 22902), (395, 22974), (402, 23070), (410, 23136), (411, 23139), (414, 23163), (417,

23190), (418, 23193), (419, 23196), (421, 23202), (442, 23271), (445, 23280), (454, 23325), (459, 23334), (471, 23412), (476, 23466), (484, 23520), (491, 23577), (501, 23619), (507, 23655), (516, 23718), (523, 23769), (539, 23880), (548, 23919), (560, 24000), (577, 24174), (578, 24177), (583, 24210), (606, 24417), (609, 24426), (610, 24432), (642, 24744), (660, 24951), (676, 25089), (696, 25239), (707, 25350), (715, 25395), (716, 25404), (717, 25410), (725, 25446), (741, 25539), (744, 25551), (750, 25581), (752, 25614), (754, 25626),

Gene: Clown_33 Start: 21973, Stop: 27672, Start Num: 1

Candidate Starts for Clown_33:

(Start: 1 @21973 has 29 MA's), (2, 22048), (6, 22147), (7, 22156), (10, 22180), (14, 22249), (17, 22348), (18, 22351), (54, 22606), (66, 22696), (72, 22750), (81, 22807), (85, 22873), (90, 22894), (94, 22915), (125, 23086), (133, 23122), (134, 23128), (142, 23194), (144, 23203), (146, 23224), (156, 23308), (169, 23434), (177, 23506), (178, 23518), (181, 23554), (195, 23677), (196, 23680), (199, 23710), (203, 23785), (205, 23797), (208, 23830), (209, 23839), (214, 23893), (223, 23953), (228, 24001), (234, 24034), (240, 24079), (242, 24091), (244, 24100), (270, 24244), (279, 24295), (280, 24298), (286, 24331), (289, 24373), (293, 24388), (298, 24412), (303, 24430), (304, 24439), (310, 24499), (318, 24538), (319, 24544), (321, 24550), (324, 24556), (325, 24559), (329, 24577), (332, 24589), (334, 24607), (344, 24679), (349, 24712), (354, 24727), (361, 24766), (370, 24829), (380, 24886), (397, 25093), (411, 25192), (414, 25216), (417, 25243), (418, 25246), (419, 25249), (442, 25324), (445, 25333), (454, 25378), (459, 25387), (462, 25399), (471, 25465), (476, 25519), (484, 25573), (493, 25642), (501, 25672), (514, 25753), (516, 25771), (520, 25789), (523, 25822), (528, 25852), (563, 26062), (571, 26122), (573, 26167), (574, 26170), (581, 26233), (597, 26344), (600, 26362), (606, 26461), (607, 26464), (609, 26470), (610, 26476), (626, 26596), (647, 26869), (653, 26926), (654, 26950), (659, 26977), (708, 27400), (725, 27484), (735, 27547), (737, 27562), (744, 27589), (749, 27616), (750, 27619),

Gene: CoveyB_32 Start: 19906, Stop: 25437, Start Num: 1

Candidate Starts for CoveyB_32:

(Start: 1 @19906 has 29 MA's), (3, 19993), (6, 20080), (10, 20113), (12, 20137), (19, 20260), (25, 20281), (26, 20287), (30, 20311), (36, 20341), (47, 20380), (64, 20464), (72, 20500), (74, 20524), (82, 20563), (144, 20953), (166, 21121), (169, 21181), (177, 21253), (178, 21265), (181, 21301), (184, 21325), (195, 21424), (196, 21427), (199, 21457), (203, 21532), (205, 21544), (209, 21586), (212, 21616), (219, 21667), (237, 21808), (240, 21826), (242, 21838), (244, 21847), (265, 21949), (267, 21970), (270, 21991), (279, 22042), (280, 22045), (281, 22051), (291, 22129), (298, 22159), (303, 22177), (310, 22246), (316, 22279), (318, 22285), (320, 22294), (323, 22300), (334, 22354), (340, 22399), (344, 22426), (346, 22435), (348, 22456), (361, 22513), (366, 22549), (379, 22630), (380, 22633), (388, 22702), (395, 22774), (402, 22870), (410, 22936), (411, 22939), (414, 22963), (417, 22990), (418, 22993), (419, 22996), (421, 23002), (442, 23071), (445, 23080), (454, 23125), (459, 23134), (471, 23212), (476, 23266), (484, 23320), (491, 23377), (501, 23419), (507, 23455), (516, 23518), (523, 23569), (539, 23680), (548, 23719), (560, 23800), (577, 23974), (578, 23977), (583, 24010), (606, 24217), (609, 24226), (610, 24232), (642, 24544), (660, 24751), (676, 24889), (696, 25039), (707, 25150), (715, 25195), (716, 25204), (725, 25246), (741, 25339), (744, 25351), (750, 25381), (752, 25414), (754, 25426),

Gene: Danyall_31 Start: 19906, Stop: 25437, Start Num: 1

Candidate Starts for Danyall_31:

(Start: 1 @19906 has 29 MA's), (3, 19993), (6, 20080), (10, 20113), (12, 20137), (19, 20260), (25, 20281), (26, 20287), (30, 20311), (36, 20341), (47, 20380), (64, 20464), (72, 20500), (74, 20524), (82, 20563), (144, 20953), (166, 21121), (169, 21181), (177, 21253), (178, 21265), (181, 21301), (184, 21325), (195, 21424), (196, 21427), (199, 21457), (203, 21532), (205, 21544), (209, 21586), (212, 21616), (219, 21667), (237, 21808), (240, 21826), (242, 21838), (244, 21847), (265, 21949), (267, 21970), (270, 21991), (279, 22042), (280, 22045), (281, 22051), (291, 22129), (298, 22159), (303, 22177), (310, 22246), (316, 22279), (318, 22285), (320, 22294), (323, 22300), (334, 22354), (340,

22399), (344, 22426), (346, 22435), (348, 22456), (361, 22513), (366, 22549), (379, 22630), (380, 22633), (388, 22702), (395, 22774), (402, 22870), (410, 22936), (411, 22939), (414, 22963), (417, 22990), (418, 22993), (419, 22996), (421, 23002), (442, 23071), (445, 23080), (454, 23125), (459, 23134), (471, 23212), (476, 23266), (484, 23320), (491, 23377), (501, 23419), (507, 23455), (516, 23518), (523, 23569), (539, 23680), (548, 23719), (560, 23800), (577, 23974), (578, 23977), (583, 24010), (606, 24217), (609, 24226), (610, 24232), (642, 24544), (660, 24751), (676, 24889), (696, 25039), (707, 25150), (715, 25195), (716, 25204), (717, 25210), (725, 25246), (741, 25339), (744, 25351), (750, 25381), (752, 25414), (754, 25426),

Gene: Delrey21_32 Start: 25053, Stop: 29963, Start Num: 22

Candidate Starts for Delrey21_32:

(Start: 22 @25053 has 60 MA's), (40, 25173), (44, 25185), (47, 25206), (50, 25227), (56, 25251), (62, 25317), (63, 25326), (64, 25329), (80, 25431), (86, 25500), (88, 25509), (111, 25617), (116, 25638), (124, 25680), (126, 25686), (135, 25743), (137, 25752), (147, 25815), (159, 25914), (163, 25926), (168, 25968), (173, 26049), (176, 26073), (178, 26103), (183, 26160), (185, 26163), (186, 26169), (188, 26181), (194, 26253), (199, 26292), (201, 26328), (203, 26367), (205, 26379), (209, 26421), (212, 26451), (223, 26535), (227, 26568), (240, 26661), (244, 26682), (249, 26697), (265, 26784), (270, 26826), (280, 26880), (281, 26886), (286, 26913), (300, 27000), (303, 27012), (304, 27021), (310, 27081), (312, 27093), (318, 27120), (330, 27162), (331, 27168), (333, 27183), (334, 27189), (340, 27234), (344, 27261), (346, 27270), (347, 27273), (370, 27411), (383, 27465), (385, 27468), (402, 27555), (429, 27657), (442, 27702), (443, 27705), (461, 27795), (501, 28071), (503, 28086), (504, 28089), (522, 28212), (527, 28236), (533, 28299), (544, 28356), (563, 28473), (567, 28515), (571, 28533), (581, 28644), (594, 28746), (607, 28878), (609, 28884), (610, 28890), (613, 28911), (620, 28953), (638, 29172), (642, 29199), (647, 29271), (652, 29310), (678, 29517), (689, 29583), (692, 29589), (700, 29655), (711, 29751), (719, 29790), (726, 29853), (727, 29856), (731, 29874), (734, 29889), (738, 29916), (743, 29928),

Gene: Derg_30 Start: 23486, Stop: 28501, Start Num: 22

Candidate Starts for Derg_30:

(Start: 22 @23486 has 60 MA's), (33, 23561), (40, 23606), (50, 23660), (56, 23684), (59, 23726), (61, 23744), (63, 23759), (73, 23831), (78, 23858), (86, 23933), (88, 23942), (96, 23999), (98, 24017), (99, 24023), (102, 24041), (109, 24068), (140, 24224), (147, 24275), (150, 24287), (155, 24335), (169, 24476), (173, 24509), (177, 24551), (185, 24623), (187, 24638), (188, 24641), (199, 24752), (201, 24788), (205, 24839), (209, 24881), (212, 24911), (219, 24962), (223, 24995), (227, 25028), (228, 25040), (240, 25121), (248, 25154), (249, 25157), (259, 25214), (266, 25250), (267, 25265), (270, 25286), (279, 25337), (303, 25472), (310, 25541), (318, 25580), (319, 25586), (322, 25595), (330, 25622), (334, 25649), (337, 25670), (343, 25706), (346, 25730), (347, 25733), (354, 25769), (361, 25808), (375, 25898), (385, 25928), (401, 25976), (402, 25982), (418, 26105), (419, 26108), (421, 26114), (440, 26171), (441, 26183), (449, 26210), (455, 26243), (456, 26249), (463, 26306), (469, 26360), (475, 26423), (492, 26534), (499, 26561), (500, 26567), (516, 26669), (527, 26735), (546, 26867), (551, 26894), (563, 26975), (571, 27035), (573, 27080), (606, 27386), (609, 27395), (613, 27422), (625, 27491), (645, 27719), (663, 27863), (672, 27932), (673, 27938), (675, 27944), (685, 28019), (691, 28049), (707, 28187), (717, 28247), (725, 28283), (730, 28328), (736, 28355), (745, 28394), (746, 28400), (748, 28406), (751, 28433), (755, 28469), (756, 28481),

Gene: Dextert_31 Start: 21862, Stop: 26988, Start Num: 22

Candidate Starts for Dextert_31:

(Start: 22 @21862 has 60 MA's), (50, 22036), (57, 22069), (62, 22126), (63, 22135), (64, 22138), (73, 22207), (76, 22219), (78, 22234), (83, 22270), (86, 22309), (87, 22315), (89, 22321), (95, 22354), (101, 22396), (103, 22405), (105, 22414), (107, 22420), (115, 22447), (126, 22498), (130, 22516), (145, 22612), (147, 22627), (154, 22672), (161, 22720), (177, 22891), (185, 22963), (188, 22981), (195, 23059), (199, 23092), (201, 23128), (203, 23167), (205, 23179), (212, 23251), (219, 23302), (221, 23323), (223, 23335), (230, 23386), (234, 23416), (244, 23482), (265, 23584), (270, 23626),

(280, 23680), (285, 23710), (286, 23713), (291, 23764), (297, 23791), (303, 23812), (309, 23878), (316, 23914), (318, 23920), (329, 23959), (330, 23962), (333, 23983), (334, 23989), (337, 24010), (344, 24061), (349, 24094), (354, 24109), (358, 24133), (391, 24343), (392, 24346), (397, 24451), (399, 24469), (405, 24499), (411, 24550), (419, 24607), (425, 24682), (428, 24691), (431, 24700), (433, 24706), (438, 24757), (445, 24790), (448, 24802), (451, 24823), (453, 24835), (458, 24868), (461, 24889), (473, 25021), (482, 25075), (513, 25282), (530, 25396), (532, 25408), (550, 25534), (553, 25552), (565, 25630), (586, 25819), (589, 25849), (613, 26047), (640, 26254), (641, 26257), (643, 26275), (668, 26524), (672, 26542), (677, 26554), (700, 26680), (722, 26836), (723, 26839), (727, 26881), (731, 26899), (734, 26914), (743, 26953),

Gene: DirtyBoi_18 Start: 11005, Stop: 16017, Start Num: 4

Candidate Starts for DirtyBoi_18:

(Start: 4 @11005 has 12 MA's), (9, 11035), (11, 11056), (13, 11092), (29, 11296), (31, 11326), (44, 11401), (58, 11506), (68, 11566), (79, 11644), (80, 11647), (85, 11719), (94, 11761), (106, 11848), (169, 12277), (173, 12310), (175, 12328), (179, 12373), (181, 12397), (188, 12442), (189, 12451), (190, 12487), (191, 12496), (195, 12520), (198, 12535), (199, 12553), (205, 12640), (211, 12694), (212, 12712), (223, 12787), (226, 12817), (237, 12889), (239, 12895), (241, 12910), (252, 12964), (265, 13027), (267, 13045), (271, 13072), (273, 13084), (277, 13099), (280, 13120), (301, 13240), (305, 13267), (308, 13300), (313, 13339), (315, 13354), (329, 13402), (333, 13426), (337, 13456), (346, 13519), (356, 13564), (357, 13567), (367, 13636), (379, 13708), (387, 13729), (389, 13735), (390, 13741), (400, 13765), (401, 13768), (404, 13789), (407, 13819), (409, 13831), (414, 13867), (429, 13921), (430, 13924), (432, 13930), (442, 13975), (445, 13984), (467, 14125), (472, 14158), (476, 14203), (478, 14209), (481, 14221), (485, 14272), (502, 14356), (506, 14380), (510, 14404), (511, 14407), (518, 14458), (527, 14506), (537, 14593), (545, 14617), (547, 14629), (551, 14650), (555, 14677), (569, 14782), (572, 14815), (576, 14863), (579, 14875), (592, 14947), (596, 14956), (622, 15112), (630, 15142), (648, 15334), (661, 15454), (662, 15457), (680, 15601), (690, 15664), (709, 15826), (711, 15838), (722, 15895), (733, 15970), (735, 15976), (740, 16006), (742, 16009),

Gene: DoctorFroggo_32 Start: 25053, Stop: 29963, Start Num: 22

Candidate Starts for DoctorFroggo_32:

(Start: 22 @25053 has 60 MA's), (40, 25173), (44, 25185), (47, 25206), (50, 25227), (56, 25251), (62, 25317), (63, 25326), (64, 25329), (80, 25431), (86, 25500), (88, 25509), (111, 25617), (116, 25638), (124, 25680), (126, 25686), (135, 25743), (137, 25752), (147, 25815), (159, 25914), (163, 25926), (168, 25968), (173, 26049), (176, 26073), (178, 26103), (183, 26160), (185, 26163), (186, 26169), (188, 26181), (194, 26253), (199, 26292), (201, 26328), (203, 26367), (205, 26379), (209, 26421), (212, 26451), (223, 26535), (227, 26568), (240, 26661), (244, 26682), (249, 26697), (265, 26784), (270, 26826), (280, 26880), (281, 26886), (286, 26913), (300, 27000), (303, 27012), (304, 27021), (310, 27081), (312, 27093), (318, 27120), (330, 27162), (331, 27168), (333, 27183), (334, 27189), (340, 27234), (344, 27261), (346, 27270), (347, 27273), (370, 27411), (383, 27465), (385, 27468), (402, 27555), (429, 27657), (442, 27702), (443, 27705), (461, 27795), (501, 28071), (503, 28086), (504, 28089), (522, 28212), (527, 28236), (533, 28299), (544, 28356), (563, 28473), (567, 28515), (571, 28533), (581, 28644), (594, 28746), (607, 28878), (609, 28884), (610, 28890), (613, 28911), (620, 28953), (638, 29172), (642, 29199), (647, 29271), (652, 29310), (678, 29517), (689, 29583), (692, 29589), (700, 29655), (711, 29751), (719, 29790), (726, 29853), (727, 29856), (731, 29874), (734, 29889), (738, 29916), (743, 29928),

Gene: EMoore_29 Start: 23379, Stop: 28523, Start Num: 23

Candidate Starts for EMoore_29:

(Start: 23 @23379 has 8 MA's), (40, 23499), (50, 23553), (56, 23577), (59, 23619), (63, 23652), (64, 23655), (78, 23751), (86, 23826), (87, 23832), (89, 23838), (95, 23871), (101, 23913), (107, 23937), (111, 23946), (119, 23976), (130, 24033), (135, 24072), (137, 24081), (138, 24084), (147, 24144), (148, 24147), (158, 24222), (159, 24231), (173, 24366), (174, 24375), (179, 24432), (186, 24486), (188, 24498), (195, 24576), (199, 24609), (201, 24645), (203, 24684), (205, 24696), (210, 24744),

(212, 24768), (223, 24852), (229, 24900), (230, 24903), (242, 24990), (245, 25002), (262, 25089), (270, 25143), (280, 25197), (281, 25203), (286, 25230), (291, 25281), (303, 25329), (304, 25338), (310, 25398), (312, 25410), (316, 25431), (318, 25437), (319, 25443), (320, 25446), (321, 25449), (329, 25476), (334, 25506), (340, 25551), (344, 25578), (347, 25590), (349, 25611), (354, 25626), (361, 25665), (380, 25785), (384, 25839), (394, 25914), (395, 25926), (396, 25989), (403, 26034), (406, 26055), (413, 26100), (420, 26142), (421, 26145), (422, 26169), (423, 26187), (424, 26199), (427, 26220), (432, 26232), (435, 26250), (438, 26277), (439, 26280), (457, 26364), (464, 26430), (471, 26463), (474, 26505), (476, 26517), (490, 26616), (495, 26646), (501, 26673), (507, 26709), (530, 26865), (531, 26868), (537, 26922), (544, 26946), (562, 27054), (563, 27063), (571, 27123), (572, 27153), (573, 27168), (581, 27234), (587, 27270), (607, 27465), (609, 27471), (613, 27498), (619, 27534), (647, 27861), (652, 27900), (688, 28137), (700, 28215), (711, 28311), (731, 28434), (738, 28476), (743, 28488),

Gene: EdmundFerry_29 Start: 21457, Stop: 26574, Start Num: 22

Candidate Starts for EdmundFerry_29:

(Start: 22 @21457 has 60 MA's), (40, 21577), (50, 21631), (57, 21664), (62, 21721), (63, 21730), (64, 21733), (73, 21802), (76, 21814), (78, 21829), (83, 21865), (86, 21904), (87, 21910), (89, 21916), (95, 21949), (101, 21991), (103, 22000), (105, 22009), (107, 22015), (126, 22093), (130, 22111), (135, 22150), (145, 22207), (147, 22222), (161, 22315), (177, 22486), (185, 22558), (188, 22576), (195, 22654), (199, 22687), (201, 22723), (203, 22762), (205, 22774), (212, 22846), (215, 22876), (219, 22897), (221, 22918), (223, 22930), (230, 22981), (234, 23011), (244, 23077), (265, 23179), (270, 23221), (280, 23275), (285, 23305), (286, 23308), (291, 23359), (297, 23386), (303, 23407), (309, 23473), (316, 23509), (318, 23515), (329, 23554), (332, 23566), (333, 23578), (334, 23584), (337, 23605), (349, 23689), (354, 23704), (358, 23728), (380, 23863), (391, 23938), (392, 23941), (397, 24046), (399, 24064), (405, 24094), (411, 24145), (419, 24202), (425, 24277), (428, 24286), (431, 24295), (433, 24301), (438, 24352), (445, 24385), (448, 24397), (451, 24418), (453, 24430), (458, 24463), (461, 24484), (473, 24616), (482, 24670), (513, 24877), (530, 24991), (532, 25003), (550, 25129), (553, 25147), (565, 25225), (586, 25414), (589, 25444), (609, 25615), (613, 25642), (640, 25849), (641, 25852), (643, 25870), (668, 26119), (672, 26137), (677, 26149), (700, 26266), (722, 26422), (723, 26425), (727, 26467), (731, 26485), (734, 26500), (743, 26539),

Gene: Evamon_29 Start: 19392, Stop: 24923, Start Num: 1

Candidate Starts for Evamon_29:

(Start: 1 @19392 has 29 MA's), (3, 19479), (6, 19566), (10, 19599), (12, 19623), (19, 19746), (25, 19767), (26, 19773), (30, 19797), (36, 19827), (47, 19866), (64, 19950), (72, 19986), (74, 20010), (82, 20049), (144, 20439), (166, 20607), (169, 20667), (177, 20739), (178, 20751), (181, 20787), (184, 20811), (195, 20910), (196, 20913), (199, 20943), (203, 21018), (205, 21030), (209, 21072), (212, 21102), (219, 21153), (237, 21294), (240, 21312), (242, 21324), (244, 21333), (265, 21435), (267, 21456), (270, 21477), (279, 21528), (280, 21531), (281, 21537), (291, 21615), (298, 21645), (303, 21663), (310, 21732), (316, 21765), (318, 21771), (320, 21780), (323, 21786), (334, 21840), (340, 21885), (344, 21912), (346, 21921), (348, 21942), (361, 21999), (366, 22035), (379, 22116), (380, 22119), (388, 22188), (395, 22260), (402, 22356), (410, 22422), (411, 22425), (414, 22449), (417, 22476), (418, 22479), (419, 22482), (421, 22488), (442, 22557), (445, 22566), (454, 22611), (459, 22620), (471, 22698), (476, 22752), (484, 22806), (491, 22863), (501, 22905), (507, 22941), (516, 23004), (523, 23055), (539, 23166), (548, 23205), (560, 23286), (577, 23460), (578, 23463), (583, 23496), (606, 23703), (609, 23712), (610, 23718), (642, 24030), (660, 24237), (676, 24375), (696, 24525), (707, 24636), (715, 24681), (716, 24690), (717, 24696), (725, 24732), (741, 24825), (744, 24837), (750, 24867), (752, 24900), (754, 24912),

Gene: Eyes_17 Start: 10596, Stop: 15716, Start Num: 4

Candidate Starts for Eyes_17:

(Start: 4 @10596 has 12 MA's), (6, 10605), (24, 10848), (28, 10878), (29, 10887), (31, 10917), (37, 10956), (42, 10983), (63, 11139), (68, 11157), (85, 11310), (94, 11352), (100, 11406), (142, 11631),

(143, 11634), (149, 11670), (157, 11748), (164, 11787), (169, 11871), (173, 11904), (174, 11913), (175, 11922), (178, 11955), (179, 11967), (181, 11991), (188, 12036), (189, 12045), (190, 12081), (196, 12117), (198, 12129), (199, 12147), (201, 12183), (202, 12192), (212, 12306), (219, 12348), (237, 12483), (238, 12486), (239, 12489), (241, 12504), (252, 12558), (260, 12597), (273, 12678), (277, 12693), (280, 12714), (288, 12777), (295, 12813), (329, 12975), (350, 13032), (359, 13044), (360, 13047), (367, 13080), (369, 13098), (387, 13173), (389, 13179), (390, 13185), (399, 13206), (400, 13209), (401, 13212), (409, 13275), (414, 13311), (416, 13326), (421, 13350), (429, 13365), (430, 13368), (432, 13374), (445, 13428), (463, 13527), (467, 13569), (476, 13647), (485, 13716), (488, 13734), (505, 13842), (506, 13845), (510, 13869), (511, 13872), (514, 13893), (517, 13914), (518, 13923), (537, 14058), (545, 14082), (555, 14142), (563, 14202), (569, 14247), (572, 14280), (576, 14328), (579, 14340), (588, 14400), (603, 14550), (604, 14568), (614, 14646), (615, 14652), (617, 14661), (621, 14688), (629, 14781), (631, 14820), (633, 14862), (646, 15015), (650, 15048), (651, 15051), (656, 15108), (657, 15117), (658, 15129), (661, 15150), (665, 15171), (690, 15363), (698, 15402), (704, 15471), (709, 15525), (735, 15678),

Gene: Fireball_30 Start: 19524, Stop: 25058, Start Num: 1

Candidate Starts for Fireball_30:

(Start: 1 @19524 has 29 MA's), (3, 19611), (6, 19698), (10, 19731), (12, 19755), (19, 19878), (25, 19899), (26, 19905), (30, 19929), (33, 19938), (36, 19959), (47, 19998), (64, 20082), (72, 20118), (74, 20142), (82, 20181), (144, 20571), (166, 20739), (169, 20799), (177, 20871), (178, 20883), (181, 20919), (184, 20943), (195, 21042), (196, 21045), (199, 21075), (203, 21150), (205, 21162), (209, 21204), (212, 21234), (219, 21285), (237, 21426), (240, 21444), (242, 21456), (244, 21465), (265, 21567), (267, 21588), (270, 21609), (279, 21660), (280, 21663), (291, 21747), (298, 21777), (303, 21795), (310, 21864), (316, 21897), (318, 21903), (320, 21912), (323, 21918), (334, 21972), (344, 22044), (346, 22053), (348, 22074), (361, 22131), (366, 22167), (379, 22248), (380, 22251), (388, 22320), (395, 22392), (402, 22488), (410, 22554), (411, 22557), (414, 22581), (417, 22608), (418, 22611), (419, 22614), (421, 22620), (442, 22689), (445, 22698), (454, 22743), (459, 22752), (471, 22830), (486, 22959), (489, 22974), (495, 23016), (501, 23058), (504, 23076), (507, 23094), (516, 23157), (523, 23208), (539, 23319), (548, 23358), (560, 23439), (577, 23613), (578, 23616), (583, 23649), (585, 23664), (606, 23856), (609, 23865), (610, 23871), (626, 23985), (634, 24105), (652, 24285), (676, 24510), (696, 24660), (715, 24816), (716, 24825), (725, 24867), (743, 24966), (744, 24972), (750, 25002), (752, 25035), (754, 25047),

Gene: Fitzgerald_31 Start: 25116, Stop: 29930, Start Num: 22

Candidate Starts for Fitzgerald_31:

(Start: 22 @25116 has 60 MA's), (50, 25290), (56, 25314), (91, 25452), (102, 25491), (104, 25497), (108, 25509), (113, 25527), (119, 25539), (123, 25566), (127, 25584), (131, 25596), (133, 25602), (147, 25695), (164, 25815), (166, 25836), (169, 25896), (173, 25929), (177, 25971), (180, 26007), (185, 26043), (187, 26058), (188, 26061), (199, 26172), (201, 26208), (205, 26259), (209, 26301), (212, 26331), (219, 26382), (223, 26415), (227, 26448), (228, 26460), (240, 26541), (244, 26562), (248, 26574), (266, 26670), (267, 26685), (270, 26706), (279, 26757), (281, 26766), (303, 26892), (304, 26901), (310, 26961), (319, 27006), (322, 27015), (330, 27042), (334, 27069), (337, 27090), (343, 27126), (355, 27192), (361, 27228), (374, 27315), (375, 27318), (383, 27345), (401, 27396), (402, 27402), (419, 27528), (449, 27630), (455, 27663), (463, 27726), (469, 27780), (475, 27843), (492, 27954), (499, 27981), (500, 27987), (516, 28089), (518, 28101), (527, 28155), (530, 28182), (534, 28209), (538, 28248), (542, 28272), (546, 28287), (551, 28314), (562, 28386), (563, 28395), (571, 28455), (573, 28500), (600, 28689), (609, 28815), (610, 28821), (612, 28839), (627, 28935), (635, 29040), (645, 29139), (663, 29283), (672, 29358), (685, 29445), (736, 29784), (745, 29823), (746, 29829), (748, 29835), (751, 29862), (755, 29898), (756, 29910),

Gene: Flatwoods_33 Start: 23847, Stop: 28862, Start Num: 22

Candidate Starts for Flatwoods_33:

(Start: 22 @23847 has 60 MA's), (33, 23922), (40, 23967), (50, 24021), (56, 24045), (59, 24087), (61, 24105), (63, 24120), (73, 24192), (78, 24219), (86, 24294), (88, 24303), (95, 24339), (96, 24360), (98, 24378), (99, 24384), (102, 24402), (109, 24429), (147, 24636), (150, 24648), (155, 24696), (169, 24837), (173, 24870), (177, 24912), (185, 24984), (187, 24999), (188, 25002), (199, 25113), (201, 25149), (205, 25200), (209, 25242), (212, 25272), (219, 25323), (223, 25356), (227, 25389), (228, 25401), (240, 25482), (248, 25515), (249, 25518), (259, 25575), (266, 25611), (267, 25626), (270, 25647), (279, 25698), (303, 25833), (310, 25902), (318, 25941), (319, 25947), (322, 25956), (330, 25983), (334, 26010), (337, 26031), (343, 26067), (346, 26091), (347, 26094), (354, 26130), (361, 26169), (375, 26259), (385, 26289), (401, 26337), (402, 26343), (418, 26466), (419, 26469), (421, 26475), (440, 26532), (441, 26544), (449, 26571), (455, 26604), (456, 26610), (463, 26667), (469, 26721), (475, 26784), (492, 26895), (499, 26922), (500, 26928), (516, 27030), (527, 27096), (546, 27228), (551, 27255), (563, 27336), (571, 27396), (573, 27441), (606, 27747), (609, 27756), (613, 27783), (625, 27852), (635, 27981), (645, 28080), (663, 28224), (672, 28293), (673, 28299), (675, 28305), (685, 28380), (691, 28410), (707, 28548), (717, 28608), (725, 28644), (730, 28689), (736, 28716), (745, 28755), (746, 28761), (748, 28767), (751, 28794), (755, 28830), (756, 28842),

Gene: Fosterous_31 Start: 24949, Stop: 29772, Start Num: 22

Candidate Starts for Fosterous_31:

(Start: 22 @24949 has 60 MA's), (50, 25123), (56, 25147), (91, 25285), (101, 25318), (104, 25330), (108, 25342), (113, 25360), (119, 25372), (127, 25417), (147, 25528), (166, 25669), (169, 25729), (173, 25762), (177, 25804), (180, 25840), (185, 25876), (187, 25891), (188, 25894), (199, 26005), (201, 26041), (205, 26092), (209, 26134), (212, 26164), (219, 26215), (223, 26248), (227, 26281), (228, 26293), (240, 26374), (248, 26407), (266, 26503), (267, 26518), (270, 26539), (279, 26590), (281, 26599), (291, 26677), (303, 26725), (304, 26734), (310, 26794), (318, 26833), (319, 26839), (322, 26848), (330, 26875), (334, 26902), (337, 26923), (343, 26959), (355, 27025), (358, 27046), (361, 27061), (374, 27148), (375, 27151), (401, 27229), (408, 27289), (419, 27361), (449, 27463), (455, 27496), (463, 27559), (469, 27613), (475, 27676), (492, 27787), (499, 27814), (500, 27820), (516, 27922), (518, 27934), (527, 27988), (530, 28015), (534, 28042), (538, 28081), (542, 28105), (546, 28120), (551, 28147), (562, 28219), (563, 28228), (571, 28288), (573, 28333), (609, 28648), (610, 28654), (612, 28672), (627, 28768), (635, 28873), (645, 28972), (663, 29116), (672, 29191), (675, 29203), (685, 29287), (736, 29626), (745, 29665), (746, 29671), (748, 29677), (751, 29704), (755, 29740), (756, 29752),

Gene: Fugax_31 Start: 20106, Stop: 25637, Start Num: 1

Candidate Starts for Fugax_31:

(Start: 1 @20106 has 29 MA's), (3, 20193), (6, 20280), (10, 20313), (12, 20337), (19, 20460), (25, 20481), (26, 20487), (30, 20511), (36, 20541), (47, 20580), (64, 20664), (72, 20700), (74, 20724), (82, 20763), (144, 21153), (166, 21321), (169, 21381), (177, 21453), (178, 21465), (181, 21501), (184, 21525), (195, 21624), (196, 21627), (199, 21657), (203, 21732), (205, 21744), (209, 21786), (212, 21816), (219, 21867), (237, 22008), (240, 22026), (242, 22038), (244, 22047), (265, 22149), (267, 22170), (270, 22191), (279, 22242), (280, 22245), (281, 22251), (291, 22329), (298, 22359), (303, 22377), (310, 22446), (316, 22479), (318, 22485), (320, 22494), (323, 22500), (334, 22554), (340, 22599), (344, 22626), (346, 22635), (348, 22656), (361, 22713), (366, 22749), (379, 22830), (380, 22833), (388, 22902), (395, 22974), (402, 23070), (410, 23136), (411, 23139), (414, 23163), (417, 23190), (418, 23193), (419, 23196), (421, 23202), (442, 23271), (445, 23280), (454, 23325), (459, 23334), (471, 23412), (476, 23466), (484, 23520), (491, 23577), (501, 23619), (507, 23655), (516, 23718), (523, 23769), (539, 23880), (548, 23919), (560, 24000), (577, 24174), (578, 24177), (583, 24210), (606, 24417), (609, 24426), (610, 24432), (642, 24744), (660, 24951), (676, 25089), (696, 25239), (707, 25350), (715, 25395), (716, 25404), (717, 25410), (725, 25446), (741, 25539), (744, 25551), (750, 25581), (752, 25614), (754, 25626),

Gene: GEazy_17 Start: 10605, Stop: 15728, Start Num: 4

Candidate Starts for GEazy_17:

(Start: 4 @10605 has 12 MA's), (6, 10614), (28, 10887), (29, 10896), (31, 10926), (53, 11055), (68, 11166), (75, 11223), (94, 11361), (100, 11415), (106, 11448), (144, 11649), (149, 11679), (157, 11757), (159, 11775), (164, 11796), (169, 11880), (173, 11913), (174, 11922), (175, 11931), (178, 11964), (179, 11976), (181, 12000), (188, 12045), (189, 12054), (190, 12090), (191, 12099), (196, 12126), (198, 12138), (199, 12156), (201, 12192), (212, 12315), (219, 12357), (237, 12492), (238, 12495), (239, 12498), (241, 12513), (252, 12567), (260, 12606), (273, 12687), (277, 12702), (280, 12723), (282, 12738), (284, 12750), (288, 12786), (295, 12822), (329, 12984), (350, 13041), (359, 13053), (360, 13056), (367, 13089), (369, 13107), (387, 13182), (389, 13188), (390, 13194), (399, 13215), (400, 13218), (401, 13221), (409, 13284), (414, 13320), (416, 13335), (421, 13359), (429, 13374), (430, 13377), (445, 13437), (463, 13536), (467, 13578), (476, 13656), (485, 13725), (488, 13743), (505, 13851), (510, 13878), (511, 13881), (516, 13920), (517, 13923), (518, 13932), (526, 13980), (537, 14067), (545, 14091), (555, 14151), (563, 14211), (572, 14289), (576, 14337), (579, 14349), (588, 14409), (591, 14451), (601, 14532), (603, 14559), (604, 14577), (605, 14607), (614, 14655), (615, 14661), (617, 14670), (624, 14718), (629, 14790), (631, 14829), (633, 14871), (650, 15057), (651, 15060), (656, 15117), (657, 15126), (658, 15138), (661, 15159), (690, 15372), (698, 15411), (704, 15480), (709, 15534), (722, 15606), (735, 15687), (738, 15711),

Gene: GTE6_30 Start: 21946, Stop: 27066, Start Num: 22

Candidate Starts for GTE6_30:

(Start: 22 @21946 has 60 MA's), (40, 22066), (50, 22120), (57, 22153), (62, 22210), (63, 22219), (64, 22222), (73, 22291), (76, 22303), (78, 22318), (83, 22354), (86, 22393), (87, 22399), (89, 22405), (95, 22438), (101, 22480), (103, 22489), (105, 22498), (107, 22504), (126, 22582), (130, 22600), (135, 22639), (145, 22696), (147, 22711), (177, 22975), (185, 23047), (188, 23065), (195, 23143), (199, 23176), (201, 23212), (203, 23251), (205, 23263), (212, 23335), (214, 23359), (215, 23365), (219, 23386), (221, 23407), (223, 23419), (230, 23470), (234, 23500), (244, 23566), (265, 23668), (270, 23710), (280, 23764), (285, 23794), (286, 23797), (291, 23848), (297, 23875), (303, 23896), (309, 23962), (316, 23998), (318, 24004), (328, 24034), (329, 24043), (332, 24055), (333, 24067), (334, 24073), (337, 24094), (344, 24145), (349, 24178), (354, 24193), (358, 24217), (380, 24352), (391, 24427), (392, 24430), (397, 24535), (399, 24553), (405, 24583), (411, 24634), (419, 24691), (425, 24766), (428, 24775), (431, 24784), (433, 24790), (436, 24832), (438, 24841), (445, 24874), (448, 24886), (451, 24907), (453, 24919), (458, 24952), (461, 24973), (473, 25105), (482, 25159), (513, 25366), (530, 25480), (532, 25492), (540, 25570), (550, 25618), (553, 25636), (565, 25714), (586, 25903), (589, 25933), (609, 26104), (613, 26131), (640, 26338), (641, 26341), (643, 26359), (668, 26608), (672, 26626), (677, 26638), (700, 26758), (722, 26914), (723, 26917), (727, 26959), (731, 26977), (734, 26992), (743, 27031),

Gene: Gaea_32 Start: 23498, Stop: 28510, Start Num: 22

Candidate Starts for Gaea_32:

(Start: 22 @23498 has 60 MA's), (33, 23573), (40, 23618), (50, 23672), (56, 23696), (59, 23738), (61, 23756), (63, 23771), (73, 23843), (78, 23870), (86, 23945), (88, 23954), (96, 24011), (98, 24029), (99, 24035), (147, 24287), (150, 24299), (155, 24347), (169, 24488), (173, 24521), (177, 24563), (185, 24635), (187, 24650), (188, 24653), (199, 24764), (201, 24800), (205, 24851), (209, 24893), (212, 24923), (219, 24974), (223, 25007), (227, 25040), (228, 25052), (240, 25133), (248, 25166), (249, 25169), (259, 25226), (266, 25262), (267, 25277), (270, 25298), (279, 25349), (303, 25484), (304, 25493), (316, 25586), (318, 25592), (319, 25598), (322, 25607), (329, 25631), (332, 25643), (334, 25661), (343, 25718), (361, 25820), (367, 25862), (375, 25910), (385, 25940), (401, 25988), (402, 25994), (419, 26120), (440, 26183), (441, 26195), (447, 26216), (449, 26222), (455, 26255), (463, 26318), (469, 26372), (492, 26546), (499, 26573), (500, 26579), (516, 26681), (527, 26747), (546, 26879), (551, 26906), (563, 26987), (571, 27047), (573, 27092), (606, 27398), (609, 27407), (613, 27434), (645, 27728), (663, 27872), (672, 27941), (673, 27947), (675, 27953), (685, 28028), (691, 28058), (707, 28196), (717, 28256), (725, 28292), (730, 28337), (736, 28364), (745, 28403), (746, 28409), (748, 28415), (751, 28442), (755, 28478), (756, 28490),

Gene: Galadriel_33 Start: 25438, Stop: 30261, Start Num: 22

Candidate Starts for Galadriel_33:

(Start: 22 @25438 has 60 MA's), (50, 25612), (56, 25636), (91, 25774), (104, 25819), (108, 25831), (113, 25849), (119, 25861), (123, 25888), (127, 25906), (131, 25918), (147, 26017), (164, 26137), (166, 26158), (169, 26218), (173, 26251), (177, 26293), (180, 26329), (185, 26365), (187, 26380), (188, 26383), (199, 26494), (201, 26530), (205, 26581), (209, 26623), (212, 26653), (219, 26704), (223, 26737), (227, 26770), (228, 26782), (240, 26863), (243, 26881), (244, 26884), (248, 26896), (266, 26992), (267, 27007), (270, 27028), (279, 27079), (281, 27088), (291, 27166), (303, 27214), (304, 27223), (310, 27283), (319, 27328), (322, 27337), (330, 27364), (334, 27391), (337, 27412), (343, 27448), (355, 27514), (361, 27550), (374, 27637), (375, 27640), (377, 27649), (383, 27667), (401, 27718), (402, 27724), (419, 27850), (441, 27925), (449, 27952), (455, 27985), (463, 28048), (469, 28102), (475, 28165), (492, 28276), (499, 28303), (500, 28309), (516, 28411), (518, 28423), (527, 28477), (530, 28504), (534, 28531), (538, 28570), (542, 28594), (551, 28636), (562, 28708), (563, 28717), (571, 28777), (573, 28822), (609, 29137), (610, 29143), (612, 29161), (627, 29257), (635, 29362), (645, 29461), (663, 29605), (672, 29680), (675, 29692), (685, 29776), (736, 30115), (745, 30154), (746, 30160), (748, 30166), (751, 30193), (755, 30229), (756, 30241),

Gene: Geodirt_30 Start: 24421, Stop: 29247, Start Num: 22

Candidate Starts for Geodirt_30:

(Start: 22 @24421 has 60 MA's), (50, 24595), (56, 24619), (91, 24757), (102, 24796), (104, 24802), (108, 24814), (113, 24832), (119, 24844), (123, 24871), (127, 24889), (147, 25000), (164, 25120), (166, 25141), (169, 25201), (173, 25234), (177, 25276), (180, 25312), (185, 25348), (187, 25363), (188, 25366), (199, 25477), (201, 25513), (205, 25564), (209, 25606), (212, 25636), (219, 25687), (223, 25720), (227, 25753), (228, 25765), (240, 25846), (244, 25867), (248, 25879), (266, 25975), (267, 25990), (270, 26011), (279, 26062), (281, 26071), (291, 26149), (303, 26197), (304, 26206), (310, 26266), (319, 26311), (322, 26320), (330, 26347), (334, 26374), (337, 26395), (343, 26431), (355, 26497), (361, 26533), (374, 26620), (375, 26623), (401, 26701), (408, 26761), (419, 26833), (440, 26896), (447, 26929), (449, 26935), (450, 26944), (455, 26968), (463, 27031), (469, 27085), (475, 27148), (492, 27259), (499, 27286), (500, 27292), (516, 27394), (518, 27406), (527, 27460), (530, 27487), (534, 27514), (538, 27553), (542, 27577), (546, 27592), (551, 27619), (562, 27691), (563, 27700), (571, 27760), (573, 27805), (609, 28123), (610, 28129), (612, 28147), (627, 28243), (645, 28447), (663, 28591), (672, 28666), (675, 28678), (685, 28762), (736, 29101), (745, 29140), (746, 29146), (748, 29152), (751, 29179), (755, 29215), (756, 29227),

Gene: Gezellig_30 Start: 19524, Stop: 25055, Start Num: 1

Candidate Starts for Gezellig_30:

(Start: 1 @19524 has 29 MA's), (3, 19611), (6, 19698), (10, 19731), (12, 19755), (19, 19878), (25, 19899), (26, 19905), (30, 19929), (36, 19959), (47, 19998), (64, 20082), (72, 20118), (74, 20142), (82, 20181), (144, 20571), (166, 20739), (169, 20799), (177, 20871), (178, 20883), (181, 20919), (184, 20943), (195, 21042), (196, 21045), (199, 21075), (203, 21150), (205, 21162), (209, 21204), (212, 21234), (219, 21285), (237, 21426), (240, 21444), (242, 21456), (244, 21465), (265, 21567), (267, 21588), (270, 21609), (279, 21660), (280, 21663), (281, 21669), (291, 21747), (298, 21777), (303, 21795), (310, 21864), (316, 21897), (318, 21903), (320, 21912), (323, 21918), (334, 21972), (340, 22017), (344, 22044), (346, 22053), (348, 22074), (361, 22131), (366, 22167), (379, 22248), (380, 22251), (388, 22320), (395, 22392), (402, 22488), (410, 22554), (411, 22557), (414, 22581), (417, 22608), (418, 22611), (419, 22614), (421, 22620), (442, 22689), (445, 22698), (454, 22743), (459, 22752), (471, 22830), (476, 22884), (484, 22938), (491, 22995), (501, 23037), (507, 23073), (516, 23136), (523, 23187), (539, 23298), (548, 23337), (560, 23418), (577, 23592), (578, 23595), (583, 23628), (606, 23835), (609, 23844), (610, 23850), (642, 24162), (660, 24369), (676, 24507), (696, 24657), (707, 24768), (715, 24813), (716, 24822), (717, 24828), (725, 24864), (741, 24957), (744, 24969), (750, 24999), (752, 25032), (754, 25044),

Gene: Gustavo_32 Start: 23650, Stop: 28665, Start Num: 22

Candidate Starts for Gustavo_32:

(Start: 22 @23650 has 60 MA's), (34, 23737), (40, 23770), (50, 23824), (56, 23848), (59, 23890), (61, 23908), (63, 23923), (73, 23995), (78, 24022), (86, 24097), (88, 24106), (96, 24163), (98, 24181), (99, 24187), (102, 24205), (109, 24232), (147, 24439), (150, 24451), (155, 24499), (169, 24640), (173, 24673), (177, 24715), (185, 24787), (187, 24802), (188, 24805), (199, 24916), (201, 24952), (205, 25003), (209, 25045), (212, 25075), (215, 25105), (223, 25159), (227, 25192), (240, 25285), (248, 25318), (249, 25321), (259, 25378), (266, 25414), (267, 25429), (270, 25450), (279, 25501), (303, 25636), (304, 25645), (316, 25738), (318, 25744), (319, 25750), (322, 25759), (327, 25771), (329, 25783), (332, 25795), (334, 25813), (343, 25870), (361, 25972), (375, 26062), (385, 26092), (401, 26140), (402, 26146), (418, 26269), (419, 26272), (440, 26335), (441, 26347), (447, 26368), (449, 26374), (455, 26407), (463, 26470), (469, 26524), (492, 26698), (499, 26725), (500, 26731), (516, 26833), (527, 26899), (546, 27031), (551, 27058), (563, 27139), (571, 27199), (573, 27244), (606, 27550), (609, 27559), (613, 27586), (625, 27655), (635, 27784), (645, 27883), (663, 28027), (672, 28096), (673, 28102), (675, 28108), (685, 28183), (691, 28213), (705, 28318), (707, 28351), (717, 28411), (725, 28447), (730, 28492), (736, 28519), (745, 28558), (746, 28564), (748, 28570), (751, 28597), (755, 28633), (756, 28645),

Gene: Halo3_30 Start: 19817, Stop: 25348, Start Num: 1

Candidate Starts for Halo3_30:

(Start: 1 @19817 has 29 MA's), (3, 19904), (6, 19991), (10, 20024), (12, 20048), (19, 20171), (25, 20192), (26, 20198), (30, 20222), (36, 20252), (47, 20291), (64, 20375), (72, 20411), (74, 20435), (82, 20474), (144, 20864), (166, 21032), (169, 21092), (177, 21164), (178, 21176), (181, 21212), (184, 21236), (195, 21335), (196, 21338), (199, 21368), (203, 21443), (205, 21455), (209, 21497), (212, 21527), (219, 21578), (237, 21719), (240, 21737), (242, 21749), (244, 21758), (265, 21860), (267, 21881), (270, 21902), (279, 21953), (280, 21956), (281, 21962), (291, 22040), (298, 22070), (303, 22088), (310, 22157), (316, 22190), (318, 22196), (320, 22205), (323, 22211), (334, 22265), (340, 22310), (344, 22337), (346, 22346), (348, 22367), (361, 22424), (366, 22460), (379, 22541), (380, 22544), (388, 22613), (395, 22685), (402, 22781), (410, 22847), (411, 22850), (414, 22874), (417, 22901), (418, 22904), (419, 22907), (421, 22913), (442, 22982), (445, 22991), (454, 23036), (459, 23045), (471, 23123), (476, 23177), (484, 23231), (491, 23288), (501, 23330), (507, 23366), (516, 23429), (523, 23480), (539, 23591), (548, 23630), (560, 23711), (577, 23885), (578, 23888), (583, 23921), (606, 24128), (609, 24137), (610, 24143), (642, 24455), (660, 24662), (676, 24800), (696, 24950), (707, 25061), (715, 25106), (716, 25115), (717, 25121), (725, 25157), (741, 25250), (744, 25262), (750, 25292), (752, 25325), (754, 25337),

Gene: HannahD_17 Start: 10605, Stop: 15728, Start Num: 4

Candidate Starts for HannahD_17:

(Start: 4 @10605 has 12 MA's), (6, 10614), (28, 10887), (29, 10896), (31, 10926), (53, 11055), (68, 11166), (75, 11223), (94, 11361), (100, 11415), (106, 11448), (144, 11649), (149, 11679), (157, 11757), (159, 11775), (164, 11796), (169, 11880), (173, 11913), (174, 11922), (175, 11931), (178, 11964), (179, 11976), (181, 12000), (188, 12045), (189, 12054), (190, 12090), (191, 12099), (196, 12126), (198, 12138), (199, 12156), (201, 12192), (212, 12315), (219, 12357), (237, 12492), (238, 12495), (239, 12498), (241, 12513), (252, 12567), (260, 12606), (273, 12687), (277, 12702), (280, 12723), (282, 12738), (284, 12750), (288, 12786), (295, 12822), (329, 12984), (350, 13041), (359, 13053), (360, 13056), (367, 13089), (369, 13107), (387, 13182), (389, 13188), (390, 13194), (399, 13215), (400, 13218), (401, 13221), (409, 13284), (414, 13320), (416, 13335), (421, 13359), (429, 13374), (430, 13377), (445, 13437), (463, 13536), (467, 13578), (476, 13656), (485, 13725), (488, 13743), (505, 13851), (510, 13878), (511, 13881), (516, 13920), (517, 13923), (518, 13932), (526, 13980), (537, 14067), (545, 14091), (555, 14151), (563, 14211), (572, 14289), (576, 14337), (579, 14349), (588, 14409), (591, 14451), (601, 14532), (603, 14559), (604, 14577), (605, 14607), (614, 14655), (615, 14661), (617, 14670), (624, 14718), (629, 14790), (631, 14829), (633, 14871), (650, 15057), (651, 15060), (656, 15117), (657, 15126), (658, 15138), (661, 15159), (690, 15372), (698, 15411), (704, 15480), (709, 15534), (722, 15606), (735, 15687), (738, 15711),

Gene: Hans_33 Start: 23262, Stop: 28151, Start Num: 23

Candidate Starts for Hans_33:

(Start: 23 @23262 has 8 MA's), (40, 23382), (50, 23436), (56, 23460), (63, 23535), (64, 23538), (78, 23634), (86, 23709), (87, 23715), (89, 23721), (93, 23745), (95, 23754), (105, 23814), (107, 23820), (111, 23829), (119, 23859), (130, 23916), (135, 23955), (137, 23964), (147, 24027), (148, 24030), (158, 24105), (159, 24114), (173, 24249), (174, 24258), (177, 24291), (179, 24315), (188, 24381), (193, 24444), (201, 24528), (203, 24567), (205, 24579), (210, 24627), (212, 24651), (219, 24702), (223, 24735), (230, 24786), (234, 24816), (242, 24873), (245, 24885), (249, 24897), (262, 24972), (270, 25026), (280, 25080), (286, 25113), (300, 25200), (303, 25212), (304, 25221), (310, 25281), (312, 25293), (316, 25314), (318, 25320), (319, 25326), (320, 25329), (321, 25332), (329, 25359), (330, 25362), (332, 25371), (333, 25383), (334, 25389), (340, 25434), (346, 25470), (347, 25473), (349, 25494), (370, 25611), (385, 25668), (402, 25755), (410, 25821), (438, 25878), (439, 25881), (443, 25905), (461, 25995), (466, 26043), (484, 26172), (495, 26241), (497, 26250), (501, 26271), (504, 26289), (507, 26307), (530, 26463), (531, 26466), (546, 26571), (563, 26679), (571, 26739), (572, 26769), (581, 26850), (607, 27081), (609, 27087), (616, 27135), (619, 27150), (626, 27216), (636, 27348), (647, 27477), (652, 27516), (700, 27843), (711, 27939), (731, 28062), (738, 28104), (743, 28116),

Gene: Hedwig_18 Start: 11001, Stop: 16013, Start Num: 4

Candidate Starts for Hedwig_18:

(Start: 4 @11001 has 12 MA's), (9, 11031), (11, 11052), (13, 11088), (29, 11292), (31, 11322), (44, 11397), (58, 11502), (68, 11562), (79, 11640), (80, 11643), (85, 11715), (94, 11757), (106, 11844), (169, 12273), (171, 12282), (173, 12306), (175, 12324), (179, 12369), (181, 12393), (188, 12438), (189, 12447), (190, 12483), (191, 12492), (195, 12516), (198, 12531), (199, 12549), (200, 12573), (205, 12636), (211, 12690), (212, 12708), (223, 12783), (226, 12813), (237, 12885), (239, 12891), (241, 12906), (245, 12927), (252, 12960), (265, 13023), (267, 13041), (271, 13068), (273, 13080), (277, 13095), (280, 13116), (301, 13236), (305, 13263), (308, 13296), (313, 13335), (315, 13350), (329, 13398), (333, 13422), (337, 13452), (346, 13515), (356, 13560), (357, 13563), (367, 13632), (379, 13704), (387, 13725), (389, 13731), (390, 13737), (400, 13761), (401, 13764), (404, 13785), (407, 13815), (409, 13827), (414, 13863), (429, 13917), (430, 13920), (432, 13926), (442, 13971), (445, 13980), (467, 14121), (472, 14154), (476, 14199), (478, 14205), (481, 14217), (485, 14268), (502, 14352), (506, 14376), (510, 14400), (511, 14403), (518, 14454), (527, 14502), (537, 14589), (545, 14613), (547, 14625), (551, 14646), (555, 14673), (569, 14778), (572, 14811), (576, 14859), (579, 14871), (592, 14943), (596, 14952), (622, 15108), (630, 15138), (648, 15330), (661, 15450), (662, 15453), (680, 15597), (690, 15660), (709, 15822), (711, 15834), (722, 15891), (733, 15966), (735, 15972), (740, 16002), (742, 16005),

Gene: Inspectinfecti_32 Start: 23624, Stop: 28513, Start Num: 23

Candidate Starts for Inspectinfecti_32:

(Start: 23 @23624 has 8 MA's), (40, 23744), (50, 23798), (56, 23822), (63, 23897), (64, 23900), (78, 23996), (86, 24071), (87, 24077), (89, 24083), (93, 24107), (95, 24116), (105, 24176), (107, 24182), (111, 24191), (119, 24221), (130, 24278), (135, 24317), (137, 24326), (147, 24389), (148, 24392), (158, 24467), (159, 24476), (173, 24611), (174, 24620), (177, 24653), (179, 24677), (188, 24743), (193, 24806), (201, 24890), (203, 24929), (205, 24941), (210, 24989), (212, 25013), (219, 25064), (223, 25097), (230, 25148), (234, 25178), (242, 25235), (245, 25247), (249, 25259), (262, 25334), (270, 25388), (280, 25442), (281, 25448), (286, 25475), (291, 25526), (300, 25562), (303, 25574), (304, 25583), (310, 25643), (312, 25655), (318, 25682), (319, 25688), (320, 25691), (321, 25694), (329, 25721), (330, 25724), (332, 25733), (333, 25745), (334, 25751), (340, 25796), (346, 25832), (347, 25835), (349, 25856), (370, 25973), (385, 26030), (402, 26117), (410, 26183), (438, 26240), (439, 26243), (443, 26267), (461, 26357), (466, 26405), (484, 26534), (495, 26603), (497, 26612), (501, 26633), (504, 26651), (507, 26669), (530, 26825), (531, 26828), (546, 26933), (563, 27041), (571, 27101), (572, 27131), (581, 27212), (607, 27443), (609, 27449), (616, 27497), (619, 27512),

(626, 27578), (636, 27710), (647, 27839), (652, 27878), (700, 28205), (711, 28301), (731, 28424), (738, 28466), (743, 28478),

Gene: JKSyngboy_30 Start: 24222, Stop: 29240, Start Num: 22

Candidate Starts for JKSyngboy_30:

(Start: 22 @24222 has 60 MA's), (33, 24297), (50, 24396), (56, 24420), (59, 24462), (61, 24480), (63, 24495), (73, 24567), (78, 24594), (88, 24678), (98, 24753), (99, 24759), (102, 24777), (147, 25011), (155, 25071), (169, 25212), (173, 25245), (177, 25287), (185, 25359), (187, 25374), (188, 25377), (199, 25488), (201, 25524), (205, 25575), (209, 25617), (212, 25647), (223, 25731), (227, 25764), (228, 25776), (240, 25857), (248, 25890), (249, 25893), (264, 25977), (266, 25986), (267, 26001), (270, 26022), (279, 26073), (291, 26160), (303, 26208), (304, 26217), (316, 26310), (318, 26316), (319, 26322), (322, 26331), (327, 26343), (329, 26355), (332, 26367), (334, 26385), (343, 26442), (361, 26544), (367, 26586), (375, 26634), (385, 26664), (401, 26712), (402, 26718), (412, 26793), (419, 26844), (421, 26850), (440, 26907), (441, 26919), (447, 26940), (449, 26946), (455, 26979), (456, 26985), (463, 27042), (469, 27096), (492, 27270), (499, 27297), (500, 27303), (516, 27405), (527, 27471), (538, 27564), (551, 27630), (562, 27702), (563, 27711), (571, 27771), (573, 27816), (606, 28119), (609, 28128), (610, 28134), (613, 28155), (627, 28254), (635, 28359), (645, 28458), (663, 28602), (672, 28671), (673, 28677), (675, 28683), (685, 28758), (691, 28788), (707, 28926), (717, 28986), (725, 29022), (730, 29067), (736, 29094), (745, 29133), (746, 29139), (748, 29145), (751, 29172), (755, 29208), (756, 29220),

Gene: Jabberwocky_31 Start: 25577, Stop: 30391, Start Num: 22

Candidate Starts for Jabberwocky_31:

(Start: 22 @25577 has 60 MA's), (50, 25751), (56, 25775), (91, 25913), (104, 25958), (108, 25970), (113, 25988), (119, 26000), (123, 26027), (127, 26045), (131, 26057), (147, 26156), (164, 26276), (166, 26297), (169, 26357), (173, 26390), (177, 26432), (180, 26468), (185, 26504), (187, 26519), (188, 26522), (199, 26633), (201, 26669), (205, 26720), (209, 26762), (212, 26792), (219, 26843), (223, 26876), (227, 26909), (228, 26921), (240, 27002), (244, 27023), (248, 27035), (266, 27131), (267, 27146), (270, 27167), (279, 27218), (281, 27227), (291, 27305), (303, 27353), (304, 27362), (310, 27422), (319, 27467), (322, 27476), (330, 27503), (334, 27530), (337, 27551), (343, 27587), (355, 27653), (361, 27689), (374, 27776), (375, 27779), (383, 27806), (401, 27857), (402, 27863), (419, 27989), (449, 28091), (455, 28124), (463, 28187), (469, 28241), (475, 28304), (492, 28415), (499, 28442), (500, 28448), (516, 28550), (527, 28616), (530, 28643), (534, 28670), (538, 28709), (542, 28733), (551, 28775), (562, 28847), (563, 28856), (571, 28916), (573, 28961), (609, 29276), (610, 29282), (612, 29300), (627, 29396), (635, 29501), (645, 29600), (663, 29744), (672, 29819), (675, 29831), (685, 29906), (736, 30245), (745, 30284), (746, 30290), (748, 30296), (751, 30323), (755, 30359), (756, 30371),

Gene: Jambalaya_29 Start: 19171, Stop: 24702, Start Num: 1

Candidate Starts for Jambalaya_29:

(Start: 1 @19171 has 29 MA's), (3, 19258), (6, 19345), (10, 19378), (12, 19402), (19, 19525), (25, 19546), (26, 19552), (30, 19576), (36, 19606), (47, 19645), (64, 19729), (72, 19765), (74, 19789), (82, 19828), (144, 20218), (166, 20386), (169, 20446), (177, 20518), (178, 20530), (181, 20566), (184, 20590), (195, 20689), (196, 20692), (199, 20722), (203, 20797), (205, 20809), (209, 20851), (212, 20881), (219, 20932), (237, 21073), (240, 21091), (242, 21103), (244, 21112), (265, 21214), (267, 21235), (270, 21256), (279, 21307), (280, 21310), (281, 21316), (291, 21394), (298, 21424), (303, 21442), (310, 21511), (316, 21544), (318, 21550), (320, 21559), (323, 21565), (334, 21619), (340, 21664), (344, 21691), (346, 21700), (348, 21721), (361, 21778), (366, 21814), (379, 21895), (380, 21898), (388, 21967), (395, 22039), (402, 22135), (410, 22201), (411, 22204), (414, 22228), (417, 22255), (418, 22258), (419, 22261), (421, 22267), (442, 22336), (445, 22345), (454, 22390), (459, 22399), (471, 22477), (476, 22531), (484, 22585), (491, 22642), (501, 22684), (507, 22720), (516, 22783), (523, 22834), (539, 22945), (548, 22984), (560, 23065), (577, 23239), (578, 23242), (583, 23275), (606, 23482), (609, 23491), (610, 23497), (642, 23809), (660, 24016), (676, 24154), (696,

24304), (707, 24415), (715, 24460), (716, 24469), (725, 24511), (741, 24604), (744, 24616), (750, 24646), (752, 24679), (754, 24691),

Gene: Kamashten_32 Start: 25026, Stop: 29843, Start Num: 22

Candidate Starts for Kamashten_32:

(Start: 22 @25026 has 60 MA's), (50, 25200), (56, 25224), (91, 25362), (104, 25407), (108, 25419), (113, 25437), (119, 25449), (123, 25476), (127, 25494), (131, 25506), (147, 25605), (164, 25725), (166, 25746), (169, 25806), (173, 25839), (177, 25881), (185, 25953), (187, 25968), (188, 25971), (199, 26082), (201, 26118), (205, 26169), (209, 26211), (212, 26241), (219, 26292), (223, 26325), (227, 26358), (228, 26370), (240, 26451), (244, 26472), (248, 26484), (266, 26580), (267, 26595), (270, 26616), (279, 26667), (281, 26676), (291, 26754), (303, 26802), (304, 26811), (310, 26871), (319, 26916), (322, 26925), (330, 26952), (334, 26979), (337, 27000), (343, 27036), (355, 27102), (361, 27138), (374, 27225), (375, 27228), (377, 27237), (383, 27255), (401, 27306), (402, 27312), (419, 27438), (441, 27513), (449, 27540), (455, 27573), (463, 27636), (469, 27690), (475, 27753), (492, 27864), (499, 27891), (500, 27897), (516, 27999), (518, 28011), (527, 28065), (530, 28092), (534, 28119), (538, 28158), (542, 28182), (551, 28224), (562, 28296), (563, 28305), (571, 28365), (573, 28410), (609, 28728), (610, 28734), (612, 28752), (627, 28848), (635, 28953), (645, 29052), (663, 29196), (672, 29271), (675, 29283), (685, 29358), (711, 29553), (736, 29697), (745, 29736), (746, 29742), (748, 29748), (751, 29775), (755, 29811), (756, 29823),

Gene: Keitabear_33 Start: 26382, Stop: 31208, Start Num: 22

Candidate Starts for Keitabear_33:

(Start: 22 @26382 has 60 MA's), (50, 26556), (56, 26580), (91, 26718), (104, 26763), (108, 26775), (113, 26793), (119, 26805), (123, 26832), (127, 26850), (131, 26862), (147, 26961), (164, 27081), (166, 27102), (169, 27162), (173, 27195), (177, 27237), (180, 27273), (185, 27309), (187, 27324), (188, 27327), (199, 27438), (201, 27474), (205, 27525), (209, 27567), (212, 27597), (219, 27648), (223, 27681), (227, 27714), (228, 27726), (240, 27807), (244, 27828), (248, 27840), (266, 27936), (267, 27951), (270, 27972), (279, 28023), (281, 28032), (291, 28110), (303, 28158), (304, 28167), (310, 28227), (319, 28272), (322, 28281), (330, 28308), (334, 28335), (337, 28356), (343, 28392), (355, 28458), (361, 28494), (374, 28581), (375, 28584), (377, 28593), (383, 28611), (401, 28662), (402, 28668), (419, 28794), (449, 28896), (455, 28929), (463, 28992), (469, 29046), (475, 29109), (492, 29220), (499, 29247), (500, 29253), (516, 29355), (527, 29421), (530, 29448), (534, 29475), (538, 29514), (542, 29538), (551, 29580), (562, 29652), (571, 29721), (573, 29766), (609, 30084), (610, 30090), (612, 30108), (627, 30204), (645, 30408), (663, 30552), (672, 30627), (675, 30639), (685, 30723), (736, 31062), (745, 31101), (746, 31107), (748, 31113), (751, 31140), (755, 31176), (756, 31188),

Gene: Kewpiedoll_32 Start: 24214, Stop: 29250, Start Num: 22

Candidate Starts for Kewpiedoll_32:

(Start: 22 @24214 has 60 MA's), (50, 24388), (56, 24412), (57, 24421), (59, 24454), (61, 24472), (63, 24487), (78, 24586), (86, 24661), (87, 24667), (88, 24670), (96, 24727), (98, 24745), (100, 24754), (102, 24769), (114, 24817), (136, 24934), (140, 24952), (141, 24964), (147, 25003), (166, 25144), (169, 25204), (173, 25237), (177, 25279), (185, 25351), (187, 25366), (188, 25369), (199, 25480), (201, 25516), (205, 25567), (209, 25609), (212, 25639), (219, 25690), (223, 25723), (227, 25756), (228, 25768), (240, 25849), (244, 25870), (248, 25882), (266, 25978), (267, 25993), (270, 26014), (279, 26065), (281, 26074), (291, 26152), (303, 26200), (304, 26209), (310, 26269), (319, 26314), (322, 26323), (330, 26350), (334, 26377), (337, 26398), (343, 26434), (355, 26500), (361, 26536), (374, 26623), (375, 26626), (401, 26704), (408, 26764), (419, 26836), (426, 26854), (440, 26899), (441, 26911), (447, 26932), (449, 26938), (450, 26947), (455, 26971), (463, 27034), (469, 27088), (475, 27151), (492, 27262), (499, 27289), (500, 27295), (516, 27397), (518, 27409), (527, 27463), (530, 27490), (534, 27517), (538, 27556), (546, 27595), (551, 27622), (562, 27694), (563, 27703), (571, 27763), (573, 27808), (600, 27997), (609, 28126), (610, 28132), (612, 28150), (627, 28246), (635, 28351), (645, 28450), (663, 28594), (672, 28669), (675, 28681), (685, 28765), (736, 29104),

(745, 29143), (746, 29149), (748, 29155), (751, 29182), (755, 29218), (756, 29230),

Gene: Kiko_18 Start: 10875, Stop: 15764, Start Num: 4

Candidate Starts for Kiko_18:

(Start: 4 @10875 has 12 MA's), (8, 10899), (13, 10962), (15, 11019), (21, 11115), (24, 11127), (27, 11142), (29, 11166), (31, 11196), (49, 11307), (50, 11313), (51, 11316), (52, 11322), (53, 11325), (55, 11337), (58, 11376), (63, 11418), (67, 11430), (74, 11490), (81, 11523), (85, 11589), (90, 11610), (94, 11631), (100, 11685), (106, 11718), (132, 11835), (142, 11910), (144, 11919), (149, 11949), (157, 12027), (169, 12147), (174, 12189), (175, 12198), (178, 12231), (179, 12243), (181, 12267), (182, 12276), (189, 12321), (190, 12357), (191, 12366), (194, 12384), (199, 12423), (201, 12459), (202, 12468), (205, 12510), (212, 12582), (221, 12645), (232, 12723), (236, 12756), (237, 12759), (239, 12765), (241, 12780), (245, 12801), (251, 12831), (252, 12834), (261, 12876), (268, 12924), (271, 12942), (272, 12948), (275, 12963), (277, 12969), (279, 12987), (280, 12990), (284, 13017), (290, 13065), (292, 13074), (301, 13110), (302, 13113), (308, 13170), (311, 13200), (315, 13224), (329, 13272), (333, 13296), (335, 13305), (337, 13326), (351, 13416), (365, 13500), (367, 13506), (407, 13557), (414, 13605), (416, 13620), (421, 13644), (426, 13656), (429, 13659), (430, 13662), (432, 13668), (442, 13713), (445, 13722), (467, 13863), (472, 13896), (476, 13941), (505, 14136), (506, 14139), (508, 14145), (516, 14205), (518, 14217), (534, 14322), (545, 14376), (552, 14412), (555, 14436), (578, 14637), (598, 14727), (611, 14844), (622, 14886), (649, 15093), (651, 15102), (657, 15168), (661, 15201), (690, 15411), (709, 15573), (711, 15585), (722, 15642), (736, 15726), (740, 15753),

Gene: KimmyK_31 Start: 20106, Stop: 25637, Start Num: 1

Candidate Starts for KimmyK_31:

(Start: 1 @20106 has 29 MA's), (3, 20193), (6, 20280), (10, 20313), (12, 20337), (19, 20460), (25, 20481), (26, 20487), (30, 20511), (36, 20541), (47, 20580), (64, 20664), (72, 20700), (74, 20724), (82, 20763), (144, 21153), (166, 21321), (169, 21381), (177, 21453), (178, 21465), (181, 21501), (184, 21525), (195, 21624), (196, 21627), (199, 21657), (203, 21732), (205, 21744), (209, 21786), (212, 21816), (219, 21867), (237, 22008), (240, 22026), (242, 22038), (244, 22047), (265, 22149), (267, 22170), (270, 22191), (279, 22242), (280, 22245), (281, 22251), (291, 22329), (298, 22359), (303, 22377), (310, 22446), (316, 22479), (318, 22485), (320, 22494), (323, 22500), (334, 22554), (340, 22599), (344, 22626), (346, 22635), (348, 22656), (361, 22713), (366, 22749), (379, 22830), (380, 22833), (388, 22902), (395, 22974), (402, 23070), (410, 23136), (411, 23139), (414, 23163), (417, 23190), (418, 23193), (419, 23196), (421, 23202), (442, 23271), (445, 23280), (454, 23325), (459, 23334), (471, 23412), (476, 23466), (484, 23520), (491, 23577), (501, 23619), (507, 23655), (516, 23718), (523, 23769), (539, 23880), (548, 23919), (560, 24000), (577, 24174), (578, 24177), (583, 24210), (606, 24417), (609, 24426), (610, 24432), (642, 24744), (660, 24951), (676, 25089), (696, 25239), (707, 25350), (715, 25395), (716, 25404), (717, 25410), (725, 25446), (741, 25539), (744, 25551), (750, 25581), (752, 25614), (754, 25626),

Gene: Kroos_33 Start: 24403, Stop: 29418, Start Num: 22

Candidate Starts for Kroos_33:

(Start: 22 @24403 has 60 MA's), (33, 24478), (40, 24523), (50, 24577), (56, 24601), (59, 24643), (61, 24661), (63, 24676), (73, 24748), (78, 24775), (86, 24850), (88, 24859), (95, 24895), (96, 24916), (98, 24934), (99, 24940), (102, 24958), (109, 24985), (147, 25192), (150, 25204), (155, 25252), (169, 25393), (173, 25426), (177, 25468), (185, 25540), (187, 25555), (188, 25558), (199, 25669), (201, 25705), (205, 25756), (209, 25798), (212, 25828), (219, 25879), (223, 25912), (227, 25945), (228, 25957), (240, 26038), (248, 26071), (249, 26074), (259, 26131), (266, 26167), (267, 26182), (270, 26203), (279, 26254), (303, 26389), (310, 26458), (318, 26497), (319, 26503), (322, 26512), (330, 26539), (334, 26566), (337, 26587), (343, 26623), (346, 26647), (347, 26650), (354, 26686), (361, 26725), (363, 26743), (367, 26767), (375, 26815), (385, 26845), (401, 26893), (402, 26899), (418, 27022), (419, 27025), (421, 27031), (440, 27088), (441, 27100), (447, 27121), (449, 27127), (455, 27160), (456, 27166), (463, 27223), (469, 27277), (475, 27340), (492, 27451), (499, 27478), (500,

27484), (516, 27586), (527, 27652), (546, 27784), (551, 27811), (563, 27892), (571, 27952), (573, 27997), (606, 28303), (609, 28312), (613, 28339), (625, 28408), (635, 28537), (645, 28636), (663, 28780), (672, 28849), (673, 28855), (675, 28861), (685, 28936), (691, 28966), (707, 29104), (717, 29164), (725, 29200), (730, 29245), (736, 29272), (745, 29311), (746, 29317), (748, 29323), (751, 29350), (755, 29386), (756, 29398),

Gene: Kwekel_30 Start: 21376, Stop: 26505, Start Num: 22

Candidate Starts for Kwekel_30:

(Start: 22 @21376 has 60 MA's), (40, 21496), (50, 21550), (57, 21583), (62, 21640), (63, 21649), (64, 21652), (76, 21733), (78, 21748), (83, 21784), (86, 21823), (87, 21829), (89, 21835), (95, 21868), (101, 21910), (103, 21919), (105, 21928), (107, 21934), (126, 22012), (130, 22030), (135, 22069), (147, 22141), (173, 22363), (177, 22405), (185, 22477), (188, 22495), (195, 22573), (199, 22606), (201, 22642), (205, 22693), (212, 22765), (214, 22789), (215, 22795), (219, 22816), (223, 22849), (230, 22900), (234, 22930), (244, 22996), (255, 23041), (265, 23098), (270, 23140), (280, 23194), (286, 23227), (297, 23305), (309, 23392), (316, 23428), (318, 23434), (328, 23464), (329, 23473), (334, 23503), (337, 23524), (344, 23575), (349, 23608), (354, 23623), (380, 23782), (391, 23857), (392, 23860), (394, 23887), (396, 23962), (397, 23965), (399, 23983), (404, 24010), (408, 24049), (414, 24088), (419, 24121), (425, 24196), (428, 24205), (431, 24214), (433, 24220), (436, 24262), (438, 24271), (445, 24304), (448, 24316), (451, 24337), (453, 24349), (458, 24382), (461, 24403), (473, 24535), (482, 24589), (513, 24796), (520, 24835), (530, 24910), (550, 25048), (553, 25066), (565, 25144), (586, 25333), (589, 25363), (609, 25534), (613, 25561), (640, 25768), (641, 25771), (643, 25789), (668, 26038), (677, 26068), (700, 26197), (723, 26356), (727, 26398), (731, 26416), (734, 26431), (743, 26470),

Gene: Kwobi_33 Start: 24389, Stop: 29404, Start Num: 22

Candidate Starts for Kwobi_33:

(Start: 22 @24389 has 60 MA's), (34, 24476), (40, 24509), (50, 24563), (56, 24587), (59, 24629), (61, 24647), (63, 24662), (73, 24734), (78, 24761), (86, 24836), (88, 24845), (96, 24902), (98, 24920), (99, 24926), (147, 25178), (155, 25238), (169, 25379), (173, 25412), (177, 25454), (185, 25526), (187, 25541), (188, 25544), (199, 25655), (201, 25691), (205, 25742), (209, 25784), (212, 25814), (215, 25844), (223, 25898), (227, 25931), (240, 26024), (248, 26057), (249, 26060), (259, 26117), (266, 26153), (267, 26168), (270, 26189), (279, 26240), (303, 26375), (304, 26384), (316, 26477), (318, 26483), (319, 26489), (322, 26498), (329, 26522), (332, 26534), (334, 26552), (343, 26609), (361, 26711), (375, 26801), (385, 26831), (401, 26879), (402, 26885), (418, 27008), (419, 27011), (421, 27017), (440, 27074), (441, 27086), (447, 27107), (449, 27113), (455, 27146), (463, 27209), (469, 27263), (475, 27326), (492, 27437), (499, 27464), (500, 27470), (516, 27572), (527, 27638), (546, 27770), (551, 27797), (563, 27878), (571, 27938), (573, 27983), (606, 28289), (609, 28298), (613, 28325), (625, 28394), (635, 28523), (645, 28622), (663, 28766), (672, 28835), (673, 28841), (675, 28847), (685, 28922), (691, 28952), (707, 29090), (717, 29150), (725, 29186), (730, 29231), (736, 29258), (745, 29297), (746, 29303), (748, 29309), (751, 29336), (755, 29372), (756, 29384),

Gene: Lennon_33 Start: 26184, Stop: 30995, Start Num: 22

Candidate Starts for Lennon_33:

(Start: 22 @26184 has 60 MA's), (50, 26358), (56, 26382), (91, 26520), (102, 26559), (104, 26565), (108, 26577), (113, 26595), (119, 26607), (123, 26634), (127, 26652), (131, 26664), (147, 26763), (164, 26883), (166, 26904), (169, 26964), (173, 26997), (177, 27039), (180, 27075), (185, 27111), (187, 27126), (188, 27129), (199, 27240), (201, 27276), (205, 27327), (209, 27369), (212, 27399), (219, 27450), (223, 27483), (227, 27516), (228, 27528), (240, 27609), (244, 27630), (248, 27642), (266, 27738), (267, 27753), (270, 27774), (279, 27825), (281, 27834), (291, 27912), (303, 27960), (304, 27969), (310, 28029), (318, 28068), (319, 28074), (322, 28083), (330, 28110), (334, 28137), (337, 28158), (343, 28194), (355, 28260), (361, 28296), (374, 28383), (375, 28386), (383, 28413), (401, 28464), (402, 28470), (419, 28596), (449, 28698), (455, 28731), (463, 28794), (469, 28848), (475, 28911), (492, 29022), (499, 29049), (500, 29055), (516, 29157), (518, 29169), (527, 29223),

(530, 29250), (534, 29277), (538, 29316), (542, 29340), (551, 29382), (562, 29454), (563, 29463), (571, 29523), (573, 29568), (609, 29883), (610, 29889), (612, 29907), (627, 30003), (635, 30108), (645, 30207), (663, 30351), (672, 30414), (675, 30426), (685, 30510), (736, 30849), (745, 30888), (746, 30894), (748, 30900), (751, 30927), (755, 30963), (756, 30975),

Gene: Leonard_31 Start: 23260, Stop: 28149, Start Num: 23

Candidate Starts for Leonard_31:

(Start: 23 @23260 has 8 MA's), (40, 23380), (50, 23434), (56, 23458), (63, 23533), (64, 23536), (78, 23632), (86, 23707), (87, 23713), (89, 23719), (93, 23743), (95, 23752), (105, 23812), (107, 23818), (111, 23827), (119, 23857), (130, 23914), (135, 23953), (137, 23962), (147, 24025), (148, 24028), (158, 24103), (159, 24112), (173, 24247), (174, 24256), (177, 24289), (179, 24313), (188, 24379), (193, 24442), (201, 24526), (203, 24565), (205, 24577), (210, 24625), (212, 24649), (219, 24700), (223, 24733), (230, 24784), (234, 24814), (242, 24871), (245, 24883), (249, 24895), (262, 24970), (270, 25024), (280, 25078), (281, 25084), (286, 25111), (300, 25198), (303, 25210), (304, 25219), (310, 25279), (312, 25291), (316, 25312), (318, 25318), (319, 25324), (320, 25327), (329, 25357), (330, 25360), (332, 25369), (333, 25381), (334, 25387), (340, 25432), (346, 25468), (347, 25471), (349, 25492), (370, 25609), (385, 25666), (402, 25753), (410, 25819), (438, 25876), (439, 25879), (443, 25903), (461, 25993), (466, 26041), (484, 26170), (495, 26239), (501, 26269), (504, 26287), (530, 26461), (531, 26464), (546, 26569), (562, 26668), (563, 26677), (571, 26737), (572, 26767), (581, 26848), (607, 27079), (609, 27085), (619, 27148), (636, 27346), (647, 27475), (652, 27514), (697, 27796), (700, 27841), (703, 27868), (711, 27937), (731, 28060), (738, 28102), (743, 28114),

Gene: LilHam_30 Start: 22983, Stop: 28007, Start Num: 22

Candidate Starts for LilHam_30:

(Start: 22 @22983 has 60 MA's), (34, 23070), (40, 23103), (50, 23157), (56, 23181), (59, 23223), (61, 23241), (63, 23256), (73, 23328), (78, 23355), (86, 23430), (88, 23439), (96, 23496), (98, 23514), (99, 23520), (147, 23772), (155, 23832), (169, 23973), (173, 24006), (177, 24048), (185, 24120), (187, 24135), (188, 24138), (199, 24249), (201, 24285), (205, 24336), (209, 24378), (212, 24408), (219, 24459), (223, 24492), (227, 24525), (228, 24537), (240, 24618), (248, 24651), (249, 24654), (259, 24711), (266, 24747), (267, 24762), (270, 24783), (279, 24834), (303, 24969), (304, 24978), (316, 25071), (318, 25077), (319, 25083), (322, 25092), (327, 25104), (329, 25116), (332, 25128), (334, 25146), (343, 25203), (361, 25305), (363, 25323), (367, 25347), (375, 25395), (385, 25425), (401, 25473), (402, 25479), (418, 25602), (419, 25605), (421, 25611), (440, 25668), (441, 25680), (447, 25701), (449, 25707), (455, 25740), (463, 25803), (469, 25857), (492, 26031), (499, 26058), (500, 26064), (516, 26166), (527, 26232), (551, 26391), (563, 26472), (571, 26532), (573, 26577), (606, 26889), (609, 26898), (613, 26925), (625, 26994), (635, 27123), (645, 27222), (663, 27366), (672, 27438), (673, 27444), (675, 27450), (685, 27525), (691, 27555), (707, 27693), (717, 27753), (725, 27789), (730, 27834), (736, 27861), (745, 27900), (746, 27906), (748, 27912), (751, 27939), (755, 27975), (756, 27987),

Gene: Lilbeanie_28 Start: 18351, Stop: 23423, Start Num: 20

Candidate Starts for Lilbeanie_28:

(Start: 20 @18351 has 1 MA's), (33, 18426), (45, 18492), (50, 18525), (56, 18549), (57, 18558), (70, 18633), (77, 18663), (84, 18693), (110, 18813), (135, 18930), (139, 18948), (147, 19002), (148, 19005), (151, 19035), (159, 19089), (167, 19140), (172, 19221), (173, 19224), (186, 19347), (188, 19359), (199, 19470), (201, 19506), (203, 19545), (207, 19569), (209, 19599), (212, 19629), (223, 19713), (227, 19749), (240, 19839), (247, 19869), (254, 19902), (255, 19905), (259, 19932), (270, 20004), (279, 20055), (280, 20058), (281, 20064), (286, 20091), (287, 20112), (291, 20142), (296, 20166), (299, 20175), (316, 20292), (318, 20298), (326, 20322), (328, 20328), (332, 20349), (334, 20367), (343, 20424), (354, 20487), (361, 20526), (386, 20649), (413, 20754), (434, 20823), (454, 20898), (469, 21006), (470, 21009), (480, 21066), (486, 21108), (489, 21123), (498, 21162), (501, 21171), (513, 21231), (517, 21255), (523, 21303), (529, 21327), (546, 21408), (551, 21435), (562, 21507), (563, 21516), (568, 21567), (571, 21576), (573, 21621), (609, 21915), (613, 21942), (657,

22335), (667, 22422), (681, 22542), (712, 22785), (720, 22827), (721, 22830), (732, 22911), (747, 22974), (753, 23034), (757, 23079), (758, 23091), (759, 23118), (760, 23181), (761, 23202), (762, 23241), (763, 23265), (764, 23301), (765, 23316), (766, 23349), (767, 23376), (768, 23388),

Gene: Love_36 Start: 25948, Stop: 30777, Start Num: 22

Candidate Starts for Love_36:

(Start: 22 @25948 has 60 MA's), (50, 26122), (56, 26146), (91, 26284), (104, 26329), (108, 26341), (113, 26359), (119, 26371), (123, 26398), (127, 26416), (131, 26428), (147, 26527), (164, 26647), (166, 26668), (169, 26728), (173, 26761), (177, 26803), (180, 26839), (185, 26875), (187, 26890), (188, 26893), (199, 27004), (201, 27040), (205, 27091), (209, 27133), (212, 27163), (219, 27214), (223, 27247), (228, 27292), (240, 27373), (244, 27394), (248, 27406), (266, 27502), (267, 27517), (270, 27538), (279, 27589), (281, 27598), (303, 27724), (304, 27733), (310, 27793), (319, 27838), (322, 27847), (330, 27874), (334, 27901), (337, 27922), (343, 27958), (355, 28024), (361, 28060), (374, 28147), (375, 28150), (377, 28159), (383, 28177), (401, 28228), (402, 28234), (419, 28360), (441, 28435), (449, 28462), (455, 28495), (463, 28558), (469, 28612), (475, 28675), (492, 28786), (499, 28813), (500, 28819), (516, 28921), (518, 28933), (527, 28987), (530, 29014), (534, 29041), (538, 29080), (551, 29146), (562, 29218), (563, 29227), (571, 29287), (573, 29332), (609, 29647), (610, 29653), (612, 29671), (627, 29767), (635, 29872), (645, 29971), (663, 30115), (672, 30196), (675, 30208), (685, 30292), (699, 30382), (736, 30631), (745, 30670), (746, 30676), (748, 30682), (751, 30709), (755, 30745), (756, 30757),

Gene: MagicMan_17 Start: 10932, Stop: 16046, Start Num: 4

Candidate Starts for MagicMan_17:

(Start: 4 @10932 has 12 MA's), (6, 10941), (28, 11214), (29, 11223), (31, 11253), (32, 11262), (42, 11319), (53, 11382), (60, 11454), (63, 11475), (68, 11493), (85, 11646), (94, 11688), (100, 11742), (106, 11775), (142, 11967), (143, 11970), (149, 12006), (157, 12084), (164, 12123), (169, 12207), (173, 12240), (174, 12249), (175, 12258), (178, 12291), (179, 12303), (181, 12327), (188, 12372), (189, 12381), (190, 12417), (191, 12426), (196, 12453), (198, 12465), (199, 12483), (201, 12519), (212, 12642), (219, 12684), (237, 12819), (238, 12822), (239, 12825), (241, 12840), (252, 12894), (260, 12933), (271, 13002), (273, 13014), (277, 13029), (280, 13050), (282, 13065), (284, 13077), (288, 13113), (295, 13149), (329, 13311), (350, 13368), (359, 13380), (360, 13383), (367, 13416), (387, 13509), (389, 13515), (390, 13521), (399, 13542), (400, 13545), (401, 13548), (409, 13611), (414, 13647), (416, 13662), (421, 13686), (429, 13701), (430, 13704), (432, 13710), (445, 13764), (463, 13863), (467, 13905), (476, 13983), (482, 14007), (485, 14052), (505, 14178), (508, 14187), (510, 14205), (511, 14208), (516, 14247), (517, 14250), (518, 14259), (545, 14418), (563, 14538), (572, 14616), (576, 14664), (579, 14676), (588, 14736), (601, 14853), (603, 14880), (604, 14898), (614, 14976), (615, 14982), (617, 14991), (621, 15018), (629, 15111), (631, 15150), (633, 15192), (646, 15345), (650, 15378), (651, 15381), (656, 15438), (657, 15447), (658, 15459), (661, 15480), (665, 15501), (690, 15693), (698, 15732), (704, 15801), (709, 15855), (735, 16008),

Gene: McKinley_35 Start: 25980, Stop: 30803, Start Num: 22

Candidate Starts for McKinley_35:

(Start: 22 @25980 has 60 MA's), (50, 26154), (56, 26178), (91, 26316), (104, 26361), (108, 26373), (113, 26391), (119, 26403), (123, 26430), (127, 26448), (131, 26460), (147, 26559), (164, 26679), (166, 26700), (169, 26760), (173, 26793), (177, 26835), (180, 26871), (185, 26907), (187, 26922), (188, 26925), (199, 27036), (201, 27072), (205, 27123), (209, 27165), (212, 27195), (219, 27246), (223, 27279), (227, 27312), (228, 27324), (240, 27405), (244, 27426), (248, 27438), (266, 27534), (267, 27549), (270, 27570), (279, 27621), (281, 27630), (291, 27708), (303, 27756), (304, 27765), (310, 27825), (318, 27864), (319, 27870), (322, 27879), (330, 27906), (334, 27933), (337, 27954), (343, 27990), (355, 28056), (358, 28077), (361, 28092), (374, 28179), (375, 28182), (401, 28260), (408, 28320), (419, 28392), (449, 28494), (455, 28527), (463, 28590), (469, 28644), (475, 28707), (492, 28818), (499, 28845), (500, 28851), (516, 28953), (518, 28965), (527, 29019), (530, 29046), (534, 29073), (538, 29112), (542, 29136), (546, 29151), (551, 29178), (562, 29250), (563, 29259),

(571, 29319), (573, 29364), (600, 29553), (609, 29682), (610, 29688), (612, 29706), (627, 29805), (635, 29910), (644, 29982), (645, 30009), (663, 30153), (672, 30222), (675, 30234), (685, 30318), (736, 30657), (745, 30696), (746, 30702), (748, 30708), (751, 30735), (755, 30771), (756, 30783),

Gene: MelBins_32 Start: 23406, Stop: 28298, Start Num: 23

Candidate Starts for MelBins_32:

(Start: 23 @23406 has 8 MA's), (40, 23526), (50, 23580), (56, 23604), (63, 23679), (64, 23682), (78, 23778), (86, 23853), (87, 23859), (89, 23865), (93, 23889), (95, 23898), (105, 23958), (107, 23964), (111, 23973), (119, 24003), (130, 24060), (135, 24099), (137, 24108), (138, 24111), (147, 24171), (148, 24174), (158, 24249), (159, 24258), (173, 24393), (174, 24402), (177, 24435), (179, 24459), (188, 24525), (193, 24588), (201, 24672), (203, 24711), (205, 24723), (210, 24771), (212, 24795), (223, 24879), (230, 24930), (234, 24960), (242, 25017), (245, 25029), (262, 25116), (270, 25170), (280, 25224), (281, 25230), (286, 25257), (300, 25344), (303, 25356), (304, 25365), (310, 25425), (312, 25437), (316, 25458), (318, 25464), (319, 25470), (320, 25473), (321, 25476), (329, 25503), (330, 25506), (332, 25515), (333, 25527), (334, 25533), (340, 25578), (346, 25614), (347, 25617), (349, 25638), (370, 25755), (385, 25812), (402, 25899), (410, 25965), (438, 26022), (439, 26025), (443, 26049), (461, 26139), (466, 26187), (484, 26316), (495, 26385), (501, 26415), (504, 26433), (507, 26451), (530, 26607), (531, 26610), (546, 26715), (562, 26814), (563, 26823), (571, 26883), (572, 26913), (581, 26994), (607, 27225), (609, 27231), (619, 27294), (632, 27471), (636, 27492), (647, 27621), (652, 27660), (700, 27990), (711, 28086), (713, 28095), (731, 28209), (738, 28251), (743, 28263),

Gene: ModicumRichard_17 Start: 10946, Stop: 15646, Start Num: 35

Candidate Starts for ModicumRichard_17:

(Start: 35 @10946 has 5 MA's), (61, 11105), (81, 11228), (97, 11363), (117, 11450), (118, 11453), (121, 11480), (128, 11507), (129, 11513), (130, 11516), (162, 11735), (165, 11762), (202, 12137), (204, 12170), (206, 12179), (208, 12209), (210, 12221), (213, 12257), (220, 12302), (222, 12323), (223, 12332), (225, 12347), (233, 12395), (235, 12416), (250, 12491), (253, 12503), (258, 12536), (259, 12539), (262, 12557), (263, 12563), (267, 12590), (268, 12599), (269, 12602), (276, 12644), (278, 12653), (286, 12701), (294, 12764), (319, 12902), (322, 12911), (339, 12998), (342, 13010), (345, 13031), (347, 13037), (352, 13064), (353, 13067), (362, 13115), (364, 13124), (371, 13166), (373, 13178), (380, 13220), (387, 13241), (390, 13253), (404, 13295), (460, 13565), (461, 13571), (465, 13607), (477, 13694), (487, 13772), (494, 13820), (507, 13877), (509, 13883), (515, 13931), (521, 13967), (524, 13991), (542, 14114), (556, 14186), (564, 14225), (590, 14432), (628, 14711), (632, 14789), (666, 15095), (669, 15140), (683, 15218), (684, 15224), (686, 15236), (693, 15281), (694, 15284), (714, 15458), (739, 15617),

Gene: MoontowerMania_32 Start: 24791, Stop: 29617, Start Num: 22

Candidate Starts for MoontowerMania_32:

(Start: 22 @24791 has 60 MA's), (50, 24965), (56, 24989), (91, 25127), (104, 25172), (108, 25184), (113, 25202), (119, 25214), (127, 25259), (147, 25370), (164, 25490), (166, 25511), (169, 25571), (173, 25604), (177, 25646), (185, 25718), (187, 25733), (188, 25736), (199, 25847), (201, 25883), (205, 25934), (209, 25976), (212, 26006), (219, 26057), (223, 26090), (227, 26123), (228, 26135), (240, 26216), (244, 26237), (248, 26249), (266, 26345), (267, 26360), (270, 26381), (279, 26432), (281, 26441), (291, 26519), (303, 26567), (304, 26576), (310, 26636), (319, 26681), (322, 26690), (330, 26717), (334, 26744), (337, 26765), (343, 26801), (355, 26867), (361, 26903), (374, 26990), (375, 26993), (377, 27002), (383, 27020), (401, 27071), (402, 27077), (419, 27203), (441, 27278), (449, 27305), (455, 27338), (463, 27401), (469, 27455), (475, 27518), (492, 27629), (499, 27656), (500, 27662), (516, 27764), (518, 27776), (527, 27830), (530, 27857), (534, 27884), (538, 27923), (542, 27947), (546, 27962), (551, 27989), (562, 28061), (563, 28070), (571, 28130), (573, 28175), (609, 28493), (610, 28499), (612, 28517), (627, 28613), (635, 28718), (645, 28817), (663, 28961), (672, 29036), (675, 29048), (685, 29132), (736, 29471), (745, 29510), (746, 29516), (748, 29522), (751, 29549), (755, 29585), (756, 29597),

Gene: Morgana_17 Start: 10951, Stop: 15636, Start Num: 35

Candidate Starts for Morgana_17:

(Start: 35 @10951 has 5 MA's), (61, 11110), (81, 11236), (117, 11440), (118, 11443), (121, 11470), (128, 11497), (129, 11503), (130, 11506), (162, 11725), (165, 11752), (202, 12127), (204, 12160), (206, 12169), (208, 12199), (210, 12211), (213, 12247), (220, 12292), (222, 12313), (223, 12322), (225, 12337), (233, 12385), (235, 12406), (246, 12463), (250, 12481), (253, 12493), (258, 12526), (262, 12547), (263, 12553), (268, 12589), (269, 12592), (276, 12634), (278, 12643), (286, 12691), (294, 12754), (322, 12901), (339, 12988), (342, 13000), (345, 13021), (347, 13027), (352, 13054), (353, 13057), (362, 13105), (364, 13114), (371, 13156), (373, 13168), (380, 13210), (387, 13231), (390, 13243), (404, 13285), (428, 13414), (461, 13561), (476, 13681), (477, 13684), (479, 13690), (487, 13762), (494, 13810), (507, 13867), (515, 13921), (521, 13957), (524, 13981), (556, 14176), (564, 14215), (590, 14422), (628, 14701), (632, 14779), (659, 15037), (666, 15085), (669, 15130), (683, 15208), (684, 15214), (686, 15226), (693, 15271), (694, 15274), (714, 15448), (739, 15607),

Gene: Mutzi_31 Start: 19848, Stop: 25364, Start Num: 1

Candidate Starts for Mutzi_31:

(Start: 1 @19848 has 29 MA's), (3, 19935), (6, 20022), (10, 20055), (12, 20079), (19, 20202), (25, 20223), (26, 20229), (30, 20253), (36, 20283), (47, 20322), (64, 20406), (72, 20442), (74, 20466), (82, 20505), (128, 20793), (144, 20895), (155, 20982), (166, 21063), (169, 21123), (177, 21195), (181, 21243), (184, 21267), (195, 21366), (196, 21369), (199, 21399), (203, 21474), (205, 21486), (209, 21528), (212, 21558), (219, 21609), (223, 21642), (236, 21747), (237, 21750), (240, 21768), (242, 21780), (244, 21789), (265, 21891), (267, 21912), (270, 21933), (279, 21984), (280, 21987), (291, 22071), (296, 22095), (298, 22101), (303, 22119), (310, 22188), (316, 22221), (318, 22227), (320, 22236), (323, 22242), (334, 22296), (344, 22368), (346, 22377), (348, 22398), (361, 22455), (366, 22491), (379, 22572), (380, 22575), (384, 22629), (388, 22644), (395, 22716), (402, 22812), (410, 22878), (411, 22881), (414, 22905), (417, 22932), (418, 22935), (419, 22938), (442, 23013), (444, 23019), (445, 23022), (454, 23067), (459, 23076), (471, 23154), (476, 23208), (484, 23262), (491, 23319), (501, 23361), (516, 23460), (523, 23511), (539, 23622), (548, 23661), (560, 23742), (566, 23784), (577, 23916), (578, 23919), (582, 23949), (583, 23952), (585, 23967), (606, 24159), (609, 24168), (610, 24174), (642, 24486), (659, 24681), (660, 24693), (696, 24966), (715, 25122), (716, 25131), (717, 25137), (725, 25173), (741, 25266), (744, 25278), (750, 25308), (752, 25341), (754, 25353),

Gene: Natkenzie_33 Start: 24850, Stop: 29775, Start Num: 22

Candidate Starts for Natkenzie_33:

(Start: 22 @24850 has 60 MA's), (40, 24970), (44, 24982), (50, 25024), (56, 25048), (62, 25114), (63, 25123), (71, 25168), (73, 25195), (86, 25297), (88, 25306), (92, 25324), (103, 25390), (107, 25405), (111, 25414), (124, 25477), (126, 25483), (132, 25510), (135, 25540), (137, 25549), (145, 25597), (147, 25612), (150, 25624), (159, 25711), (163, 25723), (173, 25846), (176, 25870), (177, 25888), (185, 25960), (186, 25966), (188, 25978), (199, 26089), (201, 26125), (203, 26164), (205, 26176), (209, 26218), (212, 26248), (218, 26290), (219, 26299), (220, 26302), (223, 26332), (227, 26365), (240, 26458), (249, 26494), (259, 26551), (265, 26581), (270, 26623), (280, 26677), (281, 26683), (286, 26710), (291, 26761), (300, 26797), (303, 26809), (304, 26818), (310, 26878), (312, 26890), (316, 26911), (318, 26917), (330, 26959), (331, 26965), (333, 26980), (334, 26986), (340, 27031), (346, 27067), (347, 27070), (361, 27145), (370, 27208), (385, 27265), (401, 27346), (407, 27397), (429, 27454), (438, 27475), (439, 27478), (443, 27502), (466, 27640), (471, 27661), (501, 27868), (504, 27886), (512, 27943), (527, 28033), (533, 28096), (546, 28177), (551, 28204), (562, 28276), (563, 28285), (571, 28345), (581, 28456), (606, 28687), (609, 28696), (613, 28723), (620, 28765), (638, 28984), (642, 29011), (647, 29083), (652, 29122), (678, 29329), (692, 29401), (700, 29467), (719, 29602), (726, 29665), (727, 29668), (731, 29686), (734, 29701), (738, 29728), (743, 29740),

Gene: Nordenberg_27 Start: 24150, Stop: 28973, Start Num: 22

Candidate Starts for Nordenberg_27:

(Start: 22 @24150 has 60 MA's), (50, 24324), (56, 24348), (91, 24486), (104, 24531), (108, 24543), (113, 24561), (119, 24573), (123, 24600), (127, 24618), (131, 24630), (147, 24729), (164, 24849), (166, 24870), (169, 24930), (173, 24963), (177, 25005), (180, 25041), (185, 25077), (187, 25092), (188, 25095), (199, 25206), (201, 25242), (205, 25293), (209, 25335), (212, 25365), (219, 25416), (223, 25449), (228, 25494), (240, 25575), (248, 25608), (266, 25704), (267, 25719), (270, 25740), (279, 25791), (281, 25800), (303, 25926), (304, 25935), (310, 25995), (318, 26034), (319, 26040), (322, 26049), (330, 26076), (334, 26103), (337, 26124), (343, 26160), (355, 26226), (361, 26262), (374, 26349), (375, 26352), (377, 26361), (383, 26379), (401, 26430), (402, 26436), (419, 26562), (441, 26637), (449, 26664), (455, 26697), (463, 26760), (469, 26814), (475, 26877), (492, 26988), (499, 27015), (500, 27021), (516, 27123), (518, 27135), (527, 27189), (530, 27216), (534, 27243), (538, 27282), (551, 27348), (562, 27420), (563, 27429), (571, 27489), (573, 27534), (609, 27852), (610, 27858), (612, 27876), (627, 27969), (635, 28074), (645, 28173), (663, 28317), (672, 28392), (675, 28404), (685, 28488), (736, 28827), (745, 28866), (746, 28872), (748, 28878), (751, 28905), (755, 28941), (756, 28953),

Gene: Nubi_29 Start: 19412, Stop: 24925, Start Num: 1

Candidate Starts for Nubi_29:

(Start: 1 @19412 has 29 MA's), (3, 19499), (6, 19586), (10, 19619), (12, 19643), (19, 19766), (25, 19787), (26, 19793), (30, 19817), (36, 19847), (47, 19886), (64, 19970), (72, 20006), (74, 20030), (82, 20069), (144, 20459), (166, 20627), (169, 20687), (177, 20759), (178, 20771), (181, 20807), (184, 20831), (195, 20930), (196, 20933), (199, 20963), (203, 21038), (205, 21050), (209, 21092), (212, 21122), (219, 21173), (237, 21314), (240, 21332), (242, 21344), (244, 21353), (265, 21455), (267, 21476), (270, 21497), (279, 21548), (280, 21551), (291, 21635), (298, 21665), (303, 21683), (310, 21752), (316, 21785), (318, 21791), (320, 21800), (323, 21806), (334, 21860), (344, 21932), (348, 21962), (361, 22019), (366, 22055), (379, 22136), (380, 22139), (388, 22208), (402, 22376), (410, 22442), (411, 22445), (414, 22469), (417, 22496), (418, 22499), (419, 22502), (445, 22586), (454, 22631), (459, 22640), (466, 22697), (471, 22718), (476, 22772), (484, 22826), (491, 22883), (501, 22925), (507, 22961), (514, 23006), (516, 23024), (523, 23075), (539, 23186), (548, 23225), (560, 23306), (577, 23480), (578, 23483), (583, 23516), (606, 23720), (609, 23729), (610, 23735), (642, 24044), (660, 24251), (676, 24377), (696, 24527), (707, 24638), (715, 24683), (716, 24692), (717, 24698), (725, 24734), (741, 24827), (744, 24839), (750, 24869), (752, 24902), (754, 24914),

Gene: ObLaDi_17 Start: 10934, Stop: 15625, Start Num: 35

Candidate Starts for ObLaDi_17:

(Start: 35 @10934 has 5 MA's), (61, 11093), (81, 11216), (97, 11351), (117, 11438), (118, 11441), (121, 11468), (128, 11495), (129, 11501), (130, 11504), (162, 11723), (165, 11750), (202, 12125), (204, 12158), (206, 12167), (208, 12197), (210, 12209), (213, 12245), (220, 12290), (222, 12311), (223, 12320), (225, 12335), (233, 12383), (235, 12404), (250, 12479), (253, 12491), (258, 12524), (262, 12545), (263, 12551), (267, 12578), (268, 12587), (269, 12590), (276, 12632), (278, 12641), (286, 12689), (294, 12752), (319, 12890), (322, 12899), (336, 12956), (339, 12986), (342, 12998), (345, 13019), (347, 13025), (352, 13052), (353, 13055), (362, 13103), (364, 13112), (371, 13154), (373, 13166), (380, 13208), (387, 13229), (390, 13241), (404, 13283), (428, 13412), (452, 13511), (461, 13559), (465, 13595), (476, 13679), (477, 13682), (479, 13688), (487, 13760), (507, 13865), (509, 13871), (515, 13919), (521, 13955), (524, 13979), (556, 14174), (557, 14186), (590, 14411), (628, 14690), (632, 14768), (659, 15026), (666, 15074), (669, 15119), (683, 15197), (684, 15203), (686, 15215), (693, 15260), (694, 15263), (714, 15437), (739, 15596),

Gene: Opie_17 Start: 10940, Stop: 16069, Start Num: 4

Candidate Starts for Opie_17:

(Start: 4 @10940 has 12 MA's), (6, 10949), (28, 11222), (29, 11231), (42, 11327), (48, 11369), (53, 11390), (63, 11483), (68, 11501), (94, 11696), (122, 11855), (142, 11975), (143, 11978), (149, 12014), (157, 12092), (169, 12215), (173, 12248), (174, 12257), (175, 12266), (178, 12299), (179, 12311),

(181, 12335), (188, 12380), (190, 12425), (196, 12461), (198, 12473), (199, 12491), (201, 12527), (212, 12650), (219, 12692), (237, 12827), (238, 12830), (239, 12833), (241, 12848), (252, 12902), (260, 12941), (273, 13022), (277, 13037), (280, 13058), (282, 13073), (284, 13085), (288, 13121), (295, 13157), (329, 13319), (338, 13352), (350, 13376), (359, 13388), (360, 13391), (367, 13424), (369, 13442), (389, 13523), (390, 13529), (399, 13550), (400, 13553), (401, 13556), (414, 13655), (416, 13670), (421, 13694), (429, 13709), (430, 13712), (432, 13718), (445, 13772), (463, 13871), (467, 13913), (472, 13946), (476, 13991), (482, 14015), (485, 14060), (488, 14078), (505, 14186), (511, 14216), (516, 14255), (517, 14258), (518, 14267), (556, 14516), (559, 14540), (576, 14684), (580, 14708), (588, 14759), (601, 14876), (603, 14903), (604, 14921), (614, 14999), (615, 15005), (617, 15014), (621, 15041), (629, 15134), (631, 15173), (633, 15215), (646, 15368), (650, 15401), (651, 15404), (656, 15461), (657, 15470), (658, 15482), (661, 15503), (665, 15524), (690, 15716), (698, 15755), (702, 15821), (704, 15824), (709, 15878), (735, 16031),

Gene: Paries_35 Start: 25616, Stop: 30439, Start Num: 22

Candidate Starts for Paries_35:

(Start: 22 @25616 has 60 MA's), (50, 25790), (56, 25814), (91, 25952), (101, 25985), (104, 25997), (108, 26009), (113, 26027), (119, 26039), (127, 26084), (147, 26195), (164, 26315), (166, 26336), (169, 26396), (173, 26429), (177, 26471), (180, 26507), (185, 26543), (187, 26558), (188, 26561), (199, 26672), (201, 26708), (205, 26759), (209, 26801), (212, 26831), (219, 26882), (223, 26915), (227, 26948), (228, 26960), (240, 27041), (244, 27062), (248, 27074), (266, 27170), (267, 27185), (270, 27206), (279, 27257), (281, 27266), (291, 27344), (303, 27392), (304, 27401), (310, 27461), (319, 27506), (322, 27515), (330, 27542), (334, 27569), (337, 27590), (343, 27626), (355, 27692), (361, 27728), (374, 27815), (375, 27818), (377, 27827), (383, 27845), (401, 27896), (402, 27902), (419, 28028), (441, 28103), (449, 28130), (455, 28163), (463, 28226), (469, 28280), (475, 28343), (492, 28454), (499, 28481), (500, 28487), (516, 28589), (518, 28601), (527, 28655), (530, 28682), (534, 28709), (538, 28748), (551, 28814), (562, 28886), (563, 28895), (571, 28955), (573, 29000), (609, 29315), (610, 29321), (612, 29339), (627, 29435), (635, 29540), (645, 29639), (663, 29783), (672, 29858), (675, 29870), (685, 29954), (736, 30293), (745, 30332), (746, 30338), (748, 30344), (751, 30371), (755, 30407), (756, 30419),

Gene: Phauci_24 Start: 19849, Stop: 24738, Start Num: 23

Candidate Starts for Phauci_24:

(Start: 23 @19849 has 8 MA's), (40, 19969), (50, 20023), (56, 20047), (63, 20122), (64, 20125), (78, 20221), (86, 20296), (87, 20302), (89, 20308), (93, 20332), (95, 20341), (105, 20401), (107, 20407), (111, 20416), (119, 20446), (130, 20503), (135, 20542), (137, 20551), (147, 20614), (148, 20617), (158, 20692), (159, 20701), (173, 20836), (174, 20845), (177, 20878), (179, 20902), (188, 20968), (193, 21031), (201, 21115), (203, 21154), (205, 21166), (210, 21214), (212, 21238), (219, 21289), (223, 21322), (230, 21373), (234, 21403), (242, 21460), (245, 21472), (249, 21484), (262, 21559), (270, 21613), (280, 21667), (286, 21700), (300, 21787), (303, 21799), (304, 21808), (310, 21868), (312, 21880), (316, 21901), (318, 21907), (319, 21913), (320, 21916), (321, 21919), (329, 21946), (330, 21949), (332, 21958), (333, 21970), (334, 21976), (340, 22021), (346, 22057), (347, 22060), (349, 22081), (370, 22198), (385, 22255), (402, 22342), (410, 22408), (438, 22465), (439, 22468), (443, 22492), (461, 22582), (466, 22630), (484, 22759), (495, 22828), (497, 22837), (501, 22858), (504, 22876), (507, 22894), (530, 23050), (531, 23053), (546, 23158), (563, 23266), (571, 23326), (572, 23356), (581, 23437), (607, 23668), (609, 23674), (616, 23722), (619, 23737), (626, 23803), (636, 23935), (647, 24064), (652, 24103), (700, 24430), (711, 24526), (731, 24649), (738, 24691), (743, 24703),

Gene: Phinally_31 Start: 23257, Stop: 28146, Start Num: 23

Candidate Starts for Phinally_31:

(Start: 23 @23257 has 8 MA's), (40, 23377), (50, 23431), (56, 23455), (63, 23530), (64, 23533), (78, 23629), (86, 23704), (87, 23710), (89, 23716), (93, 23740), (95, 23749), (105, 23809), (107, 23815), (111, 23824), (119, 23854), (130, 23911), (135, 23950), (137, 23959), (147, 24022), (148, 24025),

(158, 24100), (159, 24109), (173, 24244), (174, 24253), (177, 24286), (179, 24310), (188, 24376), (193, 24439), (201, 24523), (203, 24562), (205, 24574), (210, 24622), (212, 24646), (219, 24697), (223, 24730), (230, 24781), (234, 24811), (242, 24868), (245, 24880), (249, 24892), (262, 24967), (270, 25021), (280, 25075), (281, 25081), (286, 25108), (300, 25195), (303, 25207), (304, 25216), (310, 25276), (312, 25288), (316, 25309), (318, 25315), (319, 25321), (320, 25324), (329, 25354), (330, 25357), (332, 25366), (333, 25378), (334, 25384), (340, 25429), (346, 25465), (347, 25468), (349, 25489), (370, 25606), (385, 25663), (402, 25750), (410, 25816), (438, 25873), (439, 25876), (443, 25900), (461, 25990), (466, 26038), (484, 26167), (495, 26236), (501, 26266), (504, 26284), (530, 26458), (531, 26461), (546, 26566), (562, 26665), (563, 26674), (571, 26734), (572, 26764), (581, 26845), (607, 27076), (609, 27082), (619, 27145), (636, 27343), (647, 27472), (652, 27511), (697, 27793), (700, 27838), (703, 27865), (711, 27934), (731, 28057), (738, 28099), (743, 28111),

Gene: Phlop_29 Start: 19476, Stop: 25007, Start Num: 1

Candidate Starts for Phlop_29:

(Start: 1 @19476 has 29 MA's), (3, 19563), (6, 19650), (10, 19683), (12, 19707), (19, 19830), (25, 19851), (26, 19857), (30, 19881), (36, 19911), (47, 19950), (64, 20034), (72, 20070), (74, 20094), (82, 20133), (144, 20523), (166, 20691), (169, 20751), (177, 20823), (178, 20835), (181, 20871), (184, 20895), (195, 20994), (196, 20997), (199, 21027), (203, 21102), (205, 21114), (209, 21156), (212, 21186), (219, 21237), (237, 21378), (240, 21396), (242, 21408), (244, 21417), (265, 21519), (267, 21540), (270, 21561), (279, 21612), (280, 21615), (281, 21621), (291, 21699), (298, 21729), (303, 21747), (310, 21816), (316, 21849), (318, 21855), (320, 21864), (323, 21870), (334, 21924), (340, 21969), (344, 21996), (346, 22005), (348, 22026), (361, 22083), (366, 22119), (379, 22200), (380, 22203), (388, 22272), (395, 22344), (402, 22440), (410, 22506), (411, 22509), (414, 22533), (417, 22560), (418, 22563), (419, 22566), (421, 22572), (442, 22641), (445, 22650), (454, 22695), (459, 22704), (471, 22782), (476, 22836), (484, 22890), (491, 22947), (501, 22989), (507, 23025), (516, 23088), (523, 23139), (539, 23250), (548, 23289), (560, 23370), (577, 23544), (578, 23547), (583, 23580), (606, 23787), (609, 23796), (610, 23802), (642, 24114), (660, 24321), (676, 24459), (696, 24609), (707, 24720), (715, 24765), (716, 24774), (717, 24780), (725, 24816), (741, 24909), (744, 24921), (750, 24951), (752, 24984), (754, 24996),

Gene: PinkCoffee_31 Start: 20115, Stop: 25646, Start Num: 1

Candidate Starts for PinkCoffee_31:

(Start: 1 @20115 has 29 MA's), (3, 20202), (6, 20289), (10, 20322), (12, 20346), (19, 20469), (25, 20490), (26, 20496), (30, 20520), (36, 20550), (47, 20589), (64, 20673), (72, 20709), (74, 20733), (82, 20772), (144, 21162), (166, 21330), (169, 21390), (177, 21462), (178, 21474), (181, 21510), (184, 21534), (195, 21633), (196, 21636), (199, 21666), (203, 21741), (205, 21753), (209, 21795), (212, 21825), (219, 21876), (237, 22017), (240, 22035), (242, 22047), (244, 22056), (265, 22158), (267, 22179), (270, 22200), (279, 22251), (280, 22254), (281, 22260), (291, 22338), (298, 22368), (303, 22386), (310, 22455), (316, 22488), (318, 22494), (320, 22503), (323, 22509), (334, 22563), (340, 22608), (344, 22635), (346, 22644), (348, 22665), (361, 22722), (366, 22758), (379, 22839), (380, 22842), (388, 22911), (395, 22983), (402, 23079), (410, 23145), (411, 23148), (414, 23172), (417, 23199), (418, 23202), (419, 23205), (421, 23211), (442, 23280), (445, 23289), (454, 23334), (459, 23343), (471, 23421), (476, 23475), (484, 23529), (491, 23586), (501, 23628), (507, 23664), (516, 23727), (523, 23778), (539, 23889), (548, 23928), (560, 24009), (577, 24183), (578, 24186), (583, 24219), (606, 24426), (609, 24435), (610, 24441), (642, 24753), (660, 24960), (676, 25098), (696, 25248), (707, 25359), (715, 25404), (716, 25413), (725, 25455), (741, 25548), (744, 25560), (750, 25590), (752, 25623), (754, 25635),

Gene: Portcullis_29 Start: 19434, Stop: 24956, Start Num: 1

Candidate Starts for Portcullis_29:

(Start: 1 @19434 has 29 MA's), (3, 19521), (6, 19608), (10, 19641), (12, 19665), (19, 19788), (25, 19809), (26, 19815), (30, 19839), (36, 19869), (47, 19908), (64, 19992), (72, 20028), (74, 20052), (82, 20091), (144, 20481), (166, 20649), (169, 20709), (177, 20781), (178, 20793), (181, 20829), (184,

20853), (195, 20952), (196, 20955), (199, 20985), (203, 21060), (205, 21072), (209, 21114), (212, 21144), (219, 21195), (237, 21336), (240, 21354), (242, 21366), (244, 21375), (265, 21477), (267, 21498), (270, 21519), (279, 21570), (280, 21573), (291, 21657), (298, 21687), (303, 21705), (310, 21774), (316, 21807), (318, 21813), (320, 21822), (323, 21828), (334, 21882), (344, 21954), (346, 21963), (348, 21984), (361, 22041), (366, 22077), (379, 22158), (380, 22161), (388, 22230), (402, 22398), (410, 22464), (411, 22467), (414, 22491), (417, 22518), (418, 22521), (419, 22524), (421, 22530), (442, 22599), (445, 22608), (454, 22653), (459, 22662), (471, 22740), (476, 22794), (484, 22848), (491, 22905), (501, 22947), (507, 22983), (516, 23046), (523, 23097), (539, 23208), (548, 23247), (560, 23328), (577, 23502), (578, 23505), (583, 23538), (606, 23745), (609, 23754), (610, 23760), (613, 23781), (642, 24075), (660, 24282), (676, 24408), (696, 24558), (707, 24669), (715, 24714), (716, 24723), (717, 24729), (725, 24765), (741, 24858), (744, 24870), (750, 24900), (752, 24933), (754, 24945),

Gene: PullumCavea_29 Start: 19476, Stop: 25007, Start Num: 1

Candidate Starts for PullumCavea_29:

(Start: 1 @19476 has 29 MA's), (3, 19563), (6, 19650), (10, 19683), (12, 19707), (19, 19830), (25, 19851), (26, 19857), (30, 19881), (36, 19911), (47, 19950), (64, 20034), (72, 20070), (74, 20094), (82, 20133), (144, 20523), (166, 20691), (169, 20751), (177, 20823), (178, 20835), (181, 20871), (184, 20895), (195, 20994), (196, 20997), (199, 21027), (203, 21102), (205, 21114), (209, 21156), (212, 21186), (219, 21237), (237, 21378), (240, 21396), (242, 21408), (244, 21417), (265, 21519), (267, 21540), (270, 21561), (279, 21612), (280, 21615), (281, 21621), (291, 21699), (298, 21729), (303, 21747), (310, 21816), (316, 21849), (318, 21855), (320, 21864), (323, 21870), (334, 21924), (340, 21969), (344, 21996), (346, 22005), (348, 22026), (361, 22083), (366, 22119), (379, 22200), (380, 22203), (388, 22272), (395, 22344), (402, 22440), (410, 22506), (411, 22509), (414, 22533), (417, 22560), (418, 22563), (419, 22566), (421, 22572), (442, 22641), (445, 22650), (454, 22695), (459, 22704), (471, 22782), (476, 22836), (484, 22890), (491, 22947), (501, 22989), (507, 23025), (516, 23088), (523, 23139), (539, 23250), (548, 23289), (560, 23370), (577, 23544), (578, 23547), (583, 23580), (606, 23787), (609, 23796), (610, 23802), (642, 24114), (660, 24321), (676, 24459), (696, 24609), (707, 24720), (715, 24765), (716, 24774), (717, 24780), (725, 24816), (741, 24909), (744, 24921), (750, 24951), (752, 24984), (754, 24996),

Gene: Ribeye_33 Start: 24804, Stop: 29822, Start Num: 22

Candidate Starts for Ribeye_33:

(Start: 22 @24804 has 60 MA's), (33, 24879), (40, 24924), (50, 24978), (56, 25002), (59, 25044), (61, 25062), (63, 25077), (73, 25149), (78, 25176), (86, 25251), (88, 25260), (96, 25317), (98, 25335), (99, 25341), (102, 25359), (109, 25386), (140, 25542), (147, 25593), (150, 25605), (155, 25653), (169, 25794), (173, 25827), (177, 25869), (185, 25941), (187, 25956), (188, 25959), (199, 26070), (201, 26106), (205, 26157), (209, 26199), (212, 26229), (219, 26280), (223, 26313), (227, 26346), (228, 26358), (240, 26439), (248, 26472), (249, 26475), (259, 26532), (266, 26568), (267, 26583), (270, 26604), (279, 26655), (303, 26790), (310, 26859), (318, 26898), (319, 26904), (322, 26913), (330, 26940), (334, 26967), (337, 26988), (343, 27024), (346, 27048), (347, 27051), (354, 27087), (361, 27126), (375, 27216), (385, 27246), (401, 27294), (402, 27300), (418, 27423), (419, 27426), (421, 27432), (440, 27489), (441, 27501), (449, 27528), (455, 27561), (456, 27567), (463, 27624), (469, 27678), (475, 27741), (492, 27852), (499, 27879), (500, 27885), (516, 27987), (527, 28053), (546, 28185), (551, 28212), (563, 28293), (571, 28353), (573, 28398), (606, 28704), (609, 28713), (613, 28740), (625, 28809), (645, 29037), (663, 29181), (672, 29250), (673, 29256), (675, 29262), (685, 29340), (691, 29370), (707, 29508), (717, 29568), (725, 29604), (730, 29649), (736, 29676), (745, 29715), (746, 29721), (748, 29727), (751, 29754), (755, 29790), (756, 29802),

Gene: RiverRaider_33 Start: 23248, Stop: 28107, Start Num: 22

Candidate Starts for RiverRaider_33:

(Start: 22 @23248 has 60 MA's), (34, 23335), (40, 23368), (50, 23422), (56, 23446), (57, 23455), (65, 23500), (91, 23584), (101, 23617), (104, 23629), (108, 23641), (113, 23659), (119, 23671), (127,

23716), (135, 23755), (147, 23827), (158, 23917), (163, 23938), (169, 24028), (173, 24061), (177, 24103), (185, 24175), (187, 24190), (188, 24193), (199, 24304), (201, 24340), (205, 24391), (209, 24433), (212, 24463), (219, 24514), (223, 24547), (227, 24580), (228, 24592), (240, 24673), (244, 24694), (248, 24706), (255, 24739), (266, 24802), (267, 24817), (270, 24838), (279, 24889), (281, 24898), (291, 24976), (303, 25024), (307, 25072), (314, 25120), (316, 25126), (318, 25132), (322, 25147), (325, 25153), (329, 25171), (331, 25180), (334, 25201), (337, 25222), (343, 25258), (346, 25282), (354, 25321), (374, 25447), (385, 25480), (401, 25528), (402, 25534), (408, 25588), (411, 25603), (413, 25621), (419, 25660), (441, 25735), (449, 25762), (450, 25771), (455, 25795), (463, 25858), (469, 25912), (499, 26113), (500, 26119), (516, 26221), (518, 26233), (527, 26287), (536, 26368), (539, 26383), (543, 26407), (558, 26488), (577, 26665), (582, 26695), (584, 26698), (602, 26830), (609, 26911), (610, 26917), (613, 26938), (619, 26974), (626, 27037), (642, 27226), (647, 27298), (652, 27337), (672, 27532), (675, 27544), (685, 27616), (699, 27706), (714, 27823), (717, 27844), (736, 27961), (746, 28006), (748, 28012), (755, 28075), (756, 28087),

Gene: RoadKill_28 Start: 20943, Stop: 26069, Start Num: 22

Candidate Starts for RoadKill_28:

(Start: 22 @20943 has 60 MA's), (50, 21117), (57, 21150), (62, 21207), (63, 21216), (64, 21219), (73, 21288), (76, 21300), (78, 21315), (83, 21351), (86, 21390), (87, 21396), (89, 21402), (95, 21435), (101, 21477), (103, 21486), (105, 21495), (107, 21501), (115, 21528), (126, 21579), (130, 21597), (145, 21693), (147, 21708), (154, 21753), (161, 21801), (173, 21930), (177, 21972), (185, 22044), (188, 22062), (195, 22140), (197, 22152), (199, 22173), (201, 22209), (203, 22248), (205, 22260), (212, 22332), (214, 22356), (215, 22362), (219, 22383), (221, 22404), (223, 22416), (230, 22467), (234, 22497), (244, 22563), (265, 22665), (270, 22707), (280, 22761), (285, 22791), (286, 22794), (297, 22872), (309, 22959), (316, 22995), (318, 23001), (329, 23040), (330, 23043), (333, 23064), (334, 23070), (337, 23091), (344, 23142), (349, 23175), (354, 23190), (358, 23214), (391, 23424), (392, 23427), (397, 23532), (399, 23550), (405, 23580), (411, 23631), (419, 23688), (425, 23763), (428, 23772), (431, 23781), (433, 23787), (438, 23838), (445, 23871), (448, 23883), (451, 23904), (453, 23916), (458, 23949), (461, 23970), (473, 24102), (482, 24156), (513, 24363), (530, 24477), (532, 24489), (550, 24615), (553, 24633), (565, 24711), (586, 24900), (589, 24930), (613, 25128), (640, 25335), (641, 25338), (643, 25356), (668, 25605), (672, 25623), (677, 25635), (700, 25761), (722, 25917), (723, 25920), (727, 25962), (731, 25980), (734, 25995), (743, 26034),

Gene: Rofo_33 Start: 25011, Stop: 29837, Start Num: 22

Candidate Starts for Rofo_33:

(Start: 22 @25011 has 60 MA's), (50, 25185), (56, 25209), (91, 25347), (101, 25380), (104, 25392), (108, 25404), (113, 25422), (119, 25434), (127, 25479), (147, 25590), (164, 25710), (166, 25731), (169, 25791), (173, 25824), (177, 25866), (180, 25902), (185, 25938), (187, 25953), (188, 25956), (199, 26067), (201, 26103), (205, 26154), (209, 26196), (212, 26226), (219, 26277), (223, 26310), (227, 26343), (228, 26355), (240, 26436), (244, 26457), (248, 26469), (266, 26565), (267, 26580), (270, 26601), (279, 26652), (281, 26661), (291, 26739), (303, 26787), (304, 26796), (310, 26856), (319, 26901), (322, 26910), (330, 26937), (334, 26964), (337, 26985), (343, 27021), (355, 27087), (361, 27123), (374, 27210), (375, 27213), (377, 27222), (383, 27240), (401, 27291), (402, 27297), (419, 27423), (441, 27498), (449, 27525), (455, 27558), (463, 27621), (469, 27675), (475, 27738), (492, 27849), (499, 27876), (500, 27882), (516, 27984), (518, 27996), (527, 28050), (530, 28077), (534, 28104), (538, 28143), (551, 28209), (562, 28281), (563, 28290), (571, 28350), (573, 28395), (609, 28713), (610, 28719), (612, 28737), (627, 28833), (635, 28938), (645, 29037), (663, 29181), (672, 29256), (675, 29268), (685, 29352), (736, 29691), (745, 29730), (746, 29736), (748, 29742), (751, 29769), (755, 29805), (756, 29817),

Gene: RogerDodger_32 Start: 20284, Stop: 25797, Start Num: 1

Candidate Starts for RogerDodger_32:

(Start: 1 @20284 has 29 MA's), (3, 20371), (6, 20458), (10, 20491), (12, 20515), (19, 20638), (25, 20659), (26, 20665), (30, 20689), (36, 20719), (47, 20758), (64, 20842), (72, 20878), (74, 20902), (82,

20941), (144, 21331), (166, 21499), (169, 21559), (177, 21631), (178, 21643), (181, 21679), (184, 21703), (195, 21802), (196, 21805), (199, 21835), (203, 21910), (205, 21922), (209, 21964), (212, 21994), (219, 22045), (237, 22186), (240, 22204), (242, 22216), (244, 22225), (265, 22327), (267, 22348), (270, 22369), (279, 22420), (280, 22423), (281, 22429), (291, 22507), (298, 22537), (303, 22555), (310, 22624), (316, 22657), (318, 22663), (320, 22672), (323, 22678), (334, 22732), (340, 22777), (344, 22804), (346, 22813), (348, 22834), (361, 22891), (366, 22927), (379, 23008), (380, 23011), (388, 23080), (395, 23152), (402, 23248), (410, 23314), (411, 23317), (414, 23341), (417, 23368), (418, 23371), (419, 23374), (421, 23380), (442, 23449), (445, 23458), (454, 23503), (459, 23512), (471, 23590), (476, 23644), (484, 23698), (491, 23755), (501, 23797), (507, 23833), (516, 23896), (523, 23947), (535, 24031), (539, 24058), (548, 24097), (551, 24118), (560, 24178), (577, 24352), (578, 24355), (583, 24388), (606, 24595), (609, 24604), (610, 24610), (626, 24724), (634, 24844), (652, 25024), (676, 25249), (696, 25399), (707, 25510), (715, 25555), (716, 25564), (725, 25606), (743, 25705), (744, 25711), (750, 25741), (752, 25774), (754, 25786),

Gene: Salvador_29 Start: 19390, Stop: 24921, Start Num: 1

Candidate Starts for Salvador_29:

(Start: 1 @19390 has 29 MA's), (3, 19477), (6, 19564), (10, 19597), (12, 19621), (19, 19744), (25, 19765), (26, 19771), (30, 19795), (36, 19825), (47, 19864), (64, 19948), (72, 19984), (74, 20008), (82, 20047), (144, 20437), (166, 20605), (169, 20665), (177, 20737), (178, 20749), (181, 20785), (184, 20809), (195, 20908), (196, 20911), (199, 20941), (203, 21016), (205, 21028), (209, 21070), (212, 21100), (219, 21151), (237, 21292), (240, 21310), (242, 21322), (244, 21331), (265, 21433), (267, 21454), (270, 21475), (279, 21526), (280, 21529), (281, 21535), (291, 21613), (298, 21643), (303, 21661), (310, 21730), (316, 21763), (318, 21769), (320, 21778), (323, 21784), (334, 21838), (340, 21883), (344, 21910), (346, 21919), (348, 21940), (361, 21997), (366, 22033), (379, 22114), (380, 22117), (388, 22186), (395, 22258), (402, 22354), (410, 22420), (411, 22423), (414, 22447), (417, 22474), (418, 22477), (419, 22480), (421, 22486), (442, 22555), (445, 22564), (454, 22609), (459, 22618), (471, 22696), (476, 22750), (484, 22804), (491, 22861), (501, 22903), (507, 22939), (516, 23002), (523, 23053), (539, 23164), (548, 23203), (560, 23284), (577, 23458), (578, 23461), (583, 23494), (606, 23701), (609, 23710), (610, 23716), (642, 24028), (660, 24235), (676, 24373), (696, 24523), (707, 24634), (715, 24679), (716, 24688), (717, 24694), (725, 24730), (741, 24823), (744, 24835), (750, 24865), (752, 24898), (754, 24910),

Gene: Sampson_33 Start: 24795, Stop: 29720, Start Num: 22

Candidate Starts for Sampson_33:

(Start: 22 @24795 has 60 MA's), (40, 24915), (44, 24927), (50, 24969), (56, 24993), (62, 25059), (63, 25068), (71, 25113), (73, 25140), (86, 25242), (88, 25251), (92, 25269), (103, 25335), (107, 25350), (111, 25359), (124, 25422), (126, 25428), (132, 25455), (135, 25485), (137, 25494), (145, 25542), (147, 25557), (150, 25569), (159, 25656), (163, 25668), (173, 25791), (176, 25815), (177, 25833), (185, 25905), (186, 25911), (188, 25923), (199, 26034), (201, 26070), (203, 26109), (205, 26121), (209, 26163), (212, 26193), (218, 26235), (219, 26244), (220, 26247), (223, 26277), (227, 26310), (240, 26403), (249, 26439), (259, 26496), (265, 26526), (270, 26568), (280, 26622), (281, 26628), (286, 26655), (291, 26706), (300, 26742), (303, 26754), (304, 26763), (310, 26823), (312, 26835), (316, 26856), (318, 26862), (330, 26904), (331, 26910), (333, 26925), (334, 26931), (340, 26976), (346, 27012), (347, 27015), (361, 27090), (370, 27153), (385, 27210), (401, 27291), (407, 27342), (429, 27399), (438, 27420), (439, 27423), (443, 27447), (466, 27585), (471, 27606), (501, 27813), (504, 27831), (512, 27888), (527, 27978), (533, 28041), (546, 28122), (551, 28149), (562, 28221), (563, 28230), (571, 28290), (581, 28401), (606, 28632), (609, 28641), (613, 28668), (620, 28710), (638, 28929), (642, 28956), (647, 29028), (652, 29067), (678, 29274), (692, 29346), (700, 29412), (719, 29547), (726, 29610), (727, 29613), (731, 29631), (734, 29646), (738, 29673), (743, 29685),

Gene: Sanjuju_31 Start: 25192, Stop: 30006, Start Num: 22

Candidate Starts for Sanjuju_31:

(Start: 22 @25192 has 60 MA's), (50, 25366), (56, 25390), (91, 25528), (104, 25573), (108, 25585), (113, 25603), (119, 25615), (123, 25642), (127, 25660), (131, 25672), (147, 25771), (164, 25891), (166, 25912), (169, 25972), (173, 26005), (177, 26047), (180, 26083), (185, 26119), (187, 26134), (188, 26137), (199, 26248), (201, 26284), (205, 26335), (209, 26377), (212, 26407), (219, 26458), (223, 26491), (227, 26524), (228, 26536), (240, 26617), (244, 26638), (248, 26650), (266, 26746), (267, 26761), (270, 26782), (279, 26833), (281, 26842), (291, 26920), (303, 26968), (304, 26977), (310, 27037), (319, 27082), (322, 27091), (330, 27118), (334, 27145), (337, 27166), (343, 27202), (355, 27268), (361, 27304), (374, 27391), (375, 27394), (383, 27421), (401, 27472), (402, 27478), (419, 27604), (449, 27706), (455, 27739), (463, 27802), (469, 27856), (475, 27919), (492, 28030), (499, 28057), (500, 28063), (516, 28165), (527, 28231), (530, 28258), (534, 28285), (538, 28324), (542, 28348), (551, 28390), (562, 28462), (563, 28471), (571, 28531), (573, 28576), (609, 28891), (610, 28897), (612, 28915), (627, 29011), (635, 29116), (645, 29215), (663, 29359), (672, 29434), (675, 29446), (685, 29521), (736, 29860), (745, 29899), (746, 29905), (748, 29911), (751, 29938), (755, 29974), (756, 29986),

Gene: Saronaya_32 Start: 23650, Stop: 28665, Start Num: 22

Candidate Starts for Saronaya_32:

(Start: 22 @23650 has 60 MA's), (34, 23737), (40, 23770), (50, 23824), (56, 23848), (59, 23890), (61, 23908), (63, 23923), (73, 23995), (78, 24022), (86, 24097), (88, 24106), (96, 24163), (98, 24181), (99, 24187), (102, 24205), (109, 24232), (147, 24439), (150, 24451), (155, 24499), (169, 24640), (173, 24673), (177, 24715), (185, 24787), (187, 24802), (188, 24805), (199, 24916), (201, 24952), (205, 25003), (209, 25045), (212, 25075), (215, 25105), (223, 25159), (227, 25192), (240, 25285), (248, 25318), (249, 25321), (259, 25378), (266, 25414), (267, 25429), (270, 25450), (279, 25501), (303, 25636), (304, 25645), (316, 25738), (318, 25744), (319, 25750), (322, 25759), (327, 25771), (329, 25783), (332, 25795), (334, 25813), (343, 25870), (361, 25972), (375, 26062), (385, 26092), (401, 26140), (402, 26146), (418, 26269), (419, 26272), (440, 26335), (441, 26347), (447, 26368), (449, 26374), (455, 26407), (463, 26470), (469, 26524), (492, 26698), (499, 26725), (500, 26731), (516, 26833), (527, 26899), (546, 27031), (551, 27058), (563, 27139), (571, 27199), (573, 27244), (606, 27550), (609, 27559), (613, 27586), (625, 27655), (635, 27784), (645, 27883), (663, 28027), (672, 28096), (673, 28102), (675, 28108), (685, 28183), (691, 28213), (705, 28318), (707, 28351), (717, 28411), (725, 28447), (730, 28492), (736, 28519), (745, 28558), (746, 28564), (748, 28570), (751, 28597), (755, 28633), (756, 28645),

Gene: Savbucketdawg_29 Start: 19171, Stop: 24702, Start Num: 1

Candidate Starts for Savbucketdawg_29:

(Start: 1 @19171 has 29 MA's), (3, 19258), (6, 19345), (10, 19378), (12, 19402), (19, 19525), (25, 19546), (26, 19552), (30, 19576), (36, 19606), (47, 19645), (64, 19729), (72, 19765), (74, 19789), (82, 19828), (144, 20218), (166, 20386), (169, 20446), (177, 20518), (178, 20530), (181, 20566), (184, 20590), (195, 20689), (196, 20692), (199, 20722), (203, 20797), (205, 20809), (209, 20851), (212, 20881), (219, 20932), (237, 21073), (240, 21091), (242, 21103), (244, 21112), (265, 21214), (267, 21235), (270, 21256), (279, 21307), (280, 21310), (281, 21316), (291, 21394), (298, 21424), (303, 21442), (310, 21511), (316, 21544), (318, 21550), (320, 21559), (323, 21565), (334, 21619), (340, 21664), (344, 21691), (346, 21700), (348, 21721), (361, 21778), (366, 21814), (379, 21895), (380, 21898), (388, 21967), (395, 22039), (402, 22135), (410, 22201), (411, 22204), (414, 22228), (417, 22255), (418, 22258), (419, 22261), (421, 22267), (442, 22336), (445, 22345), (454, 22390), (459, 22399), (471, 22477), (476, 22531), (484, 22585), (491, 22642), (501, 22684), (507, 22720), (516, 22783), (523, 22834), (539, 22945), (548, 22984), (560, 23065), (577, 23239), (578, 23242), (583, 23275), (606, 23482), (609, 23491), (610, 23497), (642, 23809), (660, 24016), (676, 24154), (696, 24304), (707, 24415), (715, 24460), (716, 24469), (725, 24511), (741, 24604), (744, 24616), (750, 24646), (752, 24679), (754, 24691),

Gene: Schnabeltier_17 Start: 10933, Stop: 16047, Start Num: 4

Candidate Starts for Schnabeltier_17:

(Start: 4 @10933 has 12 MA's), (6, 10942), (28, 11215), (29, 11224), (31, 11254), (32, 11263), (42, 11320), (53, 11383), (60, 11455), (63, 11476), (68, 11494), (85, 11647), (94, 11689), (100, 11743), (106, 11776), (142, 11968), (143, 11971), (149, 12007), (157, 12085), (164, 12124), (169, 12208), (173, 12241), (174, 12250), (175, 12259), (178, 12292), (179, 12304), (181, 12328), (188, 12373), (189, 12382), (190, 12418), (191, 12427), (196, 12454), (198, 12466), (199, 12484), (201, 12520), (212, 12643), (219, 12685), (237, 12820), (238, 12823), (239, 12826), (241, 12841), (252, 12895), (260, 12934), (271, 13003), (273, 13015), (277, 13030), (280, 13051), (282, 13066), (284, 13078), (288, 13114), (295, 13150), (329, 13312), (350, 13369), (359, 13381), (360, 13384), (367, 13417), (387, 13510), (389, 13516), (390, 13522), (399, 13543), (400, 13546), (401, 13549), (409, 13612), (414, 13648), (416, 13663), (421, 13687), (429, 13702), (430, 13705), (432, 13711), (445, 13765), (463, 13864), (467, 13906), (476, 13984), (482, 14008), (485, 14053), (505, 14179), (508, 14188), (510, 14206), (511, 14209), (516, 14248), (517, 14251), (518, 14260), (545, 14419), (563, 14539), (572, 14617), (576, 14665), (579, 14677), (588, 14737), (601, 14854), (603, 14881), (604, 14899), (614, 14977), (615, 14983), (617, 14992), (621, 15019), (629, 15112), (631, 15151), (633, 15193), (646, 15346), (650, 15379), (651, 15382), (656, 15439), (657, 15448), (658, 15460), (661, 15481), (665, 15502), (690, 15694), (698, 15733), (704, 15802), (709, 15856), (735, 16009),

Gene: SchottB_31 Start: 24662, Stop: 29680, Start Num: 22

Candidate Starts for SchottB_31:

(Start: 22 @24662 has 60 MA's), (34, 24749), (40, 24782), (50, 24836), (56, 24860), (59, 24902), (61, 24920), (63, 24935), (73, 25007), (78, 25034), (86, 25109), (88, 25118), (96, 25175), (98, 25193), (99, 25199), (147, 25451), (155, 25511), (169, 25652), (173, 25685), (177, 25727), (185, 25799), (187, 25814), (188, 25817), (199, 25928), (201, 25964), (205, 26015), (209, 26057), (212, 26087), (219, 26138), (223, 26171), (227, 26204), (228, 26216), (240, 26297), (248, 26330), (249, 26333), (259, 26390), (266, 26426), (267, 26441), (270, 26462), (279, 26513), (303, 26648), (304, 26657), (316, 26750), (318, 26756), (319, 26762), (322, 26771), (327, 26783), (329, 26795), (332, 26807), (334, 26825), (343, 26882), (361, 26984), (363, 27002), (367, 27026), (375, 27074), (385, 27104), (401, 27152), (402, 27158), (418, 27281), (419, 27284), (421, 27290), (440, 27347), (441, 27359), (447, 27380), (449, 27386), (455, 27419), (463, 27482), (469, 27536), (492, 27710), (499, 27737), (500, 27743), (516, 27845), (527, 27911), (551, 28070), (563, 28151), (571, 28211), (573, 28256), (606, 28562), (609, 28571), (613, 28598), (625, 28667), (635, 28796), (645, 28895), (663, 29039), (672, 29111), (673, 29117), (675, 29123), (685, 29198), (691, 29228), (707, 29366), (717, 29426), (725, 29462), (730, 29507), (736, 29534), (745, 29573), (746, 29579), (748, 29585), (751, 29612), (755, 29648), (756, 29660),

Gene: Scioto_33 Start: 24850, Stop: 29775, Start Num: 22

Candidate Starts for Scioto_33:

(Start: 22 @24850 has 60 MA's), (40, 24970), (44, 24982), (50, 25024), (56, 25048), (62, 25114), (63, 25123), (71, 25168), (73, 25195), (86, 25297), (88, 25306), (92, 25324), (103, 25390), (107, 25405), (111, 25414), (124, 25477), (126, 25483), (132, 25510), (135, 25540), (137, 25549), (145, 25597), (147, 25612), (150, 25624), (159, 25711), (163, 25723), (173, 25846), (176, 25870), (177, 25888), (185, 25960), (186, 25966), (188, 25978), (199, 26089), (201, 26125), (203, 26164), (205, 26176), (209, 26218), (212, 26248), (218, 26290), (219, 26299), (220, 26302), (223, 26332), (227, 26365), (240, 26458), (249, 26494), (259, 26551), (265, 26581), (270, 26623), (280, 26677), (281, 26683), (286, 26710), (291, 26761), (300, 26797), (303, 26809), (304, 26818), (310, 26878), (312, 26890), (316, 26911), (318, 26917), (330, 26959), (331, 26965), (333, 26980), (334, 26986), (340, 27031), (346, 27067), (347, 27070), (361, 27145), (370, 27208), (385, 27265), (401, 27346), (407, 27397), (429, 27454), (438, 27475), (439, 27478), (443, 27502), (466, 27640), (471, 27661), (501, 27868), (504, 27886), (512, 27943), (527, 28033), (533, 28096), (546, 28177), (551, 28204), (562, 28276), (563, 28285), (571, 28345), (581, 28456), (606, 28687), (609, 28696), (613, 28723), (620, 28765), (638, 28984), (642, 29011), (647, 29083), (652, 29122), (678, 29329), (692, 29401), (700, 29467), (719, 29602), (726, 29665), (727, 29668), (731, 29686), (734, 29701), (738, 29728), (743, 29740),

Gene: Sedona_33 Start: 26117, Stop: 30943, Start Num: 22

Candidate Starts for Sedona_33:

(Start: 22 @26117 has 60 MA's), (50, 26291), (56, 26315), (91, 26453), (104, 26498), (108, 26510), (113, 26528), (119, 26540), (123, 26567), (127, 26585), (131, 26597), (147, 26696), (164, 26816), (166, 26837), (169, 26897), (173, 26930), (177, 26972), (180, 27008), (185, 27044), (187, 27059), (188, 27062), (199, 27173), (201, 27209), (205, 27260), (209, 27302), (212, 27332), (219, 27383), (223, 27416), (227, 27449), (228, 27461), (240, 27542), (244, 27563), (248, 27575), (266, 27671), (267, 27686), (270, 27707), (279, 27758), (281, 27767), (291, 27845), (303, 27893), (304, 27902), (310, 27962), (319, 28007), (322, 28016), (330, 28043), (334, 28070), (337, 28091), (343, 28127), (355, 28193), (361, 28229), (374, 28316), (375, 28319), (377, 28328), (383, 28346), (401, 28397), (402, 28403), (419, 28529), (449, 28631), (455, 28664), (463, 28727), (469, 28781), (475, 28844), (492, 28955), (499, 28982), (500, 28988), (516, 29090), (527, 29156), (530, 29183), (534, 29210), (538, 29249), (542, 29273), (551, 29315), (562, 29387), (571, 29456), (573, 29501), (609, 29819), (610, 29825), (612, 29843), (627, 29939), (645, 30143), (663, 30287), (672, 30362), (675, 30374), (685, 30458), (736, 30797), (745, 30836), (746, 30842), (748, 30848), (751, 30875), (755, 30911), (756, 30923),

Gene: Shinji_29 Start: 19375, Stop: 24897, Start Num: 1

Candidate Starts for Shinji_29:

(Start: 1 @19375 has 29 MA's), (3, 19462), (6, 19549), (10, 19582), (12, 19606), (19, 19729), (25, 19750), (26, 19756), (30, 19780), (36, 19810), (47, 19849), (64, 19933), (72, 19969), (74, 19993), (82, 20032), (144, 20422), (166, 20590), (169, 20650), (177, 20722), (178, 20734), (181, 20770), (184, 20794), (195, 20893), (196, 20896), (199, 20926), (203, 21001), (205, 21013), (209, 21055), (212, 21085), (219, 21136), (237, 21277), (240, 21295), (242, 21307), (244, 21316), (265, 21418), (267, 21439), (270, 21460), (279, 21511), (280, 21514), (291, 21598), (298, 21628), (303, 21646), (310, 21715), (316, 21748), (318, 21754), (320, 21763), (323, 21769), (334, 21823), (344, 21895), (346, 21904), (348, 21925), (361, 21982), (366, 22018), (379, 22099), (380, 22102), (388, 22171), (402, 22339), (410, 22405), (411, 22408), (414, 22432), (417, 22459), (418, 22462), (419, 22465), (421, 22471), (442, 22540), (445, 22549), (454, 22594), (459, 22603), (471, 22681), (476, 22735), (484, 22789), (491, 22846), (501, 22888), (507, 22924), (516, 22987), (523, 23038), (539, 23149), (548, 23188), (560, 23269), (577, 23443), (578, 23446), (583, 23479), (606, 23686), (609, 23695), (610, 23701), (613, 23722), (642, 24016), (660, 24223), (676, 24349), (696, 24499), (707, 24610), (715, 24655), (716, 24664), (717, 24670), (725, 24706), (741, 24799), (744, 24811), (750, 24841), (752, 24874), (754, 24886),

Gene: Shivanishola_34 Start: 25088, Stop: 29905, Start Num: 22

Candidate Starts for Shivanishola_34:

(Start: 22 @25088 has 60 MA's), (50, 25262), (57, 25295), (91, 25424), (101, 25457), (104, 25469), (108, 25481), (119, 25511), (123, 25538), (127, 25556), (147, 25667), (164, 25787), (166, 25808), (169, 25868), (173, 25901), (177, 25943), (180, 25979), (185, 26015), (187, 26030), (188, 26033), (199, 26144), (201, 26180), (205, 26231), (209, 26273), (212, 26303), (219, 26354), (223, 26387), (227, 26420), (228, 26432), (240, 26513), (244, 26534), (248, 26546), (266, 26642), (267, 26657), (270, 26678), (279, 26729), (281, 26738), (291, 26816), (303, 26864), (304, 26873), (310, 26933), (319, 26978), (322, 26987), (330, 27014), (334, 27041), (337, 27062), (343, 27098), (355, 27164), (361, 27200), (374, 27287), (375, 27290), (377, 27299), (383, 27317), (401, 27368), (402, 27374), (419, 27500), (449, 27602), (455, 27635), (463, 27698), (469, 27752), (475, 27815), (492, 27926), (499, 27953), (500, 27959), (516, 28061), (518, 28073), (527, 28127), (530, 28154), (534, 28181), (538, 28220), (551, 28286), (562, 28358), (563, 28367), (571, 28427), (573, 28472), (609, 28787), (610, 28793), (612, 28811), (627, 28907), (645, 29111), (663, 29255), (672, 29324), (685, 29420), (736, 29759), (745, 29798), (746, 29804), (748, 29810), (751, 29837), (755, 29873), (756, 29885),

Gene: Sitar_33 Start: 26184, Stop: 30995, Start Num: 22

Candidate Starts for Sitar_33:

(Start: 22 @26184 has 60 MA's), (50, 26358), (56, 26382), (91, 26520), (102, 26559), (104, 26565), (108, 26577), (113, 26595), (119, 26607), (123, 26634), (127, 26652), (131, 26664), (147, 26763), (164, 26883), (166, 26904), (169, 26964), (173, 26997), (177, 27039), (180, 27075), (185, 27111), (187, 27126), (188, 27129), (199, 27240), (201, 27276), (205, 27327), (209, 27369), (212, 27399), (219, 27450), (223, 27483), (227, 27516), (228, 27528), (240, 27609), (244, 27630), (248, 27642), (266, 27738), (267, 27753), (270, 27774), (279, 27825), (281, 27834), (291, 27912), (303, 27960), (304, 27969), (310, 28029), (318, 28068), (319, 28074), (322, 28083), (330, 28110), (334, 28137), (337, 28158), (343, 28194), (355, 28260), (361, 28296), (374, 28383), (375, 28386), (383, 28413), (401, 28464), (402, 28470), (419, 28596), (449, 28698), (455, 28731), (463, 28794), (469, 28848), (475, 28911), (492, 29022), (499, 29049), (500, 29055), (516, 29157), (518, 29169), (527, 29223), (530, 29250), (534, 29277), (538, 29316), (542, 29340), (551, 29382), (562, 29454), (563, 29463), (571, 29523), (573, 29568), (609, 29883), (610, 29889), (612, 29907), (627, 30003), (635, 30108), (645, 30207), (663, 30351), (672, 30414), (675, 30426), (685, 30510), (736, 30849), (745, 30888), (746, 30894), (748, 30900), (751, 30927), (755, 30963), (756, 30975),

Gene: SmokingBunny_29 Start: 19390, Stop: 24912, Start Num: 1

Candidate Starts for SmokingBunny_29:

(Start: 1 @19390 has 29 MA's), (3, 19477), (6, 19564), (10, 19597), (12, 19621), (19, 19744), (25, 19765), (26, 19771), (30, 19795), (36, 19825), (47, 19864), (64, 19948), (72, 19984), (74, 20008), (82, 20047), (144, 20437), (166, 20605), (169, 20665), (177, 20737), (178, 20749), (181, 20785), (184, 20809), (195, 20908), (196, 20911), (199, 20941), (203, 21016), (205, 21028), (209, 21070), (212, 21100), (219, 21151), (237, 21292), (240, 21310), (242, 21322), (244, 21331), (265, 21433), (267, 21454), (270, 21475), (279, 21526), (280, 21529), (291, 21613), (298, 21643), (303, 21661), (310, 21730), (316, 21763), (318, 21769), (320, 21778), (323, 21784), (334, 21838), (344, 21910), (346, 21919), (348, 21940), (361, 21997), (366, 22033), (379, 22114), (380, 22117), (388, 22186), (402, 22354), (410, 22420), (411, 22423), (414, 22447), (417, 22474), (418, 22477), (419, 22480), (421, 22486), (442, 22555), (445, 22564), (454, 22609), (459, 22618), (471, 22696), (476, 22750), (484, 22804), (491, 22861), (501, 22903), (507, 22939), (516, 23002), (523, 23053), (539, 23164), (548, 23203), (560, 23284), (577, 23458), (578, 23461), (583, 23494), (606, 23701), (609, 23710), (610, 23716), (613, 23737), (642, 24031), (660, 24238), (676, 24364), (696, 24514), (707, 24625), (715, 24670), (716, 24679), (717, 24685), (725, 24721), (741, 24814), (744, 24826), (750, 24856), (752, 24889), (754, 24901),

Gene: StorminNorm_32 Start: 23529, Stop: 28547, Start Num: 22

Candidate Starts for StorminNorm_32:

(Start: 22 @23529 has 60 MA's), (34, 23616), (40, 23649), (50, 23703), (56, 23727), (59, 23769), (61, 23787), (63, 23802), (73, 23874), (78, 23901), (86, 23976), (88, 23985), (96, 24042), (98, 24060), (99, 24066), (147, 24318), (155, 24378), (169, 24519), (173, 24552), (177, 24594), (185, 24666), (187, 24681), (188, 24684), (199, 24795), (201, 24831), (205, 24882), (209, 24924), (212, 24954), (219, 25005), (223, 25038), (227, 25071), (228, 25083), (240, 25164), (248, 25197), (249, 25200), (259, 25257), (266, 25293), (267, 25308), (270, 25329), (279, 25380), (303, 25515), (304, 25524), (316, 25617), (318, 25623), (319, 25629), (322, 25638), (329, 25662), (332, 25674), (334, 25692), (343, 25749), (361, 25851), (375, 25941), (385, 25971), (401, 26019), (402, 26025), (418, 26148), (419, 26151), (421, 26157), (440, 26214), (441, 26226), (447, 26247), (449, 26253), (455, 26286), (463, 26349), (469, 26403), (475, 26466), (492, 26577), (499, 26604), (500, 26610), (516, 26712), (527, 26778), (546, 26910), (551, 26937), (563, 27018), (571, 27078), (573, 27123), (606, 27429), (609, 27438), (613, 27465), (625, 27534), (635, 27663), (645, 27762), (663, 27906), (672, 27978), (673, 27984), (675, 27990), (685, 28065), (691, 28095), (707, 28233), (717, 28293), (725, 28329), (730, 28374), (736, 28401), (745, 28440), (746, 28446), (748, 28452), (751, 28479), (755, 28515), (756, 28527),

Gene: Stultus_31 Start: 24099, Stop: 28922, Start Num: 22

Candidate Starts for Stultus_31:

(Start: 22 @24099 has 60 MA's), (50, 24273), (56, 24297), (91, 24435), (102, 24474), (104, 24480), (108, 24492), (113, 24510), (119, 24522), (123, 24549), (127, 24567), (131, 24579), (147, 24678), (166, 24819), (169, 24879), (173, 24912), (177, 24954), (180, 24990), (185, 25026), (187, 25041), (188, 25044), (199, 25155), (201, 25191), (205, 25242), (209, 25284), (212, 25314), (219, 25365), (223, 25398), (227, 25431), (228, 25443), (240, 25524), (244, 25545), (248, 25557), (266, 25653), (267, 25668), (270, 25689), (279, 25740), (281, 25749), (291, 25827), (303, 25875), (304, 25884), (310, 25944), (319, 25989), (322, 25998), (330, 26025), (334, 26052), (337, 26073), (343, 26109), (355, 26175), (361, 26211), (374, 26298), (375, 26301), (377, 26310), (383, 26328), (401, 26379), (402, 26385), (419, 26511), (441, 26586), (449, 26613), (455, 26646), (463, 26709), (469, 26763), (475, 26826), (492, 26937), (499, 26964), (500, 26970), (516, 27072), (518, 27084), (527, 27138), (530, 27165), (534, 27192), (538, 27231), (542, 27255), (551, 27297), (562, 27369), (563, 27378), (571, 27438), (573, 27483), (609, 27798), (610, 27804), (612, 27822), (627, 27918), (635, 28023), (645, 28122), (663, 28266), (672, 28341), (675, 28353), (685, 28437), (736, 28776), (745, 28815), (746, 28821), (748, 28827), (751, 28854), (755, 28890), (756, 28902),

Gene: Tangent_33 Start: 24533, Stop: 29359, Start Num: 22

Candidate Starts for Tangent_33:

(Start: 22 @24533 has 60 MA's), (50, 24707), (56, 24731), (91, 24869), (101, 24902), (104, 24914), (108, 24926), (113, 24944), (119, 24956), (127, 25001), (147, 25112), (164, 25232), (166, 25253), (169, 25313), (173, 25346), (177, 25388), (180, 25424), (185, 25460), (187, 25475), (188, 25478), (199, 25589), (201, 25625), (205, 25676), (209, 25718), (212, 25748), (219, 25799), (223, 25832), (227, 25865), (228, 25877), (240, 25958), (248, 25991), (266, 26087), (267, 26102), (270, 26123), (279, 26174), (281, 26183), (291, 26261), (303, 26309), (304, 26318), (310, 26378), (318, 26417), (319, 26423), (322, 26432), (330, 26459), (334, 26486), (337, 26507), (343, 26543), (355, 26609), (358, 26630), (361, 26645), (374, 26732), (375, 26735), (401, 26813), (408, 26873), (419, 26945), (449, 27047), (455, 27080), (463, 27143), (469, 27197), (475, 27260), (492, 27371), (499, 27398), (500, 27404), (516, 27506), (518, 27518), (527, 27572), (530, 27599), (534, 27626), (538, 27665), (542, 27689), (546, 27704), (551, 27731), (562, 27803), (563, 27812), (571, 27872), (573, 27917), (600, 28106), (609, 28235), (610, 28241), (612, 28259), (627, 28355), (635, 28460), (645, 28559), (663, 28703), (672, 28778), (675, 28790), (685, 28874), (736, 29213), (745, 29252), (746, 29258), (748, 29264), (751, 29291), (755, 29327), (756, 29339),

Gene: Tangerine_32 Start: 23535, Stop: 28550, Start Num: 22

Candidate Starts for Tangerine_32:

(Start: 22 @23535 has 60 MA's), (34, 23622), (40, 23655), (50, 23709), (56, 23733), (59, 23775), (61, 23793), (63, 23808), (73, 23880), (78, 23907), (86, 23982), (88, 23991), (96, 24048), (98, 24066), (99, 24072), (102, 24090), (109, 24117), (147, 24324), (150, 24336), (155, 24384), (169, 24525), (173, 24558), (177, 24600), (185, 24672), (187, 24687), (188, 24690), (199, 24801), (201, 24837), (205, 24888), (209, 24930), (212, 24960), (215, 24990), (223, 25044), (227, 25077), (240, 25170), (248, 25203), (249, 25206), (259, 25263), (266, 25299), (267, 25314), (270, 25335), (279, 25386), (303, 25521), (304, 25530), (316, 25623), (318, 25629), (319, 25635), (322, 25644), (329, 25668), (332, 25680), (334, 25698), (343, 25755), (361, 25857), (375, 25947), (385, 25977), (401, 26025), (402, 26031), (418, 26154), (419, 26157), (440, 26220), (441, 26232), (447, 26253), (449, 26259), (455, 26292), (463, 26355), (469, 26409), (492, 26583), (499, 26610), (500, 26616), (516, 26718), (527, 26784), (546, 26916), (551, 26943), (563, 27024), (571, 27084), (573, 27129), (606, 27435), (609, 27444), (613, 27471), (625, 27540), (635, 27669), (645, 27768), (663, 27912), (672, 27981), (673, 27987), (675, 27993), (685, 28068), (691, 28098), (707, 28236), (717, 28296), (725, 28332), (730, 28377), (736, 28404), (745, 28443), (746, 28449), (748, 28455), (751, 28482), (755, 28518), (756, 28530),

Gene: Tardus_34 Start: 24199, Stop: 29124, Start Num: 22

Candidate Starts for Tardus_34:

(Start: 22 @24199 has 60 MA's), (40, 24319), (44, 24331), (50, 24373), (56, 24397), (57, 24406), (62, 24463), (63, 24472), (73, 24544), (80, 24577), (86, 24646), (88, 24655), (92, 24673), (107, 24754), (111, 24763), (124, 24826), (126, 24832), (132, 24859), (135, 24889), (137, 24898), (147, 24961), (150, 24973), (152, 25006), (159, 25060), (163, 25072), (168, 25114), (173, 25195), (176, 25219), (177, 25237), (178, 25249), (185, 25309), (188, 25327), (199, 25438), (201, 25474), (203, 25513), (205, 25525), (209, 25567), (212, 25597), (223, 25681), (227, 25714), (240, 25807), (244, 25828), (249, 25843), (265, 25930), (270, 25972), (280, 26026), (286, 26059), (303, 26158), (304, 26167), (310, 26227), (312, 26239), (318, 26266), (330, 26308), (331, 26314), (333, 26329), (334, 26335), (346, 26416), (347, 26419), (349, 26440), (361, 26494), (370, 26557), (385, 26614), (402, 26701), (410, 26767), (438, 26824), (439, 26827), (443, 26851), (461, 26941), (466, 26989), (501, 27217), (504, 27235), (512, 27292), (527, 27382), (533, 27445), (546, 27526), (551, 27553), (562, 27625), (563, 27634), (571, 27694), (581, 27805), (606, 28033), (609, 28042), (613, 28069), (620, 28111), (626, 28171), (638, 28333), (642, 28360), (647, 28432), (652, 28471), (678, 28678), (692, 28750), (700, 28816), (719, 28951), (726, 29014), (727, 29017), (731, 29035), (734, 29050), (738, 29077), (743, 29089),

Gene: TaronosaurusRx_17 Start: 10940, Stop: 16063, Start Num: 4

Candidate Starts for TaronosaurusRx_17:

(Start: 4 @10940 has 12 MA's), (5, 10946), (28, 11219), (29, 11228), (32, 11267), (42, 11324), (53, 11387), (63, 11480), (68, 11498), (85, 11651), (94, 11693), (106, 11780), (142, 11972), (143, 11975), (149, 12011), (153, 12059), (169, 12212), (173, 12245), (174, 12254), (175, 12263), (178, 12296), (179, 12308), (181, 12332), (188, 12377), (189, 12386), (191, 12431), (196, 12458), (198, 12470), (199, 12488), (212, 12647), (214, 12671), (216, 12680), (217, 12683), (237, 12824), (238, 12827), (239, 12830), (240, 12842), (241, 12845), (252, 12899), (260, 12938), (277, 13034), (280, 13055), (282, 13070), (284, 13082), (295, 13154), (329, 13316), (350, 13373), (359, 13385), (360, 13388), (367, 13421), (387, 13514), (389, 13520), (390, 13526), (399, 13547), (400, 13550), (401, 13553), (404, 13574), (407, 13604), (414, 13652), (415, 13658), (416, 13667), (421, 13691), (429, 13706), (430, 13709), (432, 13715), (442, 13760), (445, 13769), (463, 13868), (467, 13910), (472, 13943), (476, 13988), (482, 14012), (485, 14057), (488, 14075), (511, 14213), (514, 14234), (516, 14252), (517, 14255), (518, 14264), (554, 14495), (556, 14513), (559, 14537), (576, 14681), (580, 14705), (588, 14756), (603, 14900), (604, 14918), (608, 14957), (614, 14996), (615, 15002), (617, 15011), (623, 15053), (629, 15131), (631, 15170), (644, 15305), (650, 15398), (651, 15401), (656, 15458), (657, 15467), (658, 15479), (661, 15500), (690, 15713), (698, 15752), (704, 15821), (709, 15875), (735, 16025),

Gene: Thing3_32 Start: 25026, Stop: 29843, Start Num: 22

Candidate Starts for Thing3_32:

(Start: 22 @25026 has 60 MA's), (50, 25200), (56, 25224), (91, 25362), (104, 25407), (108, 25419), (113, 25437), (119, 25449), (123, 25476), (127, 25494), (131, 25506), (147, 25605), (164, 25725), (166, 25746), (169, 25806), (173, 25839), (177, 25881), (185, 25953), (187, 25968), (188, 25971), (199, 26082), (201, 26118), (205, 26169), (209, 26211), (212, 26241), (219, 26292), (223, 26325), (227, 26358), (228, 26370), (240, 26451), (244, 26472), (248, 26484), (266, 26580), (267, 26595), (270, 26616), (279, 26667), (281, 26676), (291, 26754), (303, 26802), (304, 26811), (310, 26871), (319, 26916), (322, 26925), (330, 26952), (334, 26979), (337, 27000), (343, 27036), (355, 27102), (361, 27138), (374, 27225), (375, 27228), (377, 27237), (383, 27255), (401, 27306), (402, 27312), (419, 27438), (441, 27513), (449, 27540), (455, 27573), (463, 27636), (469, 27690), (475, 27753), (492, 27864), (499, 27891), (500, 27897), (516, 27999), (518, 28011), (527, 28065), (530, 28092), (534, 28119), (538, 28158), (542, 28182), (551, 28224), (562, 28296), (563, 28305), (571, 28365), (573, 28410), (609, 28728), (610, 28734), (612, 28752), (627, 28848), (635, 28953), (645, 29052), (663, 29196), (672, 29271), (675, 29283), (685, 29358), (711, 29553), (736, 29697), (745, 29736), (746, 29742), (748, 29748), (751, 29775), (755, 29811), (756, 29823),

Gene: Tiamoceli_31 Start: 22285, Stop: 27402, Start Num: 22

Candidate Starts for Tiamoceli_31:

(Start: 22 @22285 has 60 MA's), (40, 22405), (50, 22459), (57, 22492), (62, 22549), (63, 22558), (64, 22561), (73, 22630), (76, 22642), (78, 22657), (83, 22693), (86, 22732), (87, 22738), (89, 22744), (95, 22777), (101, 22819), (103, 22828), (105, 22837), (107, 22843), (126, 22921), (130, 22939), (135, 22978), (145, 23035), (147, 23050), (161, 23143), (177, 23314), (185, 23386), (188, 23404), (195, 23482), (199, 23515), (201, 23551), (203, 23590), (205, 23602), (212, 23674), (219, 23725), (221, 23746), (223, 23758), (230, 23809), (234, 23839), (244, 23905), (265, 24007), (270, 24049), (280, 24103), (285, 24133), (286, 24136), (291, 24187), (297, 24214), (303, 24235), (309, 24301), (316, 24337), (318, 24343), (329, 24382), (332, 24394), (333, 24406), (334, 24412), (337, 24433), (349, 24517), (354, 24532), (358, 24556), (380, 24691), (381, 24703), (391, 24766), (392, 24769), (397, 24874), (399, 24892), (405, 24922), (411, 24973), (419, 25030), (425, 25105), (428, 25114), (431, 25123), (433, 25129), (438, 25180), (445, 25213), (448, 25225), (451, 25246), (453, 25258), (458, 25291), (461, 25312), (473, 25444), (482, 25498), (513, 25705), (530, 25819), (532, 25831), (550, 25957), (553, 25975), (565, 26053), (586, 26242), (589, 26272), (609, 26443), (613, 26470), (640, 26677), (641, 26680), (643, 26698), (668, 26947), (672, 26965), (677, 26977), (700, 27094), (722, 27250), (723, 27253), (727, 27295), (731, 27313), (734, 27328), (743, 27367),

Gene: TillyBobJoe_29 Start: 19189, Stop: 24723, Start Num: 1

Candidate Starts for TillyBobJoe_29:

(Start: 1 @19189 has 29 MA's), (3, 19276), (6, 19363), (10, 19396), (12, 19420), (19, 19543), (25, 19564), (26, 19570), (30, 19594), (33, 19603), (36, 19624), (47, 19663), (64, 19747), (72, 19783), (74, 19807), (82, 19846), (144, 20236), (166, 20404), (169, 20464), (177, 20536), (178, 20548), (181, 20584), (184, 20608), (195, 20707), (196, 20710), (199, 20740), (203, 20815), (205, 20827), (209, 20869), (212, 20899), (219, 20950), (237, 21091), (240, 21109), (242, 21121), (244, 21130), (265, 21232), (267, 21253), (270, 21274), (279, 21325), (280, 21328), (281, 21334), (291, 21412), (298, 21442), (303, 21460), (310, 21529), (316, 21562), (318, 21568), (320, 21577), (323, 21583), (334, 21637), (344, 21709), (346, 21718), (348, 21739), (361, 21796), (366, 21832), (379, 21913), (380, 21916), (388, 21985), (395, 22057), (402, 22153), (410, 22219), (411, 22222), (414, 22246), (417, 22273), (418, 22276), (419, 22279), (421, 22285), (442, 22354), (445, 22363), (454, 22408), (459, 22417), (471, 22495), (486, 22624), (489, 22639), (495, 22681), (501, 22723), (504, 22741), (507, 22759), (516, 22822), (523, 22873), (539, 22984), (548, 23023), (560, 23104), (577, 23278), (578, 23281), (583, 23314), (585, 23329), (606, 23521), (609, 23530), (610, 23536), (626, 23650), (634, 23770), (652, 23950), (676, 24175), (696, 24325), (715, 24481), (716, 24490), (725, 24532), (743, 24631), (744, 24637), (750, 24667), (752, 24700), (754, 24712),

Gene: Togo_29 Start: 19390, Stop: 24912, Start Num: 1

Candidate Starts for Togo_29:

(Start: 1 @19390 has 29 MA's), (3, 19477), (6, 19564), (10, 19597), (12, 19621), (19, 19744), (25, 19765), (26, 19771), (30, 19795), (36, 19825), (47, 19864), (64, 19948), (72, 19984), (74, 20008), (82, 20047), (144, 20437), (166, 20605), (169, 20665), (177, 20737), (178, 20749), (181, 20785), (184, 20809), (195, 20908), (196, 20911), (199, 20941), (203, 21016), (205, 21028), (209, 21070), (212, 21100), (219, 21151), (237, 21292), (240, 21310), (242, 21322), (244, 21331), (265, 21433), (267, 21454), (270, 21475), (279, 21526), (280, 21529), (291, 21613), (298, 21643), (303, 21661), (310, 21730), (316, 21763), (318, 21769), (320, 21778), (323, 21784), (334, 21838), (344, 21910), (346, 21919), (348, 21940), (361, 21997), (366, 22033), (379, 22114), (380, 22117), (388, 22186), (402, 22354), (410, 22420), (411, 22423), (414, 22447), (417, 22474), (418, 22477), (419, 22480), (421, 22486), (442, 22555), (445, 22564), (454, 22609), (459, 22618), (471, 22696), (476, 22750), (484, 22804), (491, 22861), (501, 22903), (507, 22939), (516, 23002), (523, 23053), (539, 23164), (548, 23203), (560, 23284), (577, 23458), (578, 23461), (583, 23494), (606, 23701), (609, 23710), (610, 23716), (613, 23737), (642, 24031), (660, 24238), (676, 24364), (696, 24514), (707, 24625), (715, 24670), (716, 24679), (717, 24685), (725, 24721), (741, 24814), (744, 24826), (750, 24856), (752, 24889), (754, 24901),

Gene: Twister6_31 Start: 19817, Stop: 25348, Start Num: 1

Candidate Starts for Twister6_31:

(Start: 1 @19817 has 29 MA's), (3, 19904), (6, 19991), (10, 20024), (12, 20048), (19, 20171), (25, 20192), (26, 20198), (30, 20222), (36, 20252), (47, 20291), (64, 20375), (72, 20411), (74, 20435), (82, 20474), (144, 20864), (166, 21032), (169, 21092), (177, 21164), (178, 21176), (181, 21212), (184, 21236), (195, 21335), (196, 21338), (199, 21368), (203, 21443), (205, 21455), (209, 21497), (212, 21527), (219, 21578), (237, 21719), (240, 21737), (242, 21749), (244, 21758), (265, 21860), (267, 21881), (270, 21902), (279, 21953), (280, 21956), (281, 21962), (291, 22040), (298, 22070), (303, 22088), (310, 22157), (316, 22190), (318, 22196), (320, 22205), (323, 22211), (334, 22265), (340, 22310), (344, 22337), (346, 22346), (348, 22367), (361, 22424), (366, 22460), (379, 22541), (380, 22544), (388, 22613), (395, 22685), (402, 22781), (410, 22847), (411, 22850), (414, 22874), (417, 22901), (418, 22904), (419, 22907), (421, 22913), (442, 22982), (445, 22991), (454, 23036), (459, 23045), (471, 23123), (476, 23177), (484, 23231), (491, 23288), (501, 23330), (507, 23366), (516, 23429), (523, 23480), (539, 23591), (548, 23630), (560, 23711), (577, 23885), (578, 23888), (583, 23921), (606, 24128), (609, 24137), (610, 24143), (642, 24455), (660, 24662), (676, 24800), (696, 24950), (707, 25061), (715, 25106), (716, 25115), (717, 25121), (725, 25157), (741, 25250), (744, 25262), (750, 25292), (752, 25325), (754, 25337),

Gene: Twonlo_28 Start: 20903, Stop: 26020, Start Num: 22

Candidate Starts for Twonlo_28:

(Start: 22 @20903 has 60 MA's), (40, 21023), (50, 21077), (57, 21110), (62, 21167), (63, 21176), (64, 21179), (73, 21248), (76, 21260), (78, 21275), (83, 21311), (86, 21350), (87, 21356), (89, 21362), (95, 21395), (101, 21437), (103, 21446), (105, 21455), (107, 21461), (126, 21539), (130, 21557), (135, 21596), (145, 21653), (147, 21668), (161, 21761), (177, 21932), (185, 22004), (188, 22022), (195, 22100), (199, 22133), (201, 22169), (203, 22208), (205, 22220), (212, 22292), (219, 22343), (221, 22364), (223, 22376), (230, 22427), (234, 22457), (244, 22523), (265, 22625), (270, 22667), (280, 22721), (285, 22751), (286, 22754), (291, 22805), (297, 22832), (303, 22853), (309, 22919), (316, 22955), (318, 22961), (329, 23000), (332, 23012), (333, 23024), (334, 23030), (337, 23051), (349, 23135), (354, 23150), (358, 23174), (380, 23309), (381, 23321), (391, 23384), (392, 23387), (397, 23492), (399, 23510), (405, 23540), (411, 23591), (419, 23648), (425, 23723), (428, 23732), (431, 23741), (433, 23747), (438, 23798), (445, 23831), (448, 23843), (451, 23864), (453, 23876), (458, 23909), (461, 23930), (473, 24062), (482, 24116), (513, 24323), (530, 24437), (532, 24449), (550, 24575), (553, 24593), (565, 24671), (586, 24860), (589, 24890), (609, 25061), (613, 25088), (640, 25295), (641, 25298), (643, 25316), (668, 25565), (672, 25583), (677, 25595), (700, 25712), (722, 25868), (723, 25871), (727, 25913), (731, 25931), (734, 25946), (743, 25985),

Gene: Tycho_32 Start: 23624, Stop: 28639, Start Num: 22

Candidate Starts for Tycho_32:

(Start: 22 @23624 has 60 MA's), (34, 23711), (40, 23744), (50, 23798), (56, 23822), (59, 23864), (61, 23882), (63, 23897), (73, 23969), (78, 23996), (86, 24071), (88, 24080), (96, 24137), (98, 24155), (99, 24161), (147, 24413), (155, 24473), (169, 24614), (173, 24647), (177, 24689), (185, 24761), (187, 24776), (188, 24779), (199, 24890), (201, 24926), (205, 24977), (209, 25019), (212, 25049), (219, 25100), (223, 25133), (227, 25166), (228, 25178), (240, 25259), (248, 25292), (249, 25295), (259, 25352), (266, 25388), (267, 25403), (270, 25424), (279, 25475), (303, 25610), (304, 25619), (316, 25712), (318, 25718), (319, 25724), (322, 25733), (327, 25745), (329, 25757), (332, 25769), (334, 25787), (343, 25844), (361, 25946), (363, 25964), (367, 25988), (375, 26036), (385, 26066), (401, 26114), (402, 26120), (418, 26243), (419, 26246), (421, 26252), (440, 26309), (441, 26321), (447, 26342), (449, 26348), (455, 26381), (463, 26444), (469, 26498), (475, 26561), (492, 26672), (499, 26699), (500, 26705), (516, 26807), (527, 26873), (546, 27005), (551, 27032), (563, 27113), (571, 27173), (573, 27218), (606, 27524), (609, 27533), (613, 27560), (625, 27629), (635, 27758), (645, 27857), (663, 28001), (672, 28070), (673, 28076), (675, 28082), (685, 28157), (691, 28187), (707, 28325), (717, 28385), (725, 28421), (730, 28466), (736, 28493), (745, 28532), (746, 28538), (748, 28544), (751, 28571), (755, 28607), (756, 28619),

Gene: Valary_32 Start: 20326, Stop: 25857, Start Num: 1

Candidate Starts for Valary_32:

(Start: 1 @20326 has 29 MA's), (3, 20413), (6, 20500), (10, 20533), (19, 20680), (25, 20701), (26, 20707), (30, 20731), (36, 20761), (47, 20800), (64, 20884), (72, 20920), (74, 20944), (82, 20983), (144, 21373), (166, 21541), (169, 21601), (177, 21673), (178, 21685), (181, 21721), (184, 21745), (195, 21844), (196, 21847), (199, 21877), (203, 21952), (205, 21964), (209, 22006), (212, 22036), (219, 22087), (237, 22228), (240, 22246), (242, 22258), (244, 22267), (265, 22369), (267, 22390), (270, 22411), (279, 22462), (280, 22465), (291, 22549), (298, 22579), (303, 22597), (310, 22666), (316, 22699), (318, 22705), (320, 22714), (323, 22720), (334, 22774), (344, 22846), (346, 22855), (348, 22876), (361, 22933), (366, 22969), (379, 23050), (380, 23053), (388, 23122), (402, 23290), (410, 23356), (411, 23359), (414, 23383), (417, 23410), (418, 23413), (419, 23416), (421, 23422), (442, 23491), (445, 23500), (454, 23545), (459, 23554), (471, 23632), (476, 23686), (484, 23740), (491, 23797), (501, 23839), (507, 23875), (516, 23938), (523, 23989), (535, 24073), (539, 24100), (548, 24139), (551, 24160), (560, 24220), (577, 24394), (578, 24397), (583, 24430), (606, 24637), (609, 24646), (610, 24652), (642, 24964), (660, 25171), (676, 25309), (696, 25459), (707, 25570), (715, 25615), (716, 25624), (717, 25630), (725, 25666), (741, 25759), (744, 25771), (750, 25801), (752, 25834), (754, 25846),

Gene: VanDeWege_32 Start: 20198, Stop: 25696, Start Num: 1

Candidate Starts for VanDeWege_32:

(Start: 1 @20198 has 29 MA's), (3, 20285), (6, 20372), (10, 20405), (12, 20429), (19, 20552), (25, 20573), (26, 20579), (30, 20603), (36, 20633), (47, 20672), (64, 20756), (72, 20792), (74, 20816), (82, 20855), (144, 21245), (166, 21413), (169, 21473), (177, 21545), (178, 21557), (181, 21593), (184, 21617), (195, 21716), (196, 21719), (199, 21749), (203, 21824), (205, 21836), (209, 21878), (212, 21908), (219, 21959), (237, 22100), (240, 22118), (242, 22130), (244, 22139), (265, 22241), (267, 22262), (270, 22283), (279, 22334), (280, 22337), (281, 22343), (291, 22421), (298, 22451), (303, 22469), (310, 22538), (316, 22571), (318, 22577), (320, 22586), (323, 22592), (334, 22646), (340, 22691), (344, 22718), (346, 22727), (348, 22748), (361, 22805), (366, 22841), (379, 22922), (380, 22925), (388, 22994), (395, 23066), (402, 23162), (410, 23228), (411, 23231), (414, 23255), (417, 23282), (418, 23285), (419, 23288), (421, 23294), (442, 23363), (445, 23372), (454, 23417), (459, 23426), (471, 23504), (476, 23558), (484, 23612), (491, 23669), (501, 23711), (507, 23747), (516, 23810), (523, 23861), (528, 23891), (539, 23972), (548, 24011), (560, 24092), (566, 24134), (577, 24266), (578, 24269), (583, 24302), (609, 24518), (610, 24524), (626, 24638), (632, 24749), (647, 24911), (655, 24992), (659, 25019), (696, 25298), (707, 25409), (715, 25454), (716, 25463), (717, 25469), (725, 25505), (741, 25598), (744, 25610), (750, 25640), (752, 25673), (754, 25685),

Gene: VanLee_18 Start: 10919, Stop: 15565, Start Num: 35

Candidate Starts for VanLee_18:

(Start: 35 @10919 has 5 MA's), (43, 10952), (61, 11063), (62, 11069), (94, 11249), (95, 11252), (99, 11288), (100, 11291), (112, 11342), (120, 11381), (146, 11528), (170, 11735), (173, 11759), (192, 11948), (202, 12044), (206, 12086), (213, 12164), (224, 12251), (256, 12431), (259, 12452), (283, 12596), (372, 13094), (374, 13112), (437, 13388), (446, 13430), (468, 13583), (477, 13655), (483, 13682), (487, 13730), (509, 13856), (515, 13904), (519, 13925), (521, 13940), (524, 13964), (525, 13967), (549, 14114), (557, 14174), (561, 14192), (595, 14480), (637, 14819), (639, 14834), (664, 15080), (671, 15137), (679, 15164), (682, 15203), (683, 15209), (687, 15236), (701, 15347), (706, 15398), (710, 15434), (718, 15470), (724, 15503), (728, 15542), (729, 15545),

Gene: Verity_32 Start: 25053, Stop: 29963, Start Num: 22

Candidate Starts for Verity_32:

(Start: 22 @25053 has 60 MA's), (40, 25173), (44, 25185), (47, 25206), (50, 25227), (56, 25251), (62, 25317), (63, 25326), (64, 25329), (80, 25431), (86, 25500), (88, 25509), (111, 25617), (116, 25638), (124, 25680), (126, 25686), (135, 25743), (137, 25752), (147, 25815), (159, 25914), (163, 25926),

(168, 25968), (173, 26049), (176, 26073), (178, 26103), (183, 26160), (185, 26163), (186, 26169), (188, 26181), (194, 26253), (199, 26292), (201, 26328), (203, 26367), (205, 26379), (209, 26421), (212, 26451), (223, 26535), (227, 26568), (240, 26661), (244, 26682), (249, 26697), (265, 26784), (270, 26826), (280, 26880), (281, 26886), (286, 26913), (300, 27000), (303, 27012), (304, 27021), (310, 27081), (312, 27093), (318, 27120), (330, 27162), (331, 27168), (333, 27183), (334, 27189), (340, 27234), (344, 27261), (346, 27270), (347, 27273), (370, 27411), (383, 27465), (385, 27468), (402, 27555), (429, 27657), (442, 27702), (443, 27705), (461, 27795), (501, 28071), (503, 28086), (504, 28089), (522, 28212), (527, 28236), (533, 28299), (544, 28356), (563, 28473), (567, 28515), (571, 28533), (581, 28644), (594, 28746), (607, 28878), (609, 28884), (610, 28890), (613, 28911), (620, 28953), (638, 29172), (642, 29199), (647, 29271), (652, 29310), (678, 29517), (689, 29583), (692, 29589), (700, 29655), (711, 29751), (719, 29790), (726, 29853), (727, 29856), (731, 29874), (734, 29889), (738, 29916), (743, 29928),

Gene: ViaConlectus_33 Start: 23474, Stop: 28399, Start Num: 22

Candidate Starts for ViaConlectus_33:

(Start: 22 @23474 has 60 MA's), (40, 23594), (44, 23606), (50, 23648), (56, 23672), (62, 23738), (63, 23747), (73, 23819), (80, 23852), (86, 23921), (88, 23930), (92, 23948), (103, 24014), (107, 24029), (111, 24038), (124, 24101), (126, 24107), (132, 24134), (135, 24164), (137, 24173), (147, 24236), (150, 24248), (159, 24335), (163, 24347), (173, 24470), (176, 24494), (177, 24512), (178, 24524), (185, 24584), (186, 24590), (188, 24602), (199, 24713), (201, 24749), (203, 24788), (205, 24800), (209, 24842), (212, 24872), (218, 24914), (219, 24923), (220, 24926), (223, 24956), (227, 24989), (240, 25082), (244, 25103), (249, 25118), (265, 25205), (267, 25226), (270, 25247), (280, 25301), (286, 25334), (291, 25385), (303, 25433), (304, 25442), (310, 25502), (312, 25514), (316, 25535), (318, 25541), (330, 25583), (331, 25589), (333, 25604), (334, 25610), (346, 25691), (347, 25694), (349, 25715), (361, 25769), (370, 25832), (385, 25889), (402, 25976), (410, 26042), (438, 26099), (439, 26102), (443, 26126), (461, 26216), (466, 26264), (501, 26492), (504, 26510), (512, 26567), (527, 26657), (533, 26720), (546, 26801), (551, 26828), (562, 26900), (563, 26909), (571, 26969), (581, 27080), (606, 27311), (609, 27320), (613, 27347), (620, 27389), (626, 27446), (638, 27608), (642, 27635), (647, 27707), (652, 27746), (678, 27953), (692, 28025), (700, 28091), (719, 28226), (726, 28289), (727, 28292), (731, 28310), (734, 28325), (738, 28352), (743, 28364),

Gene: Vivi2_35 Start: 25706, Stop: 30517, Start Num: 22

Candidate Starts for Vivi2_35:

(Start: 22 @25706 has 60 MA's), (50, 25880), (56, 25904), (91, 26042), (101, 26075), (104, 26087), (108, 26099), (113, 26117), (119, 26129), (127, 26174), (131, 26186), (147, 26285), (164, 26405), (166, 26426), (169, 26486), (173, 26519), (177, 26561), (180, 26597), (185, 26633), (187, 26648), (188, 26651), (199, 26762), (201, 26798), (205, 26849), (209, 26891), (212, 26921), (219, 26972), (223, 27005), (227, 27038), (228, 27050), (240, 27131), (244, 27152), (248, 27164), (266, 27260), (267, 27275), (270, 27296), (279, 27347), (281, 27356), (303, 27482), (304, 27491), (310, 27551), (319, 27596), (322, 27605), (330, 27632), (334, 27659), (337, 27680), (343, 27716), (355, 27782), (361, 27818), (374, 27905), (375, 27908), (401, 27986), (402, 27992), (419, 28118), (449, 28220), (455, 28253), (463, 28316), (469, 28370), (475, 28433), (492, 28544), (499, 28571), (500, 28577), (516, 28679), (527, 28745), (528, 28760), (530, 28772), (534, 28799), (538, 28838), (551, 28904), (563, 28985), (571, 29045), (573, 29090), (609, 29405), (610, 29411), (612, 29429), (627, 29522), (645, 29726), (663, 29870), (672, 29945), (685, 30032), (736, 30371), (745, 30410), (746, 30416), (748, 30422), (751, 30449), (755, 30485), (756, 30497),

Gene: Wizard_29 Start: 19524, Stop: 25055, Start Num: 1

Candidate Starts for Wizard_29:

(Start: 1 @19524 has 29 MA's), (3, 19611), (6, 19698), (10, 19731), (12, 19755), (19, 19878), (25, 19899), (26, 19905), (30, 19929), (36, 19959), (47, 19998), (64, 20082), (72, 20118), (74, 20142), (82, 20181), (144, 20571), (166, 20739), (169, 20799), (177, 20871), (178, 20883), (181, 20919), (184, 20943), (195, 21042), (196, 21045), (199, 21075), (203, 21150), (205, 21162), (209, 21204), (212,

21234), (219, 21285), (237, 21426), (240, 21444), (242, 21456), (244, 21465), (265, 21567), (267, 21588), (270, 21609), (279, 21660), (280, 21663), (281, 21669), (291, 21747), (298, 21777), (303, 21795), (310, 21864), (316, 21897), (318, 21903), (320, 21912), (323, 21918), (334, 21972), (340, 22017), (344, 22044), (346, 22053), (348, 22074), (361, 22131), (366, 22167), (379, 22248), (380, 22251), (388, 22320), (395, 22392), (402, 22488), (410, 22554), (411, 22557), (414, 22581), (417, 22608), (418, 22611), (419, 22614), (421, 22620), (442, 22689), (445, 22698), (454, 22743), (459, 22752), (471, 22830), (476, 22884), (484, 22938), (491, 22995), (501, 23037), (507, 23073), (516, 23136), (523, 23187), (539, 23298), (548, 23337), (560, 23418), (577, 23592), (578, 23595), (583, 23628), (606, 23835), (609, 23844), (610, 23850), (642, 24162), (660, 24369), (676, 24507), (696, 24657), (707, 24768), (715, 24813), (716, 24822), (717, 24828), (725, 24864), (741, 24957), (744, 24969), (750, 24999), (752, 25032), (754, 25044),

Gene: YorkOnyx_33 Start: 23880, Stop: 28898, Start Num: 22

Candidate Starts for YorkOnyx_33:

(Start: 22 @23880 has 60 MA's), (33, 23955), (40, 24000), (50, 24054), (56, 24078), (59, 24120), (61, 24138), (63, 24153), (73, 24225), (78, 24252), (86, 24327), (88, 24336), (96, 24393), (98, 24411), (99, 24417), (102, 24435), (109, 24462), (136, 24600), (140, 24618), (147, 24669), (150, 24681), (155, 24729), (169, 24870), (173, 24903), (177, 24945), (185, 25017), (187, 25032), (188, 25035), (199, 25146), (201, 25182), (205, 25233), (209, 25275), (212, 25305), (223, 25389), (227, 25422), (240, 25515), (248, 25548), (249, 25551), (259, 25608), (266, 25644), (267, 25659), (270, 25680), (279, 25731), (281, 25740), (291, 25818), (303, 25866), (304, 25875), (316, 25968), (318, 25974), (319, 25980), (322, 25989), (329, 26013), (332, 26025), (334, 26043), (343, 26100), (355, 26166), (361, 26202), (367, 26244), (375, 26292), (385, 26322), (401, 26370), (402, 26376), (418, 26499), (419, 26502), (440, 26565), (441, 26577), (447, 26598), (449, 26604), (455, 26637), (463, 26700), (469, 26754), (475, 26817), (492, 26928), (499, 26955), (500, 26961), (516, 27063), (527, 27129), (546, 27261), (551, 27288), (563, 27369), (571, 27429), (573, 27474), (606, 27780), (609, 27789), (613, 27816), (635, 28014), (645, 28113), (663, 28257), (672, 28329), (673, 28335), (675, 28341), (685, 28416), (691, 28446), (707, 28584), (717, 28644), (725, 28680), (730, 28725), (736, 28752), (745, 28791), (746, 28797), (748, 28803), (751, 28830), (755, 28866), (756, 28878),

Gene: YungMoney_31 Start: 20893, Stop: 26415, Start Num: 1

Candidate Starts for YungMoney_31:

(Start: 1 @20893 has 29 MA's), (6, 21067), (10, 21100), (12, 21124), (19, 21247), (25, 21268), (26, 21274), (30, 21298), (36, 21328), (47, 21367), (72, 21487), (74, 21511), (82, 21550), (159, 22066), (166, 22108), (169, 22168), (177, 22240), (181, 22288), (189, 22342), (196, 22414), (199, 22444), (203, 22519), (205, 22531), (209, 22573), (212, 22603), (219, 22654), (231, 22747), (237, 22795), (240, 22813), (242, 22825), (244, 22834), (264, 22933), (265, 22936), (267, 22957), (270, 22978), (279, 23029), (280, 23032), (291, 23116), (298, 23146), (303, 23164), (306, 23191), (310, 23233), (329, 23311), (330, 23314), (331, 23320), (334, 23341), (335, 23344), (344, 23413), (347, 23425), (361, 23500), (379, 23617), (380, 23620), (382, 23668), (402, 23857), (410, 23923), (411, 23926), (414, 23950), (418, 23980), (419, 23983), (421, 23989), (438, 24034), (442, 24058), (445, 24067), (454, 24112), (459, 24121), (462, 24133), (466, 24178), (467, 24181), (471, 24199), (482, 24274), (496, 24382), (501, 24409), (516, 24508), (523, 24559), (539, 24670), (548, 24709), (560, 24790), (577, 24964), (578, 24967), (583, 25000), (606, 25210), (609, 25219), (618, 25267), (642, 25537), (660, 25744), (670, 25834), (676, 25867), (695, 26014), (696, 26017), (707, 26128), (716, 26182), (725, 26224), (741, 26317), (744, 26329), (750, 26359), (752, 26392), (754, 26404),

Gene: ZAYM_17 Start: 10932, Stop: 16055, Start Num: 4

Candidate Starts for ZAYM_17:

(Start: 4 @10932 has 12 MA's), (5, 10938), (28, 11211), (29, 11220), (32, 11259), (42, 11316), (53, 11379), (63, 11472), (68, 11490), (85, 11643), (94, 11685), (106, 11772), (142, 11964), (143, 11967), (149, 12003), (153, 12051), (169, 12204), (173, 12237), (174, 12246), (175, 12255), (178, 12288), (179, 12300), (181, 12324), (188, 12369), (189, 12378), (196, 12450), (198, 12462), (199, 12480),

(212, 12639), (214, 12663), (216, 12672), (217, 12675), (237, 12816), (238, 12819), (239, 12822), (241, 12837), (252, 12891), (260, 12930), (277, 13026), (280, 13047), (282, 13062), (284, 13074), (295, 13146), (329, 13308), (350, 13365), (359, 13377), (360, 13380), (367, 13413), (387, 13506), (389, 13512), (390, 13518), (399, 13539), (400, 13542), (401, 13545), (404, 13566), (407, 13596), (414, 13644), (415, 13650), (416, 13659), (421, 13683), (429, 13698), (430, 13701), (432, 13707), (442, 13752), (445, 13761), (463, 13860), (467, 13902), (472, 13935), (476, 13980), (482, 14004), (485, 14049), (488, 14067), (511, 14205), (514, 14226), (516, 14244), (517, 14247), (518, 14256), (554, 14487), (556, 14505), (559, 14529), (576, 14673), (580, 14697), (588, 14748), (603, 14892), (604, 14910), (608, 14949), (614, 14988), (615, 14994), (617, 15003), (623, 15045), (629, 15123), (631, 15162), (644, 15297), (650, 15390), (651, 15393), (656, 15450), (657, 15459), (658, 15471), (661, 15492), (690, 15705), (698, 15744), (704, 15813), (709, 15867), (735, 16017),

Gene: Zipp_32 Start: 24950, Stop: 29863, Start Num: 22

Candidate Starts for Zipp_32:

(Start: 22 @24950 has 60 MA's), (40, 25070), (44, 25082), (47, 25103), (50, 25124), (56, 25148), (62, 25214), (63, 25223), (64, 25226), (73, 25295), (80, 25328), (83, 25358), (86, 25397), (88, 25406), (111, 25514), (116, 25535), (124, 25577), (126, 25583), (135, 25640), (137, 25649), (147, 25712), (159, 25811), (163, 25823), (168, 25865), (173, 25946), (176, 25970), (178, 26000), (183, 26057), (185, 26060), (186, 26066), (188, 26078), (194, 26150), (199, 26189), (201, 26225), (203, 26264), (205, 26276), (209, 26318), (212, 26348), (223, 26432), (227, 26465), (240, 26558), (244, 26579), (249, 26594), (265, 26681), (270, 26723), (280, 26777), (281, 26783), (286, 26810), (296, 26885), (303, 26909), (304, 26918), (310, 26978), (312, 26990), (317, 27014), (318, 27017), (328, 27047), (330, 27059), (331, 27065), (333, 27080), (334, 27086), (340, 27131), (344, 27158), (346, 27167), (347, 27170), (370, 27308), (383, 27362), (385, 27365), (402, 27452), (442, 27599), (443, 27602), (461, 27692), (501, 27968), (503, 27983), (504, 27986), (522, 28109), (527, 28133), (533, 28196), (544, 28253), (563, 28370), (567, 28412), (571, 28430), (581, 28541), (594, 28643), (607, 28775), (610, 28787), (613, 28808), (620, 28853), (638, 29072), (642, 29099), (647, 29171), (652, 29210), (678, 29417), (689, 29483), (692, 29489), (700, 29555), (711, 29651), (719, 29690), (726, 29753), (727, 29756), (731, 29774), (734, 29789), (738, 29816), (743, 29828),

Gene: Zitch_34 Start: 22821, Stop: 27749, Start Num: 22

Candidate Starts for Zitch_34:

(Start: 22 @22821 has 60 MA's), (40, 22941), (44, 22953), (50, 22995), (56, 23019), (57, 23028), (62, 23085), (63, 23094), (73, 23166), (86, 23268), (88, 23277), (92, 23295), (107, 23376), (111, 23385), (124, 23448), (126, 23454), (132, 23481), (135, 23511), (137, 23520), (147, 23583), (152, 23628), (163, 23694), (173, 23817), (176, 23841), (177, 23859), (185, 23931), (188, 23949), (194, 24021), (199, 24060), (201, 24096), (203, 24135), (205, 24147), (209, 24189), (212, 24219), (223, 24303), (227, 24336), (240, 24429), (249, 24465), (259, 24522), (265, 24552), (270, 24594), (280, 24648), (286, 24681), (291, 24732), (303, 24780), (304, 24789), (310, 24849), (312, 24861), (316, 24882), (318, 24888), (330, 24930), (331, 24936), (333, 24951), (334, 24957), (346, 25038), (347, 25041), (349, 25062), (361, 25116), (370, 25179), (385, 25236), (402, 25323), (410, 25389), (438, 25446), (439, 25449), (443, 25473), (461, 25563), (466, 25611), (501, 25839), (504, 25857), (512, 25914), (527, 26004), (533, 26067), (546, 26148), (551, 26175), (562, 26247), (563, 26256), (571, 26316), (581, 26427), (606, 26658), (609, 26667), (613, 26694), (620, 26736), (638, 26955), (642, 26982), (647, 27054), (652, 27093), (678, 27300), (692, 27372), (700, 27441), (719, 27576), (726, 27639), (727, 27642), (731, 27660), (734, 27675), (738, 27702), (743, 27714),