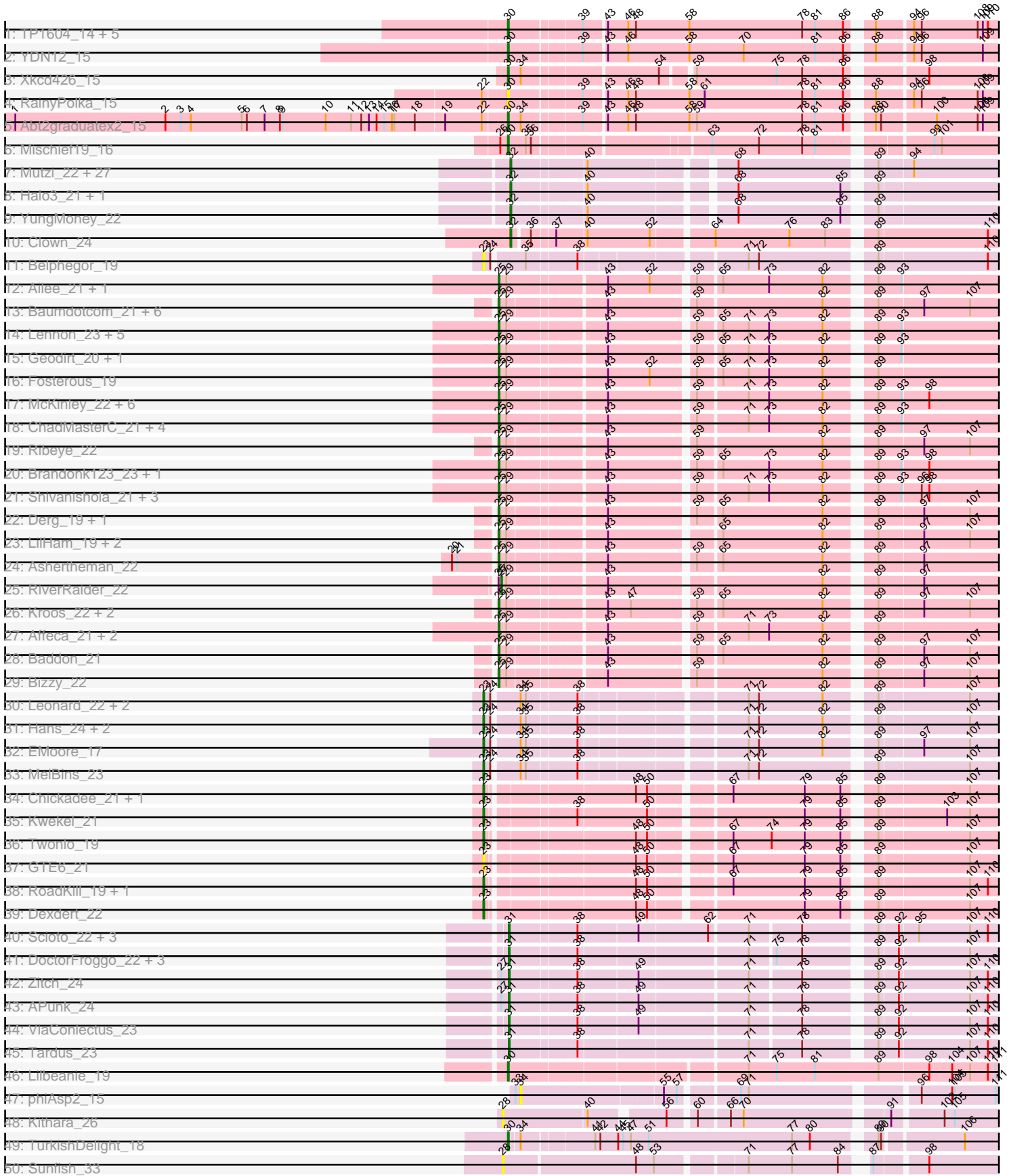


Zoomed Pham 196368



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 196368 Report

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

Pham number 196368 has 129 members, 20 are drafts.

Phages represented in each track:

- Track 1 : TP1604_14, BayC_14, Salete_14, BabyGotBac_14, Maih_14, Asis_14
- Track 2 : YDN12_15
- Track 3 : Xkcd426_15
- Track 4 : RainyPolka_15
- Track 5 : Abt2graduatex2_15
- Track 6 : Mischief19_16
- Track 7 : Mutzi_22, Savbucketdawg_20, Danyall_22, Togo_20, Wizard_20, Jambalaya_20, Phlop_20, TillyBobJoe_20, Gezellig_21, KimmyK_22, PullumCavea_20, PinkCoffee_22, ClamChowder_22, RogerDodger_23, Fugax_22, CoveyB_23, Nubi_20, Shinji_20, Salvador_20, Fireball_21, Twister6_22, Portcullis_20, Evamon_20, Arri_23, Barb_22, VanDeWege_23, Valary_23, SmokingBunny_20
- Track 8 : Halo3_21, Bakery_21
- Track 9 : YungMoney_22
- Track 10 : Clown_24
- Track 11 : Belphegor_19
- Track 12 : Ailee_21, Keitabear_23
- Track 13 : Baumdotcom_21, Gaea_21, Tycho_21, Saronaya_21, Kwobi_22, YorkOnyx_22, Gustavo_21
- Track 14 : Lennon_23, Bibwit_22, Stultus_21, Sedona_23, Barsten_22, Sitar_23
- Track 15 : Geodirt_20, Kewpiedoll_22
- Track 16 : Fosterous_19
- Track 17 : McKinley_22, Love_23, Galadriel_23, Vivi2_21, Rofo_21, MoontowerMania_20, Nordenberg_16
- Track 18 : ChadMasterC_21, Sanjuju_19, Kamashten_22, Thing3_22, Jabberwocky_19
- Track 19 : Ribeye_22
- Track 20 : Brandonk123_23, Paries_22
- Track 21 : Shivanishola_21, BobBob_19, Charming_19, Tangent_19
- Track 22 : Derg_19, Flatwoods_22
- Track 23 : LilHam_19, SchottB_20, JKSyngboy_20
- Track 24 : Ashertheman_22
- Track 25 : RiverRaider_22
- Track 26 : Kroos_22, StorminNorm_21, Tangerine_21
- Track 27 : Affeca_21, Angelicage_21, Fitzgerald_19
- Track 28 : Baddon_21
- Track 29 : Bizzy_22

- Track 30 : Leonard_22, Ali17_20, Phinally_22
- Track 31 : Hans_24, Phauci_15, Inspectinfecti_23
- Track 32 : EMoore_17
- Track 33 : MelBins_23
- Track 34 : Chickadee_21, Tiamoceli_22
- Track 35 : Kwekel_21
- Track 36 : Twonlo_19
- Track 37 : GTE6_21
- Track 38 : RoadKill_19, EdmundFerry_20
- Track 39 : Dxdert_22
- Track 40 : Scioto_22, Natkenzie_22, Sampson_22, Abblin_22
- Track 41 : DoctorFroggo_22, Zipp_22, Delrey21_22, Verity_22
- Track 42 : Zitch_24
- Track 43 : APunk_24
- Track 44 : ViaConlectus_23
- Track 45 : Tardus_23
- Track 46 : Lilbeanie_19
- Track 47 : phiAsp2_15
- Track 48 : Kithara_26
- Track 49 : TurkishDelight_18
- Track 50 : Sunfish_33

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

The start number called the most often in the published annotations is 25, it was called in 43 of the 109 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Affeca_21, Ailee_21, Angelicage_21, Ashertheman_22, Baddon_21, Barsten_22, Baumdotcom_21, Bibwit_22, Bizzy_22, BobBob_19, Brandonk123_23, ChadMasterC_21, Charming_19, Derg_19, Fitzgerald_19, Flatwoods_22, Fosterous_19, Gaea_21, Galadriel_23, Geodirt_20, Gustavo_21, JKSyngboy_20, Jabberwocky_19, Kamashten_22, Keitabear_23, Kewpiedoll_22, Kroos_22, Kwobi_22, Lennon_23, LilHam_19, Love_23, McKinley_22, MoontowerMania_20, Nordenberg_16, Paries_22, Ribeye_22, Rofo_21, Sanjuju_19, Saronaya_21, SchottB_20, Sedona_23, Shivanishola_21, Sitar_23, StorminNorm_21, Stultus_21, Tangent_19, Tangerine_21, Thing3_22, Tycho_21, Vivi2_21, YorkOnyx_22,

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

- RiverRaider_22,

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

- APunk_24, Abblin_22, Abt2graduatex2_15, Ali17_20, Arri_23, Asis_14, BabyGotBac_14, Bakery_21, Barb_22, BayC_14, Belphegor_19, Chickadee_21, ClamChowder_22, Clown_24, CoveyB_23, Danyall_22, Delrey21_22, Dxdert_22, DoctorFroggo_22, EMoore_17, EdmundFerry_20, Evamon_20, Fireball_21, Fugax_22, GTE6_21, Gezellig_21, Halo3_21, Hans_24, Inspectinfecti_23, Jambalaya_20, KimmyK_22, Kithara_26, Kwekel_21, Leonard_22, Lilbeanie_19, Maih_14, MelBins_23, Mischief19_16, Mutzi_22, Natkenzie_22, Nubi_20, Phauci_15, Phinally_22, Phlop_20, PinkCoffee_22, Portcullis_20, PullumCavea_20,

RainyPolka_15, RoadKill_19, RogerDodger_23, Salete_14, Salvador_20, Sampson_22, Savbucketdawg_20, Scioto_22, Shinji_20, SmokingBunny_20, Sunfish_33, TP1604_14, Tardus_23, Tiamoceli_22, TillyBobJoe_20, Togo_20, TurkishDelight_18, Twister6_22, Twonlo_19, Valary_23, VanDeWege_23, Verity_22, ViaConlectus_23, Wizard_20, Xkcd426_15, YDN12_15, YungMoney_22, Zipp_22, Zitch_24, phiAsp2_15,

Summary by start number:

Start 23:

- Found in 17 of 129 (13.2%) of genes in pham
- Manual Annotations of this start: 15 of 109
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ali17_20 (DE2), Belphegor_19 (DE), Chickadee_21 (DE3), Dexdert_22 (DE3), EMoore_17 (DE2), EdmundFerry_20 (DE3), GTE6_21 (DE3), Hans_24 (DE2), Inspectinfecti_23 (DE2), Kwekel_21 (DE3), Leonard_22 (DE2), MelBins_23 (DE2), Phauci_15 (DE2), Phinally_22 (DE2), RoadKill_19 (DE3), Tiamoceli_22 (DE3), Twonlo_19 (DE3),

Start 25:

- Found in 52 of 129 (40.3%) of genes in pham
- Manual Annotations of this start: 43 of 109
- Called 98.1% of time when present
- Phage (with cluster) where this start called: Affeca_21 (DE1), Ailee_21 (DE1), Angelicage_21 (DE1), Ashertheman_22 (DE1), Baddon_21 (DE1), Barsten_22 (DE1), Baumdotcom_21 (DE1), Bibwit_22 (DE1), Bizzy_22 (DE1), BobBob_19 (DE1), Brandonk123_23 (DE1), ChadMasterC_21 (DE1), Charming_19 (DE1), Derg_19 (DE1), Fitzgerald_19 (DE1), Flatwoods_22 (DE1), Fosterous_19 (DE1), Gaea_21 (DE1), Galadriel_23 (DE1), Geodirt_20 (DE1), Gustavo_21 (DE1), JKSyngboy_20 (DE1), Jabberwocky_19 (DE1), Kamashten_22 (DE1), Keitabear_23 (DE1), Kewpiedoll_22 (DE1), Kroos_22 (DE1), Kwobi_22 (DE1), Lennon_23 (DE1), LilHam_19 (DE1), Love_23 (DE1), McKinley_22 (DE1), MoontowerMania_20 (DE1), Nordenberg_16 (DE1), Paries_22 (DE1), Ribeye_22 (DE1), Rofo_21 (DE1), Sanjuju_19 (DE1), Saronaya_21 (DE1), SchottB_20 (DE1), Sedona_23 (DE1), Shivanishola_21 (DE1), Sitar_23 (DE1), StorminNorm_21 (DE1), Stultus_21 (DE1), Tangent_19 (DE1), Tangerine_21 (DE1), Thing3_22 (DE1), Tycho_21 (DE1), Vivi2_21 (DE1), YorkOnyx_22 (DE1),

Start 27:

- Found in 3 of 129 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 109
- Called 33.3% of time when present
- Phage (with cluster) where this start called: RiverRaider_22 (DE1),

Start 28:

- Found in 2 of 129 (1.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kithara_26 (singleton), Sunfish_33 (singleton),

Start 30:

- Found in 13 of 129 (10.1%) of genes in pham

- Manual Annotations of this start: 12 of 109
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abt2graduatex2_15 (BG), Asis_14 (BG), BabyGotBac_14 (BG), BayC_14 (BG), Lilbeanie_19 (DE5), Maih_14 (BG), Mischief19_16 (BG), RainyPolka_15 (BG), Salete_14 (BG), TP1604_14 (BG), TurkishDelight_18 (singleton), Xkcd426_15 (BG), YDN12_15 (BG),

Start 31:

- Found in 12 of 129 (9.3%) of genes in pham
- Manual Annotations of this start: 9 of 109
- Called 100.0% of time when present
- Phage (with cluster) where this start called: APunk_24 (DE4), Abblin_22 (DE4), Delrey21_22 (DE4), DoctorFroggo_22 (DE4), Natkenzie_22 (DE4), Sampson_22 (DE4), Scioto_22 (DE4), Tardus_23 (DE4), Verity_22 (DE4), ViaConlectus_23 (DE4), Zipp_22 (DE4), Zitch_24 (DE4),

Start 32:

- Found in 32 of 129 (24.8%) of genes in pham
- Manual Annotations of this start: 29 of 109
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arri_23 (DC1), Bakery_21 (DC1), Barb_22 (DC1), ClamChowder_22 (DC1), Clown_24 (DC2), CoveyB_23 (DC1), Danyall_22 (DC1), Evamon_20 (DC1), Fireball_21 (DC1), Fugax_22 (DC1), Gezellig_21 (DC1), Halo3_21 (DC1), Jambalaya_20 (DC1), KimmyK_22 (DC1), Mutzi_22 (DC1), Nubi_20 (DC1), Phlop_20 (DC1), PinkCoffee_22 (DC1), Portcullis_20 (DC1), PullumCavea_20 (DC1), RogerDodger_23 (DC1), Salvador_20 (DC1), Savbucketdawg_20 (DC1), Shinji_20 (DC1), SmokingBunny_20 (DC1), TillyBobJoe_20 (DC1), Togo_20 (DC1), Twister6_22 (DC1), Valary_23 (DC1), VanDeWege_23 (DC1), Wizard_20 (DC1), YungMoney_22 (DC1),

Start 34:

- Found in 12 of 129 (9.3%) of genes in pham
- No Manual Annotations of this start.
- Called 8.3% of time when present
- Phage (with cluster) where this start called: phiAsp2_15 (singleton),

Summary by clusters:

There are 10 clusters represented in this pham: singleton, BG, DE1, DE2, DE3, DE4, DE5, DE, DC2, DC1,

Info for manual annotations of cluster BG:

- Start number 30 was manually annotated 10 times for cluster BG.

Info for manual annotations of cluster DC1:

- Start number 32 was manually annotated 28 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 32 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:

- Start number 25 was manually annotated 43 times for cluster DE1.

- Start number 27 was manually annotated 1 time 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 23 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 31 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 30 was manually annotated 1 time for cluster DE5.

Gene Information:

Gene: APunk_24 Start: 18327, Stop: 19151, Start Num: 31

Candidate Starts for APunk_24:

(Start: 27 @18318 has 1 MA's), (Start: 31 @18327 has 9 MA's), (38, 18399), (49, 18465), (71, 18582), (78, 18639), (89, 18711), (92, 18732), (107, 18813), (110, 18834), (115, 18864), (120, 18885), (125, 18912), (133, 18993), (135, 18999), (137, 19020), (144, 19065), (147, 19077), (152, 19101),

Gene: Abblin_22 Start: 17540, Stop: 18364, Start Num: 31

Candidate Starts for Abblin_22:

(Start: 31 @17540 has 9 MA's), (38, 17612), (49, 17678), (62, 17753), (71, 17795), (78, 17852), (89, 17924), (92, 17945), (95, 17966), (107, 18026), (110, 18047), (113, 18068), (115, 18077), (120, 18098), (125, 18125), (130, 18182), (133, 18206), (135, 18212), (137, 18233), (147, 18290), (152, 18314),

Gene: Abt2graduatex2_15 Start: 16020, Stop: 16913, Start Num: 30

Candidate Starts for Abt2graduatex2_15:

(1, 15447), (2, 15624), (3, 15642), (4, 15654), (5, 15714), (6, 15720), (7, 15741), (8, 15759), (9, 15762), (10, 15813), (11, 15843), (12, 15855), (13, 15864), (14, 15873), (15, 15882), (16, 15891), (17, 15894), (18, 15918), (19, 15951), (22, 15993), (Start: 30 @16020 has 12 MA's), (34, 16035), (39, 16098), (43, 16122), (46, 16146), (48, 16155), (58, 16218), (59, 16227), (78, 16350), (81, 16365), (86, 16398), (88, 16419), (90, 16425), (100, 16485), (108, 16533), (109, 16539), (115, 16575), (129, 16692), (131, 16716), (133, 16734), (142, 16797), (147, 16818), (150, 16836),

Gene: Affeca_21 Start: 17356, Stop: 18186, Start Num: 25

Candidate Starts for Affeca_21:

(Start: 25 @17356 has 43 MA's), (29, 17365), (43, 17470), (59, 17560), (71, 17614), (73, 17638), (82, 17701), (89, 17749), (115, 17905), (125, 17953), (130, 18010), (133, 18034), (135, 18040), (145, 18109), (148, 18121), (151, 18139), (154, 18154),

Gene: Ailee_21 Start: 17270, Stop: 18100, Start Num: 25

Candidate Starts for Ailee_21:

(Start: 25 @17270 has 43 MA's), (29, 17279), (43, 17384), (52, 17432), (59, 17474), (65, 17498), (73, 17552), (82, 17615), (89, 17663), (93, 17690), (115, 17819), (125, 17867), (130, 17924), (133, 17948), (135, 17954), (145, 18023), (148, 18035), (151, 18053), (154, 18068),

Gene: Ali17_20 Start: 16677, Stop: 17507, Start Num: 23

Candidate Starts for Ali17_20:

(Start: 23 @16677 has 15 MA's), (24, 16683), (34, 16710), (35, 16716), (38, 16770), (71, 16941), (72, 16953), (82, 17028), (89, 17076), (107, 17178), (117, 17232), (123, 17262), (125, 17277), (130, 17334), (148, 17445),

Gene: Angelicage_21 Start: 17779, Stop: 18609, Start Num: 25

Candidate Starts for Angelicage_21:

(Start: 25 @17779 has 43 MA's), (29, 17788), (43, 17893), (59, 17983), (71, 18037), (73, 18061), (82, 18124), (89, 18172), (115, 18328), (125, 18376), (130, 18433), (133, 18457), (135, 18463), (145, 18532), (148, 18544), (151, 18562), (154, 18577),

Gene: Arri_23 Start: 14513, Stop: 15325, Start Num: 32

Candidate Starts for Arri_23:

(Start: 32 @14513 has 29 MA's), (40, 14594), (68, 14744), (89, 14891), (94, 14927), (114, 15041), (157, 15311),

Gene: Ashertheman_22 Start: 16864, Stop: 17691, Start Num: 25

Candidate Starts for Ashertheman_22:

(20, 16819), (21, 16825), (Start: 25 @16864 has 43 MA's), (29, 16873), (43, 16975), (59, 17065), (65, 17089), (82, 17206), (89, 17254), (97, 17305), (115, 17410), (119, 17428), (125, 17458), (127, 17479), (130, 17515), (135, 17545), (148, 17626), (151, 17644), (154, 17659),

Gene: Asis_14 Start: 15544, Stop: 16440, Start Num: 30

Candidate Starts for Asis_14:

(Start: 30 @15544 has 12 MA's), (39, 15622), (43, 15646), (46, 15670), (48, 15679), (58, 15742), (78, 15874), (81, 15889), (86, 15922), (88, 15943), (94, 15982), (96, 15991), (108, 16057), (109, 16063), (110, 16069), (115, 16099), (121, 16129), (125, 16153), (133, 16258), (139, 16291), (147, 16342), (150, 16360), (157, 16399), (159, 16426),

Gene: BabyGotBac_14 Start: 15544, Stop: 16440, Start Num: 30

Candidate Starts for BabyGotBac_14:

(Start: 30 @15544 has 12 MA's), (39, 15622), (43, 15646), (46, 15670), (48, 15679), (58, 15742), (78, 15874), (81, 15889), (86, 15922), (88, 15943), (94, 15982), (96, 15991), (108, 16057), (109, 16063), (110, 16069), (115, 16099), (121, 16129), (125, 16153), (133, 16258), (139, 16291), (147, 16342), (150, 16360), (157, 16399), (159, 16426),

Gene: Baddon_21 Start: 17711, Stop: 18538, Start Num: 25

Candidate Starts for Baddon_21:

(Start: 25 @17711 has 43 MA's), (29, 17720), (43, 17822), (59, 17912), (65, 17936), (82, 18053), (89, 18101), (97, 18152), (107, 18206), (115, 18257), (119, 18275), (125, 18305), (127, 18326), (130, 18362), (135, 18392), (148, 18473), (149, 18476), (151, 18491), (154, 18506),

Gene: Bakery_21 Start: 13726, Stop: 14538, Start Num: 32

Candidate Starts for Bakery_21:

(Start: 32 @13726 has 29 MA's), (40, 13807), (68, 13957), (85, 14077), (89, 14104), (114, 14254), (133, 14386), (157, 14524),

Gene: Barb_22 Start: 14500, Stop: 15312, Start Num: 32

Candidate Starts for Barb_22:

(Start: 32 @14500 has 29 MA's), (40, 14581), (68, 14731), (89, 14878), (94, 14914), (114, 15028), (157, 15298),

Gene: Barsten_22 Start: 17286, Stop: 18116, Start Num: 25

Candidate Starts for Barsten_22:

(Start: 25 @17286 has 43 MA's), (29, 17295), (43, 17400), (59, 17490), (65, 17514), (71, 17544), (73, 17568), (82, 17631), (89, 17679), (93, 17706), (115, 17835), (125, 17883), (130, 17940), (133, 17964), (135, 17970), (145, 18039), (148, 18051), (151, 18069), (154, 18084),

Gene: Baumdotcom_21 Start: 16480, Stop: 17307, Start Num: 25

Candidate Starts for Baumdotcom_21:

(Start: 25 @16480 has 43 MA's), (29, 16489), (43, 16591), (59, 16681), (82, 16822), (89, 16870), (97, 16921), (107, 16975), (115, 17026), (119, 17044), (125, 17074), (127, 17095), (130, 17131), (135, 17161), (148, 17242), (151, 17260), (154, 17275),

Gene: BayC_14 Start: 15544, Stop: 16440, Start Num: 30

Candidate Starts for BayC_14:

(Start: 30 @15544 has 12 MA's), (39, 15622), (43, 15646), (46, 15670), (48, 15679), (58, 15742), (78, 15874), (81, 15889), (86, 15922), (88, 15943), (94, 15982), (96, 15991), (108, 16057), (109, 16063), (110, 16069), (115, 16099), (121, 16129), (125, 16153), (133, 16258), (139, 16291), (147, 16342), (150, 16360), (157, 16399), (159, 16426),

Gene: Belphegor_19 Start: 15791, Stop: 16621, Start Num: 23

Candidate Starts for Belphegor_19:

(Start: 23 @15791 has 15 MA's), (24, 15797), (35, 15830), (38, 15884), (71, 16055), (72, 16067), (89, 16190), (110, 16313), (125, 16391), (130, 16448), (148, 16559),

Gene: Bibwit_22 Start: 17521, Stop: 18351, Start Num: 25

Candidate Starts for Bibwit_22:

(Start: 25 @17521 has 43 MA's), (29, 17530), (43, 17635), (59, 17725), (65, 17749), (71, 17779), (73, 17803), (82, 17866), (89, 17914), (93, 17941), (115, 18070), (125, 18118), (130, 18175), (133, 18199), (135, 18205), (145, 18274), (148, 18286), (151, 18304), (154, 18319),

Gene: Bizzy_22 Start: 16765, Stop: 17592, Start Num: 25

Candidate Starts for Bizzy_22:

(Start: 25 @16765 has 43 MA's), (29, 16774), (43, 16876), (59, 16966), (82, 17107), (89, 17155), (97, 17206), (107, 17260), (115, 17311), (119, 17329), (125, 17359), (127, 17380), (130, 17416), (135, 17446), (136, 17461), (148, 17527), (151, 17545), (154, 17560),

Gene: BobBob_19 Start: 16143, Stop: 16973, Start Num: 25

Candidate Starts for BobBob_19:

(Start: 25 @16143 has 43 MA's), (29, 16152), (43, 16257), (59, 16347), (71, 16401), (73, 16425), (82, 16488), (89, 16536), (93, 16563), (96, 16584), (98, 16593), (115, 16692), (125, 16740), (130, 16797), (133, 16821), (135, 16827), (145, 16896), (148, 16908), (151, 16926), (154, 16941),

Gene: Brandonk123_23 Start: 16835, Stop: 17665, Start Num: 25

Candidate Starts for Brandonk123_23:

(Start: 25 @16835 has 43 MA's), (29, 16844), (43, 16949), (59, 17039), (65, 17063), (73, 17117), (82, 17180), (89, 17228), (93, 17255), (98, 17285), (115, 17384), (125, 17432), (130, 17489), (135, 17519), (145, 17588), (148, 17600), (151, 17618), (154, 17633),

Gene: ChadMasterC_21 Start: 17242, Stop: 18072, Start Num: 25

Candidate Starts for ChadMasterC_21:

(Start: 25 @17242 has 43 MA's), (29, 17251), (43, 17356), (59, 17446), (71, 17500), (73, 17524), (82, 17587), (89, 17635), (93, 17662), (115, 17791), (125, 17839), (130, 17896), (133, 17920), (135, 17926), (145, 17995), (148, 18007), (151, 18025), (154, 18040),

Gene: Charming_19 Start: 16145, Stop: 16975, Start Num: 25

Candidate Starts for Charming_19:

(Start: 25 @16145 has 43 MA's), (29, 16154), (43, 16259), (59, 16349), (71, 16403), (73, 16427), (82, 16490), (89, 16538), (93, 16565), (96, 16586), (98, 16595), (115, 16694), (125, 16742), (130, 16799), (133, 16823), (135, 16829), (145, 16898), (148, 16910), (151, 16928), (154, 16943),

Gene: Chickadee_21 Start: 15725, Stop: 16555, Start Num: 23

Candidate Starts for Chickadee_21:

(Start: 23 @15725 has 15 MA's), (48, 15881), (50, 15893), (67, 15971), (79, 16055), (85, 16097), (89, 16124), (107, 16226), (115, 16277), (133, 16406), (135, 16412), (137, 16433), (148, 16493), (150, 16508),

Gene: ClamChowder_22 Start: 14500, Stop: 15312, Start Num: 32

Candidate Starts for ClamChowder_22:

(Start: 32 @14500 has 29 MA's), (40, 14581), (68, 14731), (89, 14878), (94, 14914), (114, 15028), (157, 15298),

Gene: Clown_24 Start: 16474, Stop: 17325, Start Num: 32

Candidate Starts for Clown_24:

(Start: 32 @16474 has 29 MA's), (36, 16492), (37, 16516), (40, 16549), (52, 16621), (64, 16684), (76, 16771), (83, 16813), (89, 16858), (110, 16984), (116, 17014), (122, 17044), (133, 17143), (140, 17170), (154, 17248), (157, 17266),

Gene: CoveyB_23 Start: 14345, Stop: 15157, Start Num: 32

Candidate Starts for CoveyB_23:

(Start: 32 @14345 has 29 MA's), (40, 14426), (68, 14576), (89, 14723), (94, 14759), (114, 14873), (157, 15143),

Gene: Danyall_22 Start: 14345, Stop: 15157, Start Num: 32

Candidate Starts for Danyall_22:

(Start: 32 @14345 has 29 MA's), (40, 14426), (68, 14576), (89, 14723), (94, 14759), (114, 14873), (157, 15143),

Gene: Delrey21_22 Start: 17000, Stop: 17824, Start Num: 31

Candidate Starts for Delrey21_22:

(Start: 31 @17000 has 9 MA's), (38, 17072), (71, 17255), (75, 17282), (78, 17312), (89, 17384), (92, 17405), (107, 17486), (115, 17537), (120, 17558), (125, 17585), (130, 17642), (133, 17666), (135, 17672), (136, 17687), (137, 17693), (152, 17774), (154, 17786),

Gene: Derg_19 Start: 16357, Stop: 17184, Start Num: 25

Candidate Starts for Derg_19:

(Start: 25 @16357 has 43 MA's), (29, 16366), (43, 16468), (59, 16558), (65, 16582), (82, 16699), (89, 16747), (97, 16798), (107, 16852), (115, 16903), (119, 16921), (125, 16951), (127, 16972), (130, 17008), (135, 17038), (136, 17053), (148, 17119), (151, 17137), (154, 17152), (157, 17170),

Gene: Dxdert_22 Start: 16169, Stop: 16999, Start Num: 23

Candidate Starts for Dxdert_22:

(Start: 23 @16169 has 15 MA's), (48, 16325), (50, 16337), (79, 16499), (85, 16541), (89, 16568), (107, 16670), (115, 16721), (133, 16850), (135, 16856), (137, 16877), (148, 16937), (150, 16952),

Gene: DoctorFroggo_22 Start: 17000, Stop: 17824, Start Num: 31

Candidate Starts for DoctorFroggo_22:

(Start: 31 @17000 has 9 MA's), (38, 17072), (71, 17255), (75, 17282), (78, 17312), (89, 17384), (92, 17405), (107, 17486), (115, 17537), (120, 17558), (125, 17585), (130, 17642), (133, 17666), (135, 17672), (136, 17687), (137, 17693), (152, 17774), (154, 17786),

Gene: EMoore_17 Start: 15039, Stop: 15869, Start Num: 23

Candidate Starts for EMoore_17:

(Start: 23 @15039 has 15 MA's), (24, 15045), (34, 15072), (35, 15078), (38, 15132), (71, 15303), (72, 15315), (82, 15390), (89, 15438), (97, 15486), (107, 15540), (117, 15594), (125, 15639), (130, 15696), (148, 15807),

Gene: EdmundFerry_20 Start: 15753, Stop: 16583, Start Num: 23

Candidate Starts for EdmundFerry_20:

(Start: 23 @15753 has 15 MA's), (48, 15909), (50, 15921), (67, 15999), (79, 16083), (85, 16125), (89, 16152), (107, 16254), (110, 16275), (115, 16305), (133, 16434), (135, 16440), (137, 16461), (148, 16521),

Gene: Evamon_20 Start: 13832, Stop: 14644, Start Num: 32

Candidate Starts for Evamon_20:

(Start: 32 @13832 has 29 MA's), (40, 13913), (68, 14063), (89, 14210), (94, 14246), (114, 14360), (157, 14630),

Gene: Fireball_21 Start: 13964, Stop: 14776, Start Num: 32

Candidate Starts for Fireball_21:

(Start: 32 @13964 has 29 MA's), (40, 14045), (68, 14195), (89, 14342), (94, 14378), (114, 14492), (157, 14762),

Gene: Fitzgerald_19 Start: 16571, Stop: 17401, Start Num: 25

Candidate Starts for Fitzgerald_19:

(Start: 25 @16571 has 43 MA's), (29, 16580), (43, 16685), (59, 16775), (71, 16829), (73, 16853), (82, 16916), (89, 16964), (115, 17120), (125, 17168), (130, 17225), (133, 17249), (135, 17255), (145, 17324), (148, 17336), (151, 17354), (154, 17369),

Gene: Flatwoods_22 Start: 16784, Stop: 17611, Start Num: 25

Candidate Starts for Flatwoods_22:

(Start: 25 @16784 has 43 MA's), (29, 16793), (43, 16895), (59, 16985), (65, 17009), (82, 17126), (89, 17174), (97, 17225), (107, 17279), (115, 17330), (119, 17348), (125, 17378), (127, 17399), (130, 17435), (135, 17465), (136, 17480), (148, 17546), (151, 17564), (154, 17579), (157, 17597),

Gene: Fosterous_19 Start: 17034, Stop: 17864, Start Num: 25

Candidate Starts for Fosterous_19:

(Start: 25 @17034 has 43 MA's), (29, 17043), (43, 17148), (52, 17196), (59, 17238), (65, 17262), (71, 17292), (73, 17316), (82, 17379), (89, 17427), (115, 17583), (125, 17631), (130, 17688), (133, 17712), (135, 17718), (145, 17787), (148, 17799), (151, 17817), (154, 17832),

Gene: Fugax_22 Start: 14500, Stop: 15312, Start Num: 32

Candidate Starts for Fugax_22:

(Start: 32 @14500 has 29 MA's), (40, 14581), (68, 14731), (89, 14878), (94, 14914), (114, 15028), (157, 15298),

Gene: GTE6_21 Start: 16242, Stop: 17072, Start Num: 23

Candidate Starts for GTE6_21:

(Start: 23 @16242 has 15 MA's), (48, 16398), (50, 16410), (67, 16488), (79, 16572), (85, 16614), (89, 16641), (107, 16743), (115, 16794), (133, 16923), (135, 16929), (137, 16950), (148, 17010), (150,

17025), (154, 17043),

Gene: Gaea_21 Start: 16472, Stop: 17299, Start Num: 25

Candidate Starts for Gaea_21:

(Start: 25 @16472 has 43 MA's), (29, 16481), (43, 16583), (59, 16673), (82, 16814), (89, 16862), (97, 16913), (107, 16967), (115, 17018), (119, 17036), (125, 17066), (127, 17087), (130, 17123), (135, 17153), (148, 17234), (151, 17252), (154, 17267),

Gene: Galadriel_23 Start: 16884, Stop: 17714, Start Num: 25

Candidate Starts for Galadriel_23:

(Start: 25 @16884 has 43 MA's), (29, 16893), (43, 16998), (59, 17088), (71, 17142), (73, 17166), (82, 17229), (89, 17277), (93, 17304), (98, 17334), (115, 17433), (125, 17481), (130, 17538), (133, 17562), (135, 17568), (145, 17637), (148, 17649), (151, 17667), (154, 17682),

Gene: Geodirt_20 Start: 17101, Stop: 17931, Start Num: 25

Candidate Starts for Geodirt_20:

(Start: 25 @17101 has 43 MA's), (29, 17110), (43, 17215), (59, 17305), (65, 17329), (71, 17359), (73, 17383), (82, 17446), (89, 17494), (93, 17521), (115, 17650), (125, 17698), (130, 17755), (135, 17785), (145, 17854), (148, 17866), (151, 17884), (154, 17899),

Gene: Gezellig_21 Start: 13964, Stop: 14776, Start Num: 32

Candidate Starts for Gezellig_21:

(Start: 32 @13964 has 29 MA's), (40, 14045), (68, 14195), (89, 14342), (94, 14378), (114, 14492), (157, 14762),

Gene: Gustavo_21 Start: 16571, Stop: 17398, Start Num: 25

Candidate Starts for Gustavo_21:

(Start: 25 @16571 has 43 MA's), (29, 16580), (43, 16682), (59, 16772), (82, 16913), (89, 16961), (97, 17012), (107, 17066), (115, 17117), (119, 17135), (125, 17165), (127, 17186), (130, 17222), (135, 17252), (148, 17333), (151, 17351), (154, 17366),

Gene: Halo3_21 Start: 14285, Stop: 15097, Start Num: 32

Candidate Starts for Halo3_21:

(Start: 32 @14285 has 29 MA's), (40, 14366), (68, 14516), (85, 14636), (89, 14663), (114, 14813), (133, 14945), (157, 15083),

Gene: Hans_24 Start: 17335, Stop: 18165, Start Num: 23

Candidate Starts for Hans_24:

(Start: 23 @17335 has 15 MA's), (24, 17341), (34, 17368), (35, 17374), (38, 17428), (71, 17599), (72, 17611), (82, 17686), (89, 17734), (107, 17836), (117, 17890), (125, 17935), (130, 17992), (148, 18103),

Gene: Inspectinfecti_23 Start: 17760, Stop: 18590, Start Num: 23

Candidate Starts for Inspectinfecti_23:

(Start: 23 @17760 has 15 MA's), (24, 17766), (34, 17793), (35, 17799), (38, 17853), (71, 18024), (72, 18036), (82, 18111), (89, 18159), (107, 18261), (117, 18315), (125, 18360), (130, 18417), (148, 18528),

Gene: JKSyngboy_20 Start: 17230, Stop: 18057, Start Num: 25

Candidate Starts for JKSyngboy_20:

(Start: 25 @17230 has 43 MA's), (29, 17239), (43, 17341), (65, 17455), (82, 17572), (89, 17620), (97, 17671), (107, 17725), (115, 17776), (119, 17794), (125, 17824), (127, 17845), (130, 17881), (135, 17911), (148, 17992), (151, 18010), (154, 18025),

Gene: Jabberwocky_19 Start: 17005, Stop: 17835, Start Num: 25

Candidate Starts for Jabberwocky_19:

(Start: 25 @17005 has 43 MA's), (29, 17014), (43, 17119), (59, 17209), (71, 17263), (73, 17287), (82, 17350), (89, 17398), (93, 17425), (115, 17554), (125, 17602), (130, 17659), (133, 17683), (135, 17689), (145, 17758), (148, 17770), (151, 17788), (154, 17803),

Gene: Jambalaya_20 Start: 13611, Stop: 14423, Start Num: 32

Candidate Starts for Jambalaya_20:

(Start: 32 @13611 has 29 MA's), (40, 13692), (68, 13842), (89, 13989), (94, 14025), (114, 14139), (157, 14409),

Gene: Kamashten_22 Start: 17689, Stop: 18519, Start Num: 25

Candidate Starts for Kamashten_22:

(Start: 25 @17689 has 43 MA's), (29, 17698), (43, 17803), (59, 17893), (71, 17947), (73, 17971), (82, 18034), (89, 18082), (93, 18109), (115, 18238), (125, 18286), (130, 18343), (133, 18367), (135, 18373), (145, 18442), (148, 18454), (151, 18472), (154, 18487),

Gene: Keitabear_23 Start: 19226, Stop: 20056, Start Num: 25

Candidate Starts for Keitabear_23:

(Start: 25 @19226 has 43 MA's), (29, 19235), (43, 19340), (52, 19388), (59, 19430), (65, 19454), (73, 19508), (82, 19571), (89, 19619), (93, 19646), (115, 19775), (125, 19823), (130, 19880), (133, 19904), (135, 19910), (145, 19979), (148, 19991), (151, 20009), (154, 20024),

Gene: Kewpiedoll_22 Start: 17077, Stop: 17907, Start Num: 25

Candidate Starts for Kewpiedoll_22:

(Start: 25 @17077 has 43 MA's), (29, 17086), (43, 17191), (59, 17281), (65, 17305), (71, 17335), (73, 17359), (82, 17422), (89, 17470), (93, 17497), (115, 17626), (125, 17674), (130, 17731), (135, 17761), (145, 17830), (148, 17842), (151, 17860), (154, 17875),

Gene: KimmyK_22 Start: 14500, Stop: 15312, Start Num: 32

Candidate Starts for KimmyK_22:

(Start: 32 @14500 has 29 MA's), (40, 14581), (68, 14731), (89, 14878), (94, 14914), (114, 15028), (157, 15298),

Gene: Kithara_26 Start: 16496, Stop: 17302, Start Num: 28

Candidate Starts for Kithara_26:

(28, 16496), (40, 16589), (56, 16664), (60, 16691), (66, 16724), (70, 16739), (91, 16892), (102, 16943), (105, 16955), (115, 17024), (145, 17219), (147, 17228), (157, 17285),

Gene: Kroos_22 Start: 17329, Stop: 18156, Start Num: 25

Candidate Starts for Kroos_22:

(Start: 25 @17329 has 43 MA's), (29, 17338), (43, 17440), (47, 17467), (59, 17530), (65, 17554), (82, 17671), (89, 17719), (97, 17770), (107, 17824), (115, 17875), (119, 17893), (125, 17923), (127, 17944), (130, 17980), (135, 18010), (148, 18091), (151, 18109), (154, 18124),

Gene: Kwekel_21 Start: 15688, Stop: 16518, Start Num: 23

Candidate Starts for Kwekel_21:

(Start: 23 @15688 has 15 MA's), (38, 15778), (50, 15856), (79, 16018), (85, 16060), (89, 16087), (103, 16162), (107, 16189), (115, 16240), (133, 16369), (135, 16375), (137, 16396), (148, 16456), (150, 16471),

Gene: Kwobi_22 Start: 17311, Stop: 18138, Start Num: 25

Candidate Starts for Kwobi_22:

(Start: 25 @17311 has 43 MA's), (29, 17320), (43, 17422), (59, 17512), (82, 17653), (89, 17701), (97, 17752), (107, 17806), (115, 17857), (119, 17875), (125, 17905), (127, 17926), (130, 17962), (135, 17992), (148, 18073), (151, 18091), (154, 18106),

Gene: Lennon_23 Start: 18329, Stop: 19159, Start Num: 25

Candidate Starts for Lennon_23:

(Start: 25 @18329 has 43 MA's), (29, 18338), (43, 18443), (59, 18533), (65, 18557), (71, 18587), (73, 18611), (82, 18674), (89, 18722), (93, 18749), (115, 18878), (125, 18926), (130, 18983), (133, 19007), (135, 19013), (145, 19082), (148, 19094), (151, 19112), (154, 19127),

Gene: Leonard_22 Start: 17355, Stop: 18185, Start Num: 23

Candidate Starts for Leonard_22:

(Start: 23 @17355 has 15 MA's), (24, 17361), (34, 17388), (35, 17394), (38, 17448), (71, 17619), (72, 17631), (82, 17706), (89, 17754), (107, 17856), (117, 17910), (123, 17940), (125, 17955), (130, 18012), (148, 18123),

Gene: LilHam_19 Start: 15890, Stop: 16717, Start Num: 25

Candidate Starts for LilHam_19:

(Start: 25 @15890 has 43 MA's), (29, 15899), (43, 16001), (65, 16115), (82, 16232), (89, 16280), (97, 16331), (107, 16385), (115, 16436), (119, 16454), (125, 16484), (127, 16505), (130, 16541), (135, 16571), (148, 16652), (151, 16670), (154, 16685),

Gene: Lilbeanie_19 Start: 12678, Stop: 13550, Start Num: 30

Candidate Starts for Lilbeanie_19:

(Start: 30 @12678 has 12 MA's), (71, 12936), (75, 12969), (81, 13014), (89, 13089), (98, 13146), (104, 13173), (107, 13194), (110, 13215), (111, 13224), (114, 13242), (115, 13245), (119, 13263), (120, 13266), (125, 13293), (135, 13386), (145, 13455), (151, 13485), (157, 13518),

Gene: Love_23 Start: 17204, Stop: 18034, Start Num: 25

Candidate Starts for Love_23:

(Start: 25 @17204 has 43 MA's), (29, 17213), (43, 17318), (59, 17408), (71, 17462), (73, 17486), (82, 17549), (89, 17597), (93, 17624), (98, 17654), (115, 17753), (125, 17801), (130, 17858), (133, 17882), (135, 17888), (145, 17957), (148, 17969), (151, 17987), (154, 18002),

Gene: Maih_14 Start: 15543, Stop: 16439, Start Num: 30

Candidate Starts for Maih_14:

(Start: 30 @15543 has 12 MA's), (39, 15621), (43, 15645), (46, 15669), (48, 15678), (58, 15741), (78, 15873), (81, 15888), (86, 15921), (88, 15942), (94, 15981), (96, 15990), (108, 16056), (109, 16062), (110, 16068), (115, 16098), (121, 16128), (125, 16152), (133, 16257), (139, 16290), (147, 16341), (150, 16359), (157, 16398), (159, 16425),

Gene: McKinley_22 Start: 17230, Stop: 18060, Start Num: 25

Candidate Starts for McKinley_22:

(Start: 25 @17230 has 43 MA's), (29, 17239), (43, 17344), (59, 17434), (71, 17488), (73, 17512), (82, 17575), (89, 17623), (93, 17650), (98, 17680), (115, 17779), (125, 17827), (130, 17884), (133, 17908), (135, 17914), (145, 17983), (148, 17995), (151, 18013), (154, 18028),

Gene: MelBins_23 Start: 17556, Stop: 18386, Start Num: 23

Candidate Starts for MelBins_23:

(Start: 23 @17556 has 15 MA's), (24, 17562), (34, 17589), (35, 17595), (38, 17649), (71, 17820), (72, 17832), (89, 17955), (107, 18057), (117, 18111), (123, 18141), (125, 18156), (130, 18213), (148, 18324),

Gene: Mischief19_16 Start: 18095, Stop: 18940, Start Num: 30

Candidate Starts for Mischief19_16:

(26, 18086), (Start: 30 @18095 has 12 MA's), (35, 18116), (36, 18122), (63, 18308), (72, 18362), (78, 18413), (81, 18428), (99, 18542), (101, 18551), (112, 18623), (125, 18689), (133, 18776), (135, 18782), (138, 18806), (150, 18878), (153, 18887), (154, 18899), (156, 18911),

Gene: MoontowerMania_20 Start: 16210, Stop: 17040, Start Num: 25

Candidate Starts for MoontowerMania_20:

(Start: 25 @16210 has 43 MA's), (29, 16219), (43, 16324), (59, 16414), (71, 16468), (73, 16492), (82, 16555), (89, 16603), (93, 16630), (98, 16660), (115, 16759), (125, 16807), (130, 16864), (133, 16888), (135, 16894), (145, 16963), (148, 16975), (151, 16993), (154, 17008),

Gene: Mutzi_22 Start: 14224, Stop: 15036, Start Num: 32

Candidate Starts for Mutzi_22:

(Start: 32 @14224 has 29 MA's), (40, 14305), (68, 14455), (89, 14602), (94, 14638), (114, 14752), (157, 15022),

Gene: Natkenzie_22 Start: 17540, Stop: 18364, Start Num: 31

Candidate Starts for Natkenzie_22:

(Start: 31 @17540 has 9 MA's), (38, 17612), (49, 17678), (62, 17753), (71, 17795), (78, 17852), (89, 17924), (92, 17945), (95, 17966), (107, 18026), (110, 18047), (113, 18068), (115, 18077), (120, 18098), (125, 18125), (130, 18182), (133, 18206), (135, 18212), (137, 18233), (147, 18290), (152, 18314),

Gene: Nordenberg_16 Start: 15524, Stop: 16354, Start Num: 25

Candidate Starts for Nordenberg_16:

(Start: 25 @15524 has 43 MA's), (29, 15533), (43, 15638), (59, 15728), (71, 15782), (73, 15806), (82, 15869), (89, 15917), (93, 15944), (98, 15974), (115, 16073), (125, 16121), (130, 16178), (133, 16202), (135, 16208), (145, 16277), (148, 16289), (151, 16307), (154, 16322),

Gene: Nubi_20 Start: 13852, Stop: 14664, Start Num: 32

Candidate Starts for Nubi_20:

(Start: 32 @13852 has 29 MA's), (40, 13933), (68, 14083), (89, 14230), (94, 14266), (114, 14380), (157, 14650),

Gene: Paries_22 Start: 16892, Stop: 17722, Start Num: 25

Candidate Starts for Paries_22:

(Start: 25 @16892 has 43 MA's), (29, 16901), (43, 17006), (59, 17096), (65, 17120), (73, 17174), (82, 17237), (89, 17285), (93, 17312), (98, 17342), (115, 17441), (125, 17489), (130, 17546), (135, 17576), (145, 17645), (148, 17657), (151, 17675), (154, 17690),

Gene: Phauci_15 Start: 13922, Stop: 14752, Start Num: 23

Candidate Starts for Phauci_15:

(Start: 23 @13922 has 15 MA's), (24, 13928), (34, 13955), (35, 13961), (38, 14015), (71, 14186), (72, 14198), (82, 14273), (89, 14321), (107, 14423), (117, 14477), (125, 14522), (130, 14579), (148, 14690),

Gene: Phinally_22 Start: 17352, Stop: 18182, Start Num: 23

Candidate Starts for Phinally_22:

(Start: 23 @17352 has 15 MA's), (24, 17358), (34, 17385), (35, 17391), (38, 17445), (71, 17616), (72, 17628), (82, 17703), (89, 17751), (107, 17853), (117, 17907), (123, 17937), (125, 17952), (130, 18009), (148, 18120),

Gene: Phlop_20 Start: 13916, Stop: 14728, Start Num: 32

Candidate Starts for Phlop_20:

(Start: 32 @13916 has 29 MA's), (40, 13997), (68, 14147), (89, 14294), (94, 14330), (114, 14444), (157, 14714),

Gene: PinkCoffee_22 Start: 14509, Stop: 15321, Start Num: 32

Candidate Starts for PinkCoffee_22:

(Start: 32 @14509 has 29 MA's), (40, 14590), (68, 14740), (89, 14887), (94, 14923), (114, 15037), (157, 15307),

Gene: Portcullis_20 Start: 13859, Stop: 14671, Start Num: 32

Candidate Starts for Portcullis_20:

(Start: 32 @13859 has 29 MA's), (40, 13940), (68, 14090), (89, 14237), (94, 14273), (114, 14387), (157, 14657),

Gene: PullumCavea_20 Start: 13916, Stop: 14728, Start Num: 32

Candidate Starts for PullumCavea_20:

(Start: 32 @13916 has 29 MA's), (40, 13997), (68, 14147), (89, 14294), (94, 14330), (114, 14444), (157, 14714),

Gene: RainyPolka_15 Start: 15874, Stop: 16773, Start Num: 30

Candidate Starts for RainyPolka_15:

(22, 15847), (Start: 30 @15874 has 12 MA's), (39, 15952), (43, 15976), (46, 16000), (48, 16009), (58, 16072), (61, 16090), (78, 16204), (81, 16219), (86, 16252), (88, 16273), (94, 16312), (96, 16321), (108, 16387), (109, 16393), (115, 16429), (124, 16480), (125, 16483), (128, 16510), (133, 16588), (142, 16651), (150, 16690), (154, 16711), (157, 16729), (160, 16762),

Gene: Ribeye_22 Start: 17792, Stop: 18619, Start Num: 25

Candidate Starts for Ribeye_22:

(Start: 25 @17792 has 43 MA's), (29, 17801), (43, 17903), (59, 17993), (82, 18134), (89, 18182), (97, 18233), (107, 18287), (115, 18338), (119, 18356), (125, 18386), (127, 18407), (130, 18443), (135, 18473), (148, 18554), (151, 18572), (154, 18587), (157, 18605),

Gene: RiverRaider_22 Start: 16175, Stop: 17002, Start Num: 27

Candidate Starts for RiverRaider_22:

(Start: 25 @16172 has 43 MA's), (Start: 27 @16175 has 1 MA's), (29, 16181), (43, 16286), (82, 16517), (89, 16565), (97, 16616), (115, 16721), (119, 16739), (120, 16742), (125, 16769), (130, 16826), (133, 16850), (134, 16853), (135, 16856), (142, 16913), (148, 16937), (151, 16955),

Gene: RoadKill_19 Start: 15230, Stop: 16060, Start Num: 23

Candidate Starts for RoadKill_19:

(Start: 23 @15230 has 15 MA's), (48, 15386), (50, 15398), (67, 15476), (79, 15560), (85, 15602), (89, 15629), (107, 15731), (110, 15752), (115, 15782), (133, 15911), (135, 15917), (137, 15938), (148, 15998),

Gene: Rofo_21 Start: 17144, Stop: 17974, Start Num: 25

Candidate Starts for Rofo_21:

(Start: 25 @17144 has 43 MA's), (29, 17153), (43, 17258), (59, 17348), (71, 17402), (73, 17426), (82, 17489), (89, 17537), (93, 17564), (98, 17594), (115, 17693), (125, 17741), (130, 17798), (133, 17822), (135, 17828), (145, 17897), (148, 17909), (151, 17927), (154, 17942),

Gene: RogerDodger_23 Start: 14709, Stop: 15521, Start Num: 32

Candidate Starts for RogerDodger_23:

(Start: 32 @14709 has 29 MA's), (40, 14790), (68, 14940), (89, 15087), (94, 15123), (114, 15237), (157, 15507),

Gene: Salete_14 Start: 15544, Stop: 16440, Start Num: 30

Candidate Starts for Salete_14:

(Start: 30 @15544 has 12 MA's), (39, 15622), (43, 15646), (46, 15670), (48, 15679), (58, 15742), (78, 15874), (81, 15889), (86, 15922), (88, 15943), (94, 15982), (96, 15991), (108, 16057), (109, 16063), (110, 16069), (115, 16099), (121, 16129), (125, 16153), (133, 16258), (139, 16291), (147, 16342), (150, 16360), (157, 16399), (159, 16426),

Gene: Salvador_20 Start: 13830, Stop: 14642, Start Num: 32

Candidate Starts for Salvador_20:

(Start: 32 @13830 has 29 MA's), (40, 13911), (68, 14061), (89, 14208), (94, 14244), (114, 14358), (157, 14628),

Gene: Sampson_22 Start: 17485, Stop: 18309, Start Num: 31

Candidate Starts for Sampson_22:

(Start: 31 @17485 has 9 MA's), (38, 17557), (49, 17623), (62, 17698), (71, 17740), (78, 17797), (89, 17869), (92, 17890), (95, 17911), (107, 17971), (110, 17992), (113, 18013), (115, 18022), (120, 18043), (125, 18070), (130, 18127), (133, 18151), (135, 18157), (137, 18178), (147, 18235), (152, 18259),

Gene: Sanjuju_19 Start: 16656, Stop: 17486, Start Num: 25

Candidate Starts for Sanjuju_19:

(Start: 25 @16656 has 43 MA's), (29, 16665), (43, 16770), (59, 16860), (71, 16914), (73, 16938), (82, 17001), (89, 17049), (93, 17076), (115, 17205), (125, 17253), (130, 17310), (133, 17334), (135, 17340), (145, 17409), (148, 17421), (151, 17439), (154, 17454),

Gene: Saronaya_21 Start: 16571, Stop: 17398, Start Num: 25

Candidate Starts for Saronaya_21:

(Start: 25 @16571 has 43 MA's), (29, 16580), (43, 16682), (59, 16772), (82, 16913), (89, 16961), (97, 17012), (107, 17066), (115, 17117), (119, 17135), (125, 17165), (127, 17186), (130, 17222), (135, 17252), (148, 17333), (151, 17351), (154, 17366),

Gene: Savbucketdawg_20 Start: 13611, Stop: 14423, Start Num: 32

Candidate Starts for Savbucketdawg_20:

(Start: 32 @13611 has 29 MA's), (40, 13692), (68, 13842), (89, 13989), (94, 14025), (114, 14139), (157, 14409),

Gene: SchottB_20 Start: 17572, Stop: 18399, Start Num: 25

Candidate Starts for SchottB_20:

(Start: 25 @17572 has 43 MA's), (29, 17581), (43, 17683), (65, 17797), (82, 17914), (89, 17962), (97, 18013), (107, 18067), (115, 18118), (119, 18136), (125, 18166), (127, 18187), (130, 18223), (135, 18253), (148, 18334), (151, 18352), (154, 18367),

Gene: Scioto_22 Start: 17540, Stop: 18364, Start Num: 31

Candidate Starts for Scioto_22:

(Start: 31 @17540 has 9 MA's), (38, 17612), (49, 17678), (62, 17753), (71, 17795), (78, 17852), (89, 17924), (92, 17945), (95, 17966), (107, 18026), (110, 18047), (113, 18068), (115, 18077), (120, 18098), (125, 18125), (130, 18182), (133, 18206), (135, 18212), (137, 18233), (147, 18290), (152, 18314),

Gene: Sedona_23 Start: 18961, Stop: 19791, Start Num: 25

Candidate Starts for Sedona_23:

(Start: 25 @18961 has 43 MA's), (29, 18970), (43, 19075), (59, 19165), (65, 19189), (71, 19219), (73, 19243), (82, 19306), (89, 19354), (93, 19381), (115, 19510), (125, 19558), (130, 19615), (133, 19639), (135, 19645), (145, 19714), (148, 19726), (151, 19744), (154, 19759),

Gene: Shinji_20 Start: 13800, Stop: 14612, Start Num: 32

Candidate Starts for Shinji_20:

(Start: 32 @13800 has 29 MA's), (40, 13881), (68, 14031), (89, 14178), (94, 14214), (114, 14328), (157, 14598),

Gene: Shivanishola_21 Start: 16950, Stop: 17780, Start Num: 25

Candidate Starts for Shivanishola_21:

(Start: 25 @16950 has 43 MA's), (29, 16959), (43, 17064), (59, 17154), (71, 17208), (73, 17232), (82, 17295), (89, 17343), (93, 17370), (96, 17391), (98, 17400), (115, 17499), (125, 17547), (130, 17604), (133, 17628), (135, 17634), (145, 17703), (148, 17715), (151, 17733), (154, 17748),

Gene: Sitar_23 Start: 18329, Stop: 19159, Start Num: 25

Candidate Starts for Sitar_23:

(Start: 25 @18329 has 43 MA's), (29, 18338), (43, 18443), (59, 18533), (65, 18557), (71, 18587), (73, 18611), (82, 18674), (89, 18722), (93, 18749), (115, 18878), (125, 18926), (130, 18983), (133, 19007), (135, 19013), (145, 19082), (148, 19094), (151, 19112), (154, 19127),

Gene: SmokingBunny_20 Start: 13830, Stop: 14642, Start Num: 32

Candidate Starts for SmokingBunny_20:

(Start: 32 @13830 has 29 MA's), (40, 13911), (68, 14061), (89, 14208), (94, 14244), (114, 14358), (157, 14628),

Gene: StorminNorm_21 Start: 16451, Stop: 17278, Start Num: 25

Candidate Starts for StorminNorm_21:

(Start: 25 @16451 has 43 MA's), (29, 16460), (43, 16562), (47, 16589), (59, 16652), (65, 16676), (82, 16793), (89, 16841), (97, 16892), (107, 16946), (115, 16997), (119, 17015), (125, 17045), (127, 17066), (130, 17102), (135, 17132), (148, 17213), (151, 17231), (154, 17246),

Gene: Stultus_21 Start: 16940, Stop: 17770, Start Num: 25

Candidate Starts for Stultus_21:

(Start: 25 @16940 has 43 MA's), (29, 16949), (43, 17054), (59, 17144), (65, 17168), (71, 17198), (73, 17222), (82, 17285), (89, 17333), (93, 17360), (115, 17489), (125, 17537), (130, 17594), (133, 17618), (135, 17624), (145, 17693), (148, 17705), (151, 17723), (154, 17738),

Gene: Sunfish_33 Start: 16941, Stop: 17747, Start Num: 28

Candidate Starts for Sunfish_33:

(28, 16941), (48, 17088), (53, 17106), (71, 17199), (77, 17250), (84, 17304), (87, 17322), (98, 17376), (115, 17475),

Gene: TP1604_14 Start: 15544, Stop: 16440, Start Num: 30

Candidate Starts for TP1604_14:

(Start: 30 @15544 has 12 MA's), (39, 15622), (43, 15646), (46, 15670), (48, 15679), (58, 15742), (78, 15874), (81, 15889), (86, 15922), (88, 15943), (94, 15982), (96, 15991), (108, 16057), (109, 16063), (110, 16069), (115, 16099), (121, 16129), (125, 16153), (133, 16258), (139, 16291), (147, 16342), (150, 16360), (157, 16399), (159, 16426),

Gene: Tangent_19 Start: 16145, Stop: 16975, Start Num: 25

Candidate Starts for Tangent_19:

(Start: 25 @16145 has 43 MA's), (29, 16154), (43, 16259), (59, 16349), (71, 16403), (73, 16427), (82, 16490), (89, 16538), (93, 16565), (96, 16586), (98, 16595), (115, 16694), (125, 16742), (130, 16799), (133, 16823), (135, 16829), (145, 16898), (148, 16910), (151, 16928), (154, 16943),

Gene: Tangerine_21 Start: 16457, Stop: 17284, Start Num: 25

Candidate Starts for Tangerine_21:

(Start: 25 @16457 has 43 MA's), (29, 16466), (43, 16568), (47, 16595), (59, 16658), (65, 16682), (82, 16799), (89, 16847), (97, 16898), (107, 16952), (115, 17003), (119, 17021), (125, 17051), (127, 17072), (130, 17108), (135, 17138), (148, 17219), (151, 17237), (154, 17252),

Gene: Tardus_23 Start: 16820, Stop: 17644, Start Num: 31

Candidate Starts for Tardus_23:

(Start: 31 @16820 has 9 MA's), (38, 16892), (71, 17075), (78, 17132), (89, 17204), (92, 17225), (107, 17306), (110, 17327), (115, 17357), (120, 17378), (125, 17405), (130, 17462), (133, 17486), (135, 17492), (137, 17513), (147, 17570), (152, 17594),

Gene: Thing3_22 Start: 17689, Stop: 18519, Start Num: 25

Candidate Starts for Thing3_22:

(Start: 25 @17689 has 43 MA's), (29, 17698), (43, 17803), (59, 17893), (71, 17947), (73, 17971), (82, 18034), (89, 18082), (93, 18109), (115, 18238), (125, 18286), (130, 18343), (133, 18367), (135, 18373), (145, 18442), (148, 18454), (151, 18472), (154, 18487),

Gene: Tiamoceli_22 Start: 16582, Stop: 17412, Start Num: 23

Candidate Starts for Tiamoceli_22:

(Start: 23 @16582 has 15 MA's), (48, 16738), (50, 16750), (67, 16828), (79, 16912), (85, 16954), (89, 16981), (107, 17083), (115, 17134), (133, 17263), (135, 17269), (137, 17290), (148, 17350), (150, 17365),

Gene: TillyBobJoe_20 Start: 13614, Stop: 14426, Start Num: 32

Candidate Starts for TillyBobJoe_20:

(Start: 32 @13614 has 29 MA's), (40, 13695), (68, 13845), (89, 13992), (94, 14028), (114, 14142), (157, 14412),

Gene: Togo_20 Start: 13830, Stop: 14642, Start Num: 32

Candidate Starts for Togo_20:

(Start: 32 @13830 has 29 MA's), (40, 13911), (68, 14061), (89, 14208), (94, 14244), (114, 14358), (157, 14628),

Gene: TurkishDelight_18 Start: 14791, Stop: 15639, Start Num: 30

Candidate Starts for TurkishDelight_18:

(Start: 30 @14791 has 12 MA's), (34, 14803), (41, 14881), (42, 14887), (44, 14908), (45, 14914), (47, 14923), (51, 14944), (77, 15112), (80, 15133), (89, 15196), (90, 15199), (106, 15286), (127, 15421), (141, 15538), (147, 15568), (150, 15586), (155, 15607), (157, 15622), (158, 15625),

Gene: Twister6_22 Start: 14256, Stop: 15068, Start Num: 32

Candidate Starts for Twister6_22:

(Start: 32 @14256 has 29 MA's), (40, 14337), (68, 14487), (89, 14634), (94, 14670), (114, 14784), (157, 15054),

Gene: Twonlo_19 Start: 15199, Stop: 16029, Start Num: 23

Candidate Starts for Twonlo_19:

(Start: 23 @15199 has 15 MA's), (48, 15355), (50, 15367), (67, 15445), (74, 15490), (79, 15529), (85, 15571), (89, 15598), (107, 15700), (115, 15751), (133, 15880), (135, 15886), (137, 15907), (148, 15967), (150, 15982),

Gene: Tycho_21 Start: 16586, Stop: 17413, Start Num: 25

Candidate Starts for Tycho_21:

(Start: 25 @16586 has 43 MA's), (29, 16595), (43, 16697), (59, 16787), (82, 16928), (89, 16976), (97, 17027), (107, 17081), (115, 17132), (119, 17150), (125, 17180), (127, 17201), (130, 17237), (135, 17267), (148, 17348), (151, 17366), (154, 17381),

Gene: Valary_23 Start: 14709, Stop: 15521, Start Num: 32

Candidate Starts for Valary_23:

(Start: 32 @14709 has 29 MA's), (40, 14790), (68, 14940), (89, 15087), (94, 15123), (114, 15237), (157, 15507),

Gene: VanDeWege_23 Start: 14637, Stop: 15449, Start Num: 32

Candidate Starts for VanDeWege_23:

(Start: 32 @14637 has 29 MA's), (40, 14718), (68, 14868), (89, 15015), (94, 15051), (114, 15165), (157, 15435),

Gene: Verity_22 Start: 17000, Stop: 17824, Start Num: 31

Candidate Starts for Verity_22:

(Start: 31 @17000 has 9 MA's), (38, 17072), (71, 17255), (75, 17282), (78, 17312), (89, 17384), (92, 17405), (107, 17486), (115, 17537), (120, 17558), (125, 17585), (130, 17642), (133, 17666), (135, 17672), (136, 17687), (137, 17693), (152, 17774), (154, 17786),

Gene: ViaConlectus_23 Start: 17552, Stop: 18376, Start Num: 31

Candidate Starts for ViaConlectus_23:

(Start: 31 @17552 has 9 MA's), (38, 17624), (49, 17690), (71, 17807), (78, 17864), (89, 17936), (92, 17957), (107, 18038), (110, 18059), (115, 18089), (120, 18110), (125, 18137), (133, 18218), (135, 18224), (137, 18245), (144, 18290), (147, 18302), (152, 18326),

Gene: Vivi2_21 Start: 17307, Stop: 18137, Start Num: 25

Candidate Starts for Vivi2_21:

(Start: 25 @17307 has 43 MA's), (29, 17316), (43, 17421), (59, 17511), (71, 17565), (73, 17589), (82, 17652), (89, 17700), (93, 17727), (98, 17757), (115, 17856), (125, 17904), (130, 17961), (133, 17985), (135, 17991), (145, 18060), (148, 18072), (151, 18090), (154, 18105),

Gene: Wizard_20 Start: 13964, Stop: 14776, Start Num: 32

Candidate Starts for Wizard_20:

(Start: 32 @13964 has 29 MA's), (40, 14045), (68, 14195), (89, 14342), (94, 14378), (114, 14492), (157, 14762),

Gene: Xkcd426_15 Start: 16526, Stop: 17386, Start Num: 30

Candidate Starts for Xkcd426_15:

(Start: 30 @16526 has 12 MA's), (34, 16541), (54, 16688), (59, 16718), (75, 16811), (78, 16841), (86, 16889), (98, 16967), (112, 17054), (115, 17066), (132, 17210), (133, 17222), (138, 17252), (143, 17288),

Gene: YDN12_15 Start: 15481, Stop: 16377, Start Num: 30

Candidate Starts for YDN12_15:

(Start: 30 @15481 has 12 MA's), (39, 15559), (43, 15583), (46, 15607), (58, 15679), (70, 15742), (81, 15826), (86, 15859), (88, 15880), (94, 15919), (96, 15928), (109, 16000), (115, 16036), (121, 16066),

(125, 16090), (139, 16228), (142, 16258), (143, 16261), (147, 16279), (150, 16297), (157, 16336), (159, 16363),

Gene: YorkOnyx_22 Start: 16855, Stop: 17682, Start Num: 25

Candidate Starts for YorkOnyx_22:

(Start: 25 @16855 has 43 MA's), (29, 16864), (43, 16966), (59, 17056), (82, 17197), (89, 17245), (97, 17296), (107, 17350), (115, 17401), (119, 17419), (125, 17449), (127, 17470), (130, 17506), (135, 17536), (148, 17617), (151, 17635), (154, 17650),

Gene: YungMoney_22 Start: 15274, Stop: 16086, Start Num: 32

Candidate Starts for YungMoney_22:

(Start: 32 @15274 has 29 MA's), (40, 15355), (68, 15505), (85, 15625), (89, 15652), (114, 15802), (126, 15856), (133, 15934), (157, 16072),

Gene: Zipp_22 Start: 17649, Stop: 18473, Start Num: 31

Candidate Starts for Zipp_22:

(Start: 31 @17649 has 9 MA's), (38, 17721), (71, 17904), (75, 17931), (78, 17961), (89, 18033), (92, 18054), (107, 18135), (115, 18186), (120, 18207), (125, 18234), (130, 18291), (133, 18315), (135, 18321), (136, 18336), (137, 18342), (152, 18423), (154, 18435),

Gene: Zitch_24 Start: 16782, Stop: 17606, Start Num: 31

Candidate Starts for Zitch_24:

(Start: 27 @16773 has 1 MA's), (Start: 31 @16782 has 9 MA's), (38, 16854), (49, 16920), (71, 17037), (78, 17094), (89, 17166), (92, 17187), (107, 17268), (110, 17289), (115, 17319), (120, 17340), (125, 17367), (133, 17448), (135, 17454), (137, 17475), (152, 17556),

Gene: phiAsp2_15 Start: 10148, Stop: 10969, Start Num: 34

Candidate Starts for phiAsp2_15:

(33, 10142), (34, 10148), (55, 10304), (57, 10319), (69, 10379), (71, 10388), (96, 10565), (104, 10601), (105, 10604), (111, 10652), (118, 10679), (146, 10883), (147, 10886),