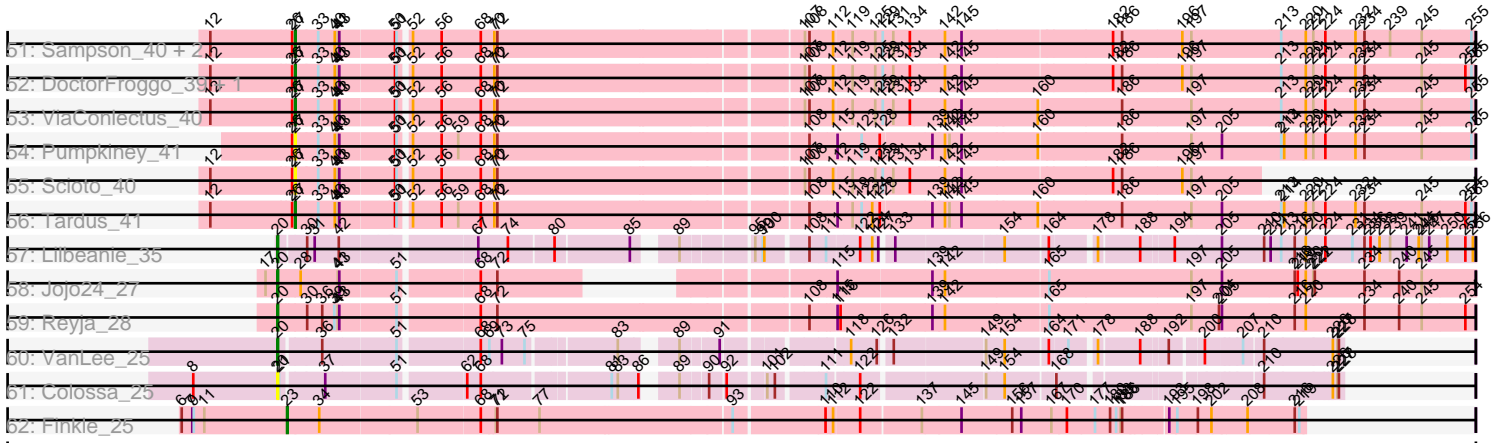


Pham 292637



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 292637 Report

This analysis was run 04/18/26 on database version 643.

Pham number 292637 has 117 members, 11 are drafts.

Phages represented in each track:

- Track 1 : PotPie_28
- Track 2 : William_32
- Track 3 : PCoral7_32, Toast_32
- Track 4 : Fairfaxidum_31
- Track 5 : Ohgeesy_28
- Track 6 : Polly_27, Zameen_30, Tayonia_30, Antonio_30
- Track 7 : Bialota_28, Zirinka_28
- Track 8 : BatStarr_28, Nymphadora_28, Eviarto_28, Herod_28, TimTam_28, Bosnia_28
- Track 9 : Hyzer_31
- Track 10 : ThankyouJordi_27
- Track 11 : Manasvini_30, Kita_30, Eudoria_30, Trumpet_30, Neobush_30
- Track 12 : Madavieve_28
- Track 13 : WelcomeAyanna_27
- Track 14 : BoyNamedSue_29
- Track 15 : AlumE_29
- Track 16 : Madeline_28
- Track 17 : Maridalia_29
- Track 18 : Hugley_27
- Track 19 : Agueybana_29
- Track 20 : Suscepit_30
- Track 21 : LordFarquaad_28, Attis_28, Yeet412_28, Bjanes7_28, SoilAssassin_28
- Track 22 : Jalleen_28, Savage_28, Haley23_28, GemG_28, Gizerno_28, Cynthia_28, Sproutie_28, Whiteclaw_28, Mocha12_28, TuertoX_28, Clap_28
- Track 23 : Nettuno_26, Lamberg_26, EdnaMode_26
- Track 24 : PantheRoc_29
- Track 25 : BaxterFox_28
- Track 26 : Yeezy_30
- Track 27 : Powerball_26
- Track 28 : Sidious_30
- Track 29 : Portcullis_36, Twister6_38, Egi03_36
- Track 30 : VanDeWege_39, CoveyB_38
- Track 31 : Wizard_35, SmokingBunny_35, Gezellig_35, Halo3_36, PullumCavea_35, Jambalaya_35, KimmyK_37, Fireball_36, Phlop_35, Salvador_35, Togo_35, Evamon_35, Savbucketdawg_35
- Track 32 : TillyBobJoe_35
- Track 33 : ClamChowder_38, Barb_38, PinkCoffee_38

- Track 34 : Fugax_38
- Track 35 : Shinji_36
- Track 36 : RogerDodger_39
- Track 37 : Nubi_35
- Track 38 : Valary_38, CherryCola_38
- Track 39 : Danyall_38
- Track 40 : Arri_39
- Track 41 : Leonard_38, Phinally_38
- Track 42 : EMOore_36
- Track 43 : Inspectinfecti_39, Phauci_31
- Track 44 : Hans_40
- Track 45 : Ali17_36
- Track 46 : MelBins_39
- Track 47 : Belphegor_39
- Track 48 : Delrey21_39
- Track 49 : Zitch_41
- Track 50 : APunk_41, Zipp_39, BigHunkinEater_42
- Track 51 : Sampson_40, Abblin_40, Natkenzie_40
- Track 52 : DoctorFroggo_39, Verity_39
- Track 53 : ViaConlectus_40
- Track 54 : Pumpkiney_41
- Track 55 : Scioto_40
- Track 56 : Tardus_41
- Track 57 : Lilbeanie_35
- Track 58 : Jojo24_27
- Track 59 : Reyja_28
- Track 60 : VanLee_25
- Track 61 : Colossa_25
- Track 62 : Finkle_25

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

The start number called the most often in the published annotations is 20, it was called in 63 of the 106 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Agueybana_29, Arri_39, Barb_38, BatStarr_28, BaxterFox_28, Bialota_28, Bosnia_28, BoyNamedSue_29, CherryCola_38, ClamChowder_38, Colossa_25, CoveyB_38, Danyall_38, EdnaMode_26, Egi03_36, Eudoria_30, Evamon_35, Eviarto_28, Fairfaxidum_31, Fireball_36, Fugax_38, Gezellig_35, Halo3_36, Herod_28, Hyzer_31, Jambalaya_35, Jojo24_27, KimmyK_37, Kita_30, Lamberg_26, Lilbeanie_35, Madavieve_28, Madeline_28, Manasvini_30, Maridalia_29, Neobush_30, Nettuno_26, Nubi_35, Nymphadora_28, Ohgeesy_28, PCoral7_32, PantheRoc_29, Phlop_35, PinkCoffee_38, Portcullis_36, Powerball_26, PullumCavea_35, Reyja_28, RogerDodger_39, Salvador_35, Savbucketdawg_35, Shinji_36, Sidious_30, SmokingBunny_35, TillyBobJoe_35, TimTam_28, Toast_32, Togo_35, Trumpet_30, Twister6_38, Valary_38, VanDeWege_39, VanLee_25, WelcomeAyanna_27, William_32, Wizard_35, Zirinka_28,

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

- AlumE_29, Antonio_30, Polly_27, Tayonia_30, ThankyouJordi_27, Yeezy_30, Zameen_30,

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

- APunk_41, Abblin_40, Ali17_36, Attis_28, Belphegor_39, BigHunkinEater_42, Bjanes7_28, Clap_28, Cynthia_28, Delrey21_39, DoctorFroggo_39, EMoore_36, Finkle_25, GemG_28, Gizermo_28, Haley23_28, Hans_40, Hugley_27, Inspectinfecti_39, Jalleen_28, Leonard_38, LordFarquaad_28, MelBins_39, Mocha12_28, Natkenzie_40, Phauci_31, Phinally_38, PotPie_28, Pumpkiney_41, Sampson_40, Savage_28, Scioto_40, SoilAssassin_28, Sproutie_28, Susceptit_30, Tardus_41, TuertoX_28, Verity_39, ViaConlectus_40, Whiteclaw_28, Yeet412_28, Zipp_39, Zitch_41,

Summary by start number:

Start 4:

- Found in 1 of 117 (0.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hugley_27 (CZ1),

Start 20:

- Found in 74 of 117 (63.2%) of genes in pham
- Manual Annotations of this start: 63 of 106
- Called 90.5% of time when present
- Phage (with cluster) where this start called: Agueybana_29 (CZ1), Arri_39 (DC1), Barb_38 (DC1), BatStarr_28 (CZ1), BaxterFox_28 (CZ3), Bialota_28 (CZ1), Bosnia_28 (CZ1), BoyNamedSue_29 (CZ1), CherryCola_38 (DC1), ClamChowder_38 (DC1), Colossa_25 (KA), CoveyB_38 (DC1), Danyall_38 (DC1), EdnaMode_26 (CZ2), Egi03_36 (DC1), Eudoria_30 (CZ1), Evamon_35 (DC1), Eviarto_28 (CZ1), Fairfaxidum_31 (CV), Fireball_36 (DC1), Fugax_38 (DC1), Gezellig_35 (DC1), Halo3_36 (DC1), Herod_28 (CZ1), Hyzer_31 (CZ1), Jambalaya_35 (DC1), Jojo24_27 (DY), KimmyK_37 (DC1), Kita_30 (CZ1), Lamberg_26 (CZ2), Lilbeanie_35 (DE5), Madavieve_28 (CZ1), Madeline_28 (CZ1), Manasvini_30 (CZ1), Maridalia_29 (CZ1), Neobush_30 (CZ1), Nettuno_26 (CZ2), Nubi_35 (DC1), Nymphadora_28 (CZ1), Ohgeesy_28 (CZ), PCoral7_32 (CV), PantheRoc_29 (CZ3), Phlop_35 (DC1), PinkCoffee_38 (DC1), Portcullis_36 (DC1), Powerball_26 (CZ4), PullumCavea_35 (DC1), Reyja_28 (DY), RogerDodger_39 (DC1), Salvador_35 (DC1), Savbucketdawg_35 (DC1), Shinji_36 (DC1), Sidious_30 (CZ7), SmokingBunny_35 (DC1), TillyBobJoe_35 (DC1), TimTam_28 (CZ1), Toast_32 (CV), Togo_35 (DC1), Trumpet_30 (CZ1), Twister6_38 (DC1), Valary_38 (DC1), VanDeWege_39 (DC1), VanLee_25 (KA), WelcomeAyanna_27 (CZ1), William_32 (CV), Wizard_35 (DC1), Zirinka_28 (CZ1),

Start 22:

- Found in 16 of 117 (13.7%) of genes in pham
- Manual Annotations of this start: 15 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attis_28 (CZ2), Bjanes7_28 (CZ2), Clap_28 (CZ2), Cynthia_28 (CZ2), GemG_28 (CZ2), Gizermo_28 (CZ2), Haley23_28 (CZ2), Jalleen_28 (CZ2), LordFarquaad_28 (CZ2), Mocha12_28 (CZ2), Savage_28 (CZ2), SoilAssassin_28 (CZ2), Sproutie_28 (CZ2), TuertoX_28 (CZ2), Whiteclaw_28 (CZ2), Yeet412_28 (CZ2),

Start 23:

- Found in 1 of 117 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finkle_25 (singleton),

Start 24:

- Found in 33 of 117 (28.2%) of genes in pham
- Manual Annotations of this start: 8 of 106
- Called 24.2% of time when present
- Phage (with cluster) where this start called: AlumE_29 (CZ1), Antonio_30 (CZ1), Polly_27 (CZ1), Suscepit_30 (CZ1), Tayonia_30 (CZ1), ThankyouJordi_27 (CZ1), Yeezy_30 (CZ3), Zameen_30 (CZ1),

Start 25:

- Found in 1 of 117 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 106
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PotPie_28 (CT),

Start 26:

- Found in 23 of 117 (19.7%) of genes in pham
- Manual Annotations of this start: 1 of 106
- Called 4.3% of time when present
- Phage (with cluster) where this start called: Delrey21_39 (DE4),

Start 27:

- Found in 23 of 117 (19.7%) of genes in pham
- Manual Annotations of this start: 17 of 106
- Called 95.7% of time when present
- Phage (with cluster) where this start called: APunk_41 (DE4), Abblin_40 (DE4), Ali17_36 (DE2), Belphegor_39 (DE2), BigHunkinEater_42 (DE4), DoctorFroggo_39 (DE4), EMOore_36 (DE2), Hans_40 (DE2), Inspectinfecti_39 (DE2), Leonard_38 (DE2), MelBins_39 (DE2), Natkenzie_40 (DE4), Phauci_31 (DE2), Phinally_38 (DE2), Pumpkiney_41 (DE4), Sampson_40 (DE4), Scioto_40 (DE4), Tardus_41 (DE4), Verity_39 (DE4), ViaConlectus_40 (DE4), Zipp_39 (DE4), Zitch_41 (DE4),

Summary by clusters:

There are 15 clusters represented in this pham: KA, CZ2, CZ3, DE2, CZ1, DE4, CZ7, CZ4, DE5, CZ, DY, singleton, CT, CV, DC1,

Info for manual annotations of cluster CT:

- Start number 25 was manually annotated 1 time for cluster CT.

Info for manual annotations of cluster CV:

- Start number 20 was manually annotated 4 times for cluster CV.

Info for manual annotations of cluster CZ:

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

Info for manual annotations of cluster CZ1:

- Start number 20 was manually annotated 18 times for cluster CZ1.
- Start number 24 was manually annotated 7 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 20 was manually annotated 3 times for cluster CZ2.
- Start number 22 was manually annotated 15 times for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 20 was manually annotated 2 times for cluster CZ3.
- Start number 24 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 20 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ7:

- Start number 20 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DC1:

- Start number 20 was manually annotated 29 times for cluster DC1.

Info for manual annotations of cluster DE2:

- Start number 27 was manually annotated 9 times for cluster DE2.

Info for manual annotations of cluster DE4:

- Start number 26 was manually annotated 1 time for cluster DE4.
- Start number 27 was manually annotated 8 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 DY:

- Start number 20 was manually annotated 2 times for cluster DY.

Info for manual annotations of cluster KA:

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

Gene Information:

Gene: APunk_41 Start: 34218, Stop: 36455, Start Num: 27

Candidate Starts for APunk_41:

(Start: 26 @34212 has 1 MA's), (Start: 27 @34218 has 17 MA's), (33, 34263), (40, 34296), (41, 34302), (43, 34305), (50, 34407), (51, 34410), (52, 34425), (56, 34482), (68, 34560), (70, 34584), (72, 34590), (107, 35163), (108, 35172), (112, 35217), (119, 35250), (125, 35295), (129, 35310), (131, 35331), (134, 35364), (142, 35430), (145, 35463), (182, 35751), (186, 35769), (196, 35886), (197, 35904), (213, 36078), (220, 36126), (221, 36141), (224, 36165), (232, 36225), (234, 36243), (239, 36294), (245, 36357), (255, 36450),

Gene: Abblin_40 Start: 34761, Stop: 36998, Start Num: 27

Candidate Starts for Abblin_40:

(12, 34596), (Start: 26 @34755 has 1 MA's), (Start: 27 @34761 has 17 MA's), (33, 34806), (40, 34839), (41, 34845), (43, 34848), (50, 34950), (51, 34953), (52, 34968), (56, 35025), (68, 35103), (70, 35127),

(72, 35133), (107, 35706), (108, 35715), (112, 35760), (119, 35793), (125, 35838), (129, 35853), (131, 35874), (134, 35907), (142, 35973), (145, 36006), (182, 36294), (186, 36312), (196, 36429), (197, 36447), (213, 36621), (220, 36669), (221, 36684), (224, 36708), (232, 36768), (234, 36786), (239, 36837), (245, 36900), (255, 36993),

Gene: Agueybana_29 Start: 24666, Stop: 26948, Start Num: 20

Candidate Starts for Agueybana_29:

(Start: 20 @24666 has 63 MA's), (Start: 24 @24681 has 8 MA's), (32, 24738), (41, 24777), (48, 24876), (57, 24963), (60, 24996), (66, 25020), (68, 25029), (70, 25053), (76, 25134), (100, 25563), (113, 25701), (114, 25704), (115, 25707), (131, 25818), (191, 26337), (205, 26451), (218, 26598), (220, 26613), (234, 26730), (240, 26799), (244, 26838), (245, 26844),

Gene: Ali17_36 Start: 32497, Stop: 34722, Start Num: 27

Candidate Starts for Ali17_36:

(12, 32332), (Start: 26 @32491 has 1 MA's), (Start: 27 @32497 has 17 MA's), (33, 32542), (35, 32545), (41, 32581), (43, 32584), (61, 32806), (62, 32812), (68, 32839), (82, 33103), (87, 33217), (108, 33451), (115, 33493), (123, 33541), (128, 33577), (141, 33682), (144, 33727), (160, 33880), (196, 34153), (197, 34171), (205, 34231), (210, 34315), (213, 34345), (217, 34375), (220, 34393), (232, 34492), (245, 34624), (251, 34672), (254, 34705), (255, 34717),

Gene: AlumE_29 Start: 24680, Stop: 26926, Start Num: 24

Candidate Starts for AlumE_29:

(Start: 20 @24665 has 63 MA's), (Start: 24 @24680 has 8 MA's), (32, 24737), (41, 24776), (48, 24875), (57, 24962), (60, 24995), (66, 25019), (68, 25028), (70, 25052), (97, 25550), (108, 25640), (109, 25655), (117, 25700), (121, 25727), (138, 25868), (142, 25895), (143, 25904), (144, 25925), (160, 26078), (173, 26150), (175, 26156), (191, 26315), (205, 26429), (218, 26576), (220, 26591), (234, 26708), (238, 26738), (239, 26759), (241, 26792), (244, 26816), (245, 26822), (251, 26873), (252, 26876),

Gene: Antonio_30 Start: 24801, Stop: 27047, Start Num: 24

Candidate Starts for Antonio_30:

(Start: 20 @24786 has 63 MA's), (Start: 24 @24801 has 8 MA's), (32, 24858), (41, 24897), (48, 24996), (57, 25083), (60, 25116), (66, 25140), (68, 25149), (70, 25173), (97, 25671), (108, 25761), (109, 25776), (117, 25821), (121, 25848), (138, 25989), (142, 26016), (143, 26025), (144, 26046), (160, 26199), (173, 26271), (191, 26436), (205, 26550), (218, 26697), (220, 26712), (234, 26829), (240, 26898), (244, 26937), (245, 26943),

Gene: Arri_39 Start: 30622, Stop: 32889, Start Num: 20

Candidate Starts for Arri_39:

(Start: 20 @30622 has 63 MA's), (39, 30727), (41, 30733), (43, 30736), (50, 30838), (51, 30841), (53, 30865), (62, 30964), (63, 30967), (68, 30991), (88, 31378), (103, 31561), (108, 31603), (109, 31618), (123, 31696), (129, 31738), (131, 31759), (138, 31831), (145, 31891), (160, 32041), (173, 32113), (175, 32119), (190, 32257), (191, 32278), (205, 32392), (220, 32554), (221, 32569), (222, 32572), (233, 32665), (234, 32671), (240, 32740), (241, 32755), (244, 32779), (245, 32785),

Gene: Attis_28 Start: 22589, Stop: 24844, Start Num: 22

Candidate Starts for Attis_28:

(16, 22556), (Start: 22 @22589 has 15 MA's), (29, 22625), (39, 22688), (45, 22724), (47, 22772), (51, 22805), (68, 22955), (97, 23477), (108, 23567), (115, 23609), (120, 23645), (134, 23747), (136, 23753), (138, 23786), (142, 23813), (143, 23822), (144, 23843), (160, 23996), (173, 24068), (175, 24074), (191, 24233), (205, 24347), (218, 24494), (220, 24509), (234, 24626), (240, 24695), (244, 24734), (245, 24740),

Gene: Barb_38 Start: 30640, Stop: 32907, Start Num: 20

Candidate Starts for Barb_38:

(Start: 20 @30640 has 63 MA's), (39, 30745), (41, 30751), (43, 30754), (50, 30856), (51, 30859), (53, 30883), (62, 30982), (63, 30985), (68, 31009), (88, 31396), (103, 31579), (108, 31621), (109, 31636), (123, 31714), (129, 31756), (131, 31777), (138, 31849), (145, 31909), (160, 32059), (173, 32131), (190, 32275), (191, 32296), (205, 32410), (220, 32572), (221, 32587), (222, 32590), (234, 32689), (240, 32758), (241, 32773), (244, 32797), (245, 32803),

Gene: BatStarr_28 Start: 24789, Stop: 27047, Start Num: 20

Candidate Starts for BatStarr_28:

(Start: 20 @24789 has 63 MA's), (Start: 24 @24804 has 8 MA's), (32, 24861), (41, 24900), (48, 24999), (57, 25086), (60, 25119), (66, 25143), (68, 25152), (70, 25176), (97, 25674), (108, 25764), (109, 25779), (117, 25824), (121, 25851), (138, 25992), (142, 26019), (143, 26028), (144, 26049), (160, 26202), (173, 26274), (191, 26439), (205, 26553), (218, 26700), (220, 26715), (234, 26832), (237, 26859), (239, 26880), (241, 26913), (244, 26937), (245, 26943),

Gene: BaxterFox_28 Start: 23989, Stop: 26247, Start Num: 20

Candidate Starts for BaxterFox_28:

(Start: 20 @23989 has 63 MA's), (Start: 24 @24004 has 8 MA's), (32, 24061), (41, 24100), (48, 24199), (57, 24286), (60, 24319), (66, 24343), (68, 24352), (70, 24376), (76, 24457), (97, 24874), (108, 24964), (109, 24979), (117, 25024), (121, 25051), (138, 25192), (142, 25219), (143, 25228), (144, 25249), (160, 25402), (173, 25474), (175, 25480), (191, 25639), (205, 25753), (218, 25900), (220, 25915), (234, 26032), (238, 26059), (239, 26080), (241, 26113), (244, 26137),

Gene: Belphegor_39 Start: 34687, Stop: 36918, Start Num: 27

Candidate Starts for Belphegor_39:

(Start: 26 @34681 has 1 MA's), (Start: 27 @34687 has 17 MA's), (33, 34732), (35, 34735), (41, 34771), (61, 34996), (62, 35002), (65, 35017), (68, 35029), (82, 35293), (87, 35407), (108, 35641), (115, 35686), (123, 35734), (128, 35770), (139, 35866), (142, 35890), (143, 35899), (144, 35920), (145, 35923), (147, 35941), (162, 36082), (166, 36091), (173, 36145), (197, 36364), (204, 36418), (205, 36424), (210, 36508), (214, 36544), (220, 36586), (221, 36601), (224, 36625), (229, 36655), (232, 36685), (234, 36703), (245, 36817), (251, 36865), (254, 36898),

Gene: Bialota_28 Start: 24801, Stop: 27074, Start Num: 20

Candidate Starts for Bialota_28:

(Start: 20 @24801 has 63 MA's), (Start: 24 @24816 has 8 MA's), (32, 24873), (41, 24912), (48, 25011), (57, 25098), (60, 25131), (66, 25155), (68, 25164), (70, 25188), (97, 25698), (108, 25788), (109, 25803), (117, 25848), (121, 25875), (138, 26016), (142, 26043), (143, 26052), (144, 26073), (160, 26226), (173, 26298), (190, 26442), (191, 26463), (203, 26559), (205, 26577), (218, 26724), (220, 26739), (221, 26754), (231, 26832), (234, 26856), (240, 26925), (241, 26940), (244, 26964), (245, 26970),

Gene: BigHunkinEater_42 Start: 33999, Stop: 36236, Start Num: 27

Candidate Starts for BigHunkinEater_42:

(Start: 26 @33993 has 1 MA's), (Start: 27 @33999 has 17 MA's), (33, 34044), (40, 34077), (41, 34083), (43, 34086), (50, 34188), (51, 34191), (52, 34206), (56, 34263), (68, 34341), (70, 34365), (72, 34371), (107, 34944), (108, 34953), (112, 34998), (119, 35031), (125, 35076), (129, 35091), (131, 35112), (134, 35145), (142, 35211), (145, 35244), (182, 35532), (186, 35550), (196, 35667), (197, 35685), (213, 35859), (220, 35907), (221, 35922), (224, 35946), (232, 36006), (234, 36024), (239, 36075), (245, 36138), (255, 36231),

Gene: Bjaner7_28 Start: 22589, Stop: 24844, Start Num: 22

Candidate Starts for Bjaner7_28:

(16, 22556), (Start: 22 @22589 has 15 MA's), (29, 22625), (39, 22688), (45, 22724), (47, 22772), (51, 22805), (68, 22955), (97, 23477), (108, 23567), (115, 23609), (120, 23645), (134, 23747), (136, 23753), (138, 23786), (142, 23813), (143, 23822), (144, 23843), (160, 23996), (173, 24068), (175, 24074), (191, 24233), (205, 24347), (218, 24494), (220, 24509), (234, 24626), (240, 24695), (244, 24734), (245, 24740),

Gene: Bosnia_28 Start: 24789, Stop: 27047, Start Num: 20

Candidate Starts for Bosnia_28:

(Start: 20 @24789 has 63 MA's), (Start: 24 @24804 has 8 MA's), (32, 24861), (41, 24900), (48, 24999), (57, 25086), (60, 25119), (66, 25143), (68, 25152), (70, 25176), (97, 25674), (108, 25764), (109, 25779), (117, 25824), (121, 25851), (138, 25992), (142, 26019), (143, 26028), (144, 26049), (160, 26202), (173, 26274), (191, 26439), (205, 26553), (218, 26700), (220, 26715), (234, 26832), (237, 26859), (239, 26880), (241, 26913), (244, 26937), (245, 26943),

Gene: BoyNamedSue_29 Start: 24665, Stop: 26926, Start Num: 20

Candidate Starts for BoyNamedSue_29:

(Start: 20 @24665 has 63 MA's), (Start: 24 @24680 has 8 MA's), (32, 24737), (41, 24776), (48, 24875), (57, 24962), (60, 24995), (66, 25019), (68, 25028), (70, 25052), (97, 25550), (108, 25640), (109, 25655), (117, 25700), (121, 25727), (138, 25868), (142, 25895), (143, 25904), (144, 25925), (160, 26078), (173, 26150), (175, 26156), (191, 26315), (205, 26429), (218, 26576), (220, 26591), (234, 26708), (238, 26738), (239, 26759), (241, 26792), (244, 26816), (245, 26822), (251, 26873), (252, 26876),

Gene: CherryCola_38 Start: 31398, Stop: 33662, Start Num: 20

Candidate Starts for CherryCola_38:

(Start: 20 @31398 has 63 MA's), (39, 31500), (41, 31506), (43, 31509), (51, 31614), (53, 31638), (62, 31737), (63, 31740), (68, 31764), (88, 32151), (103, 32334), (108, 32376), (109, 32391), (123, 32469), (129, 32511), (131, 32532), (138, 32604), (145, 32664), (160, 32814), (173, 32886), (175, 32892), (190, 33030), (191, 33051), (205, 33165), (220, 33327), (221, 33342), (222, 33345), (233, 33438), (234, 33444), (240, 33513), (241, 33528), (244, 33552), (245, 33558),

Gene: ClamChowder_38 Start: 30640, Stop: 32907, Start Num: 20

Candidate Starts for ClamChowder_38:

(Start: 20 @30640 has 63 MA's), (39, 30745), (41, 30751), (43, 30754), (50, 30856), (51, 30859), (53, 30883), (62, 30982), (63, 30985), (68, 31009), (88, 31396), (103, 31579), (108, 31621), (109, 31636), (123, 31714), (129, 31756), (131, 31777), (138, 31849), (145, 31909), (160, 32059), (173, 32131), (190, 32275), (191, 32296), (205, 32410), (220, 32572), (221, 32587), (222, 32590), (234, 32689), (240, 32758), (241, 32773), (244, 32797), (245, 32803),

Gene: Clap_28 Start: 22596, Stop: 24848, Start Num: 22

Candidate Starts for Clap_28:

(16, 22563), (Start: 22 @22596 has 15 MA's), (39, 22695), (45, 22731), (51, 22812), (53, 22836), (68, 22962), (97, 23484), (108, 23574), (115, 23616), (120, 23652), (134, 23754), (136, 23760), (138, 23793), (142, 23820), (143, 23829), (157, 23970), (189, 24204), (196, 24276), (203, 24336), (205, 24354), (216, 24495), (218, 24501), (220, 24516), (221, 24531), (234, 24633), (237, 24660), (244, 24738), (245, 24744),

Gene: Colossa_25 Start: 21008, Stop: 22783, Start Num: 20

Candidate Starts for Colossa_25:

(8, 20840), (Start: 20 @21008 has 63 MA's), (21, 21011), (37, 21086), (51, 21215), (62, 21332), (68, 21359), (81, 21587), (83, 21599), (86, 21635), (89, 21677), (90, 21719), (92, 21746), (101, 21809), (102, 21824), (111, 21905), (122, 21959), (149, 22181), (154, 22211), (168, 22295), (210, 22634), (226, 22763), (227, 22772), (228, 22775),

Gene: CoveyB_38 Start: 30440, Stop: 32707, Start Num: 20

Candidate Starts for CoveyB_38:

(Start: 20 @30440 has 63 MA's), (39, 30545), (41, 30551), (43, 30554), (50, 30656), (51, 30659), (53, 30683), (62, 30782), (63, 30785), (68, 30809), (88, 31196), (103, 31379), (108, 31421), (109, 31436), (123, 31514), (129, 31556), (131, 31577), (138, 31649), (145, 31709), (160, 31859), (173, 31931), (190, 32075), (191, 32096), (205, 32210), (216, 32351), (220, 32372), (221, 32387), (222, 32390), (234, 32489), (240, 32558), (241, 32573), (244, 32597), (245, 32603),

Gene: Cynthia_28 Start: 22596, Stop: 24848, Start Num: 22

Candidate Starts for Cynthia_28:

(16, 22563), (Start: 22 @22596 has 15 MA's), (39, 22695), (45, 22731), (51, 22812), (53, 22836), (68, 22962), (97, 23484), (108, 23574), (115, 23616), (120, 23652), (134, 23754), (136, 23760), (138, 23793), (142, 23820), (143, 23829), (157, 23970), (189, 24204), (196, 24276), (203, 24336), (205, 24354), (216, 24495), (218, 24501), (220, 24516), (221, 24531), (234, 24633), (237, 24660), (244, 24738), (245, 24744),

Gene: Danyall_38 Start: 30442, Stop: 32709, Start Num: 20

Candidate Starts for Danyall_38:

(Start: 20 @30442 has 63 MA's), (41, 30553), (43, 30556), (50, 30658), (51, 30661), (53, 30685), (62, 30784), (63, 30787), (68, 30811), (88, 31198), (96, 31330), (103, 31381), (108, 31423), (109, 31438), (123, 31516), (129, 31558), (131, 31579), (138, 31651), (145, 31711), (160, 31861), (173, 31933), (190, 32077), (191, 32098), (205, 32212), (220, 32374), (221, 32389), (222, 32392), (234, 32491), (240, 32560), (241, 32575), (244, 32599), (245, 32605), (248, 32623),

Gene: Delrey21_39 Start: 34942, Stop: 37185, Start Num: 26

Candidate Starts for Delrey21_39:

(12, 34783), (Start: 26 @34942 has 1 MA's), (Start: 27 @34948 has 17 MA's), (33, 34993), (40, 35026), (41, 35032), (43, 35035), (50, 35137), (51, 35140), (52, 35155), (56, 35212), (68, 35290), (70, 35314), (72, 35320), (107, 35893), (108, 35902), (112, 35947), (119, 35980), (125, 36025), (129, 36040), (131, 36061), (134, 36094), (142, 36160), (145, 36193), (182, 36481), (186, 36499), (196, 36616), (197, 36634), (213, 36808), (220, 36856), (221, 36871), (224, 36895), (232, 36955), (234, 36973), (245, 37087), (254, 37168), (255, 37180),

Gene: DoctorFroggo_39 Start: 34948, Stop: 37185, Start Num: 27

Candidate Starts for DoctorFroggo_39:

(12, 34783), (Start: 26 @34942 has 1 MA's), (Start: 27 @34948 has 17 MA's), (33, 34993), (40, 35026), (41, 35032), (43, 35035), (50, 35137), (51, 35140), (52, 35155), (56, 35212), (68, 35290), (70, 35314), (72, 35320), (107, 35893), (108, 35902), (112, 35947), (119, 35980), (125, 36025), (129, 36040), (131, 36061), (134, 36094), (142, 36160), (145, 36193), (182, 36481), (186, 36499), (196, 36616), (197, 36634), (213, 36808), (220, 36856), (221, 36871), (224, 36895), (232, 36955), (234, 36973), (245, 37087), (254, 37168), (255, 37180),

Gene: EMoore_36 Start: 33669, Stop: 35897, Start Num: 27

Candidate Starts for EMoore_36:

(Start: 26 @33663 has 1 MA's), (Start: 27 @33669 has 17 MA's), (33, 33714), (35, 33717), (41, 33753), (43, 33756), (58, 33942), (61, 33978), (62, 33984), (68, 34011), (70, 34035), (84, 34296), (100, 34545), (108, 34623), (128, 34752), (139, 34848), (142, 34872), (143, 34881), (151, 34968), (175, 35133), (186, 35211), (196, 35328), (197, 35346), (201, 35382), (209, 35472), (210, 35490), (213, 35520), (217, 35550), (220, 35568), (229, 35637), (232, 35667), (245, 35799), (251, 35847), (255, 35892),

Gene: EdnaMode_26 Start: 21283, Stop: 23532, Start Num: 20

Candidate Starts for EdnaMode_26:

(Start: 20 @21283 has 63 MA's), (36, 21361), (39, 21385), (41, 21391), (43, 21394), (46, 21424), (50, 21496), (51, 21499), (53, 21523), (68, 21643), (88, 22030), (108, 22255), (139, 22477), (142, 22501), (169, 22729), (191, 22921), (197, 22975), (199, 22993), (216, 23176), (220, 23197), (221, 23212), (234, 23314), (240, 23383), (244, 23422), (245, 23428),

Gene: Egi03_36 Start: 30120, Stop: 32387, Start Num: 20

Candidate Starts for Egi03_36:

(Start: 20 @30120 has 63 MA's), (41, 30231), (43, 30234), (50, 30336), (51, 30339), (53, 30363), (62, 30462), (63, 30465), (68, 30489), (88, 30876), (103, 31059), (108, 31101), (109, 31116), (123, 31194), (129, 31236), (131, 31257), (138, 31329), (145, 31389), (160, 31539), (173, 31611), (190, 31755), (191, 31776), (205, 31890), (220, 32052), (221, 32067), (222, 32070), (234, 32169), (240, 32238), (241, 32253), (244, 32277), (245, 32283), (248, 32301),

Gene: Eudoria_30 Start: 24786, Stop: 27047, Start Num: 20

Candidate Starts for Eudoria_30:

(Start: 20 @24786 has 63 MA's), (Start: 24 @24801 has 8 MA's), (32, 24858), (41, 24897), (48, 24996), (57, 25083), (60, 25116), (66, 25140), (68, 25149), (70, 25173), (97, 25671), (108, 25761), (109, 25776), (117, 25821), (121, 25848), (138, 25989), (142, 26016), (143, 26025), (144, 26046), (160, 26199), (173, 26271), (191, 26436), (205, 26550), (218, 26697), (220, 26712), (234, 26829), (240, 26898), (244, 26937), (245, 26943),

Gene: Evamon_35 Start: 30464, Stop: 32728, Start Num: 20

Candidate Starts for Evamon_35:

(Start: 20 @30464 has 63 MA's), (39, 30566), (41, 30572), (43, 30575), (51, 30680), (53, 30704), (62, 30803), (63, 30806), (68, 30830), (88, 31217), (103, 31400), (108, 31442), (109, 31457), (123, 31535), (129, 31577), (131, 31598), (138, 31670), (145, 31730), (160, 31880), (173, 31952), (190, 32096), (191, 32117), (205, 32231), (216, 32372), (220, 32393), (221, 32408), (222, 32411), (234, 32510), (240, 32579), (241, 32594), (244, 32618), (245, 32624),

Gene: Eviarto_28 Start: 24789, Stop: 27023, Start Num: 20

Candidate Starts for Eviarto_28:

(Start: 20 @24789 has 63 MA's), (Start: 24 @24804 has 8 MA's), (32, 24861), (41, 24900), (48, 24999), (57, 25086), (60, 25119), (66, 25143), (68, 25152), (70, 25176), (97, 25650), (108, 25740), (109, 25755), (117, 25800), (121, 25827), (138, 25968), (142, 25995), (143, 26004), (144, 26025), (160, 26178), (173, 26250), (191, 26415), (205, 26529), (218, 26676), (220, 26691), (234, 26808), (237, 26835), (239, 26856), (241, 26889), (244, 26913), (245, 26919),

Gene: Fairfaxidum_31 Start: 25639, Stop: 27933, Start Num: 20

Candidate Starts for Fairfaxidum_31:

(2, 25222), (10, 25480), (Start: 20 @25639 has 63 MA's), (49, 25864), (54, 25906), (63, 25990), (68, 26014), (70, 26038), (105, 26599), (113, 26686), (114, 26689), (115, 26692), (131, 26803), (140, 26884), (142, 26902), (143, 26911), (148, 26959), (156, 27034), (158, 27055), (163, 27100), (178, 27196), (197, 27379), (205, 27439), (212, 27541), (220, 27601), (224, 27640), (229, 27670), (234, 27718), (238, 27748), (239, 27769), (240, 27787), (255, 27928),

Gene: Finkle_25 Start: 21614, Stop: 23530, Start Num: 23

Candidate Starts for Finkle_25:

(6, 21404), (7, 21425), (9, 21428), (11, 21449), (Start: 23 @21614 has 1 MA's), (34, 21677), (53, 21866), (68, 21986), (71, 22013), (72, 22016), (77, 22100), (93, 22469), (110, 22640), (112, 22649), (122, 22697), (137, 22811), (145, 22886), (156, 22985), (157, 23003), (167, 23063), (170, 23093), (177, 23147), (180, 23177), (183, 23189), (185, 23198), (186, 23201), (193, 23279), (195, 23294), (198, 23333), (202, 23360), (208, 23423), (216, 23510), (219, 23519),

Gene: Fireball_36 Start: 30587, Stop: 32851, Start Num: 20

Candidate Starts for Fireball_36:

(Start: 20 @30587 has 63 MA's), (39, 30689), (41, 30695), (43, 30698), (51, 30803), (53, 30827), (62, 30926), (63, 30929), (68, 30953), (88, 31340), (103, 31523), (108, 31565), (109, 31580), (123, 31658), (129, 31700), (131, 31721), (138, 31793), (145, 31853), (160, 32003), (173, 32075), (190, 32219), (191, 32240), (205, 32354), (216, 32495), (220, 32516), (221, 32531), (222, 32534), (234, 32633), (240, 32702), (241, 32717), (244, 32741), (245, 32747),

Gene: Fugax_38 Start: 30640, Stop: 32571, Start Num: 20

Candidate Starts for Fugax_38:

(Start: 20 @30640 has 63 MA's), (39, 30745), (41, 30751), (43, 30754), (50, 30856), (51, 30859), (53, 30883), (62, 30982), (63, 30985), (68, 31009), (88, 31396), (103, 31579), (108, 31621), (109, 31636), (123, 31714), (129, 31756), (131, 31777), (138, 31849), (145, 31909), (160, 32059), (173, 32131), (190, 32275), (191, 32296), (205, 32410),

Gene: GemG_28 Start: 22596, Stop: 24848, Start Num: 22

Candidate Starts for GemG_28:

(16, 22563), (Start: 22 @22596 has 15 MA's), (39, 22695), (45, 22731), (51, 22812), (53, 22836), (68, 22962), (97, 23484), (108, 23574), (115, 23616), (120, 23652), (134, 23754), (136, 23760), (138, 23793), (142, 23820), (143, 23829), (157, 23970), (189, 24204), (196, 24276), (203, 24336), (205, 24354), (216, 24495), (218, 24501), (220, 24516), (221, 24531), (234, 24633), (237, 24660), (244, 24738), (245, 24744),

Gene: Gezellig_35 Start: 30596, Stop: 32860, Start Num: 20

Candidate Starts for Gezellig_35:

(Start: 20 @30596 has 63 MA's), (39, 30698), (41, 30704), (43, 30707), (51, 30812), (53, 30836), (62, 30935), (63, 30938), (68, 30962), (88, 31349), (103, 31532), (108, 31574), (109, 31589), (123, 31667), (129, 31709), (131, 31730), (138, 31802), (145, 31862), (160, 32012), (173, 32084), (190, 32228), (191, 32249), (205, 32363), (216, 32504), (220, 32525), (221, 32540), (222, 32543), (234, 32642), (240, 32711), (241, 32726), (244, 32750), (245, 32756),

Gene: Gizermo_28 Start: 22596, Stop: 24848, Start Num: 22

Candidate Starts for Gizermo_28:

(16, 22563), (Start: 22 @22596 has 15 MA's), (39, 22695), (45, 22731), (51, 22812), (53, 22836), (68, 22962), (97, 23484), (108, 23574), (115, 23616), (120, 23652), (134, 23754), (136, 23760), (138, 23793), (142, 23820), (143, 23829), (157, 23970), (189, 24204), (196, 24276), (203, 24336), (205, 24354), (216, 24495), (218, 24501), (220, 24516), (221, 24531), (234, 24633), (237, 24660), (244, 24738), (245, 24744),

Gene: Haley23_28 Start: 22596, Stop: 24848, Start Num: 22

Candidate Starts for Haley23_28:

(16, 22563), (Start: 22 @22596 has 15 MA's), (39, 22695), (45, 22731), (51, 22812), (53, 22836), (68, 22962), (97, 23484), (108, 23574), (115, 23616), (120, 23652), (134, 23754), (136, 23760), (138, 23793), (142, 23820), (143, 23829), (157, 23970), (189, 24204), (196, 24276), (203, 24336), (205, 24354), (216, 24495), (218, 24501), (220, 24516), (221, 24531), (234, 24633), (237, 24660), (244, 24738), (245, 24744),

Gene: Halo3_36 Start: 30889, Stop: 33153, Start Num: 20

Candidate Starts for Halo3_36:

(Start: 20 @30889 has 63 MA's), (39, 30991), (41, 30997), (43, 31000), (51, 31105), (53, 31129), (62, 31228), (63, 31231), (68, 31255), (88, 31642), (103, 31825), (108, 31867), (109, 31882), (123, 31960), (129, 32002), (131, 32023), (138, 32095), (145, 32155), (160, 32305), (173, 32377), (190, 32521), (191, 32542), (205, 32656), (216, 32797), (220, 32818), (221, 32833), (222, 32836), (234, 32935),

(240, 33004), (241, 33019), (244, 33043), (245, 33049),

Gene: Hans_40 Start: 33137, Stop: 35362, Start Num: 27

Candidate Starts for Hans_40:

(12, 32972), (Start: 26 @33131 has 1 MA's), (Start: 27 @33137 has 17 MA's), (33, 33182), (35, 33185), (43, 33224), (61, 33446), (62, 33452), (68, 33479), (82, 33743), (87, 33857), (108, 34091), (115, 34133), (128, 34217), (140, 34319), (141, 34322), (144, 34367), (160, 34520), (197, 34811), (205, 34871), (210, 34955), (213, 34985), (217, 35015), (220, 35033), (232, 35132), (245, 35264), (251, 35312), (254, 35345), (255, 35357),

Gene: Herod_28 Start: 24789, Stop: 27047, Start Num: 20

Candidate Starts for Herod_28:

(Start: 20 @24789 has 63 MA's), (Start: 24 @24804 has 8 MA's), (32, 24861), (41, 24900), (48, 24999), (57, 25086), (60, 25119), (66, 25143), (68, 25152), (70, 25176), (97, 25674), (108, 25764), (109, 25779), (117, 25824), (121, 25851), (138, 25992), (142, 26019), (143, 26028), (144, 26049), (160, 26202), (173, 26274), (191, 26439), (205, 26553), (218, 26700), (220, 26715), (234, 26832), (237, 26859), (239, 26880), (241, 26913), (244, 26937), (245, 26943),

Gene: Hugley_27 Start: 24431, Stop: 27046, Start Num: 4

Candidate Starts for Hugley_27:

(1, 24281), (3, 24428), (4, 24431), (5, 24563), (13, 24662), (14, 24686), (18, 24767), (19, 24782), (Start: 24 @24803 has 8 MA's), (32, 24860), (41, 24899), (48, 24998), (57, 25085), (60, 25118), (66, 25142), (68, 25151), (70, 25175), (97, 25673), (108, 25763), (109, 25778), (117, 25823), (121, 25850), (138, 25991), (142, 26018), (143, 26027), (144, 26048), (160, 26201), (173, 26273), (191, 26438), (205, 26552), (218, 26699), (220, 26714), (234, 26831), (237, 26858), (239, 26879), (241, 26912), (244, 26936), (245, 26942),

Gene: Hyzer_31 Start: 25865, Stop: 28147, Start Num: 20

Candidate Starts for Hyzer_31:

(Start: 20 @25865 has 63 MA's), (Start: 24 @25880 has 8 MA's), (32, 25937), (48, 26075), (51, 26084), (57, 26162), (60, 26195), (62, 26201), (66, 26219), (68, 26228), (70, 26252), (100, 26762), (113, 26900), (115, 26906), (131, 27017), (140, 27098), (191, 27536), (196, 27572), (205, 27650), (215, 27779), (216, 27791), (218, 27797), (220, 27812), (238, 27959), (239, 27980), (244, 28037), (245, 28043), (251, 28094), (252, 28097),

Gene: Inspectinfecti_39 Start: 33583, Stop: 35808, Start Num: 27

Candidate Starts for Inspectinfecti_39:

(12, 33418), (Start: 26 @33577 has 1 MA's), (Start: 27 @33583 has 17 MA's), (33, 33628), (35, 33631), (41, 33667), (43, 33670), (61, 33892), (62, 33898), (68, 33925), (82, 34189), (87, 34303), (108, 34537), (115, 34579), (128, 34663), (140, 34765), (141, 34768), (144, 34813), (152, 34891), (160, 34966), (186, 35122), (196, 35239), (197, 35257), (205, 35317), (210, 35401), (213, 35431), (217, 35461), (220, 35479), (232, 35578), (245, 35710), (251, 35758), (254, 35791), (255, 35803),

Gene: Jalleen_28 Start: 22235, Stop: 24487, Start Num: 22

Candidate Starts for Jalleen_28:

(16, 22202), (Start: 22 @22235 has 15 MA's), (39, 22334), (45, 22370), (51, 22451), (53, 22475), (68, 22601), (97, 23123), (108, 23213), (115, 23255), (120, 23291), (134, 23393), (136, 23399), (138, 23432), (142, 23459), (143, 23468), (157, 23609), (189, 23843), (196, 23915), (203, 23975), (205, 23993), (216, 24134), (218, 24140), (220, 24155), (221, 24170), (234, 24272), (237, 24299), (244, 24377), (245, 24383),

Gene: Jambalaya_35 Start: 30243, Stop: 32507, Start Num: 20

Candidate Starts for Jambalaya_35:

(Start: 20 @30243 has 63 MA's), (39, 30345), (41, 30351), (43, 30354), (51, 30459), (53, 30483), (62, 30582), (63, 30585), (68, 30609), (88, 30996), (103, 31179), (108, 31221), (109, 31236), (123, 31314), (129, 31356), (131, 31377), (138, 31449), (145, 31509), (160, 31659), (173, 31731), (190, 31875), (191, 31896), (205, 32010), (216, 32151), (220, 32172), (221, 32187), (222, 32190), (234, 32289), (240, 32358), (241, 32373), (244, 32397), (245, 32403),

Gene: Jojo24_27 Start: 21710, Stop: 23770, Start Num: 20

Candidate Starts for Jojo24_27:

(17, 21686), (Start: 20 @21710 has 63 MA's), (28, 21746), (41, 21818), (43, 21821), (51, 21926), (68, 22070), (72, 22100), (115, 22535), (139, 22715), (142, 22739), (165, 22937), (197, 23213), (205, 23273), (216, 23414), (218, 23420), (220, 23435), (221, 23450), (222, 23453), (234, 23552), (240, 23621), (245, 23666),

Gene: KimmyK_37 Start: 31178, Stop: 33442, Start Num: 20

Candidate Starts for KimmyK_37:

(Start: 20 @31178 has 63 MA's), (39, 31280), (41, 31286), (43, 31289), (51, 31394), (53, 31418), (62, 31517), (63, 31520), (68, 31544), (88, 31931), (103, 32114), (108, 32156), (109, 32171), (123, 32249), (129, 32291), (131, 32312), (138, 32384), (145, 32444), (160, 32594), (173, 32666), (190, 32810), (191, 32831), (205, 32945), (216, 33086), (220, 33107), (221, 33122), (222, 33125), (234, 33224), (240, 33293), (241, 33308), (244, 33332), (245, 33338),

Gene: Kita_30 Start: 24786, Stop: 27056, Start Num: 20

Candidate Starts for Kita_30:

(Start: 20 @24786 has 63 MA's), (Start: 24 @24801 has 8 MA's), (32, 24858), (41, 24897), (48, 24996), (57, 25083), (60, 25116), (66, 25140), (68, 25149), (70, 25173), (97, 25680), (108, 25770), (109, 25785), (117, 25830), (121, 25857), (138, 25998), (142, 26025), (143, 26034), (144, 26055), (160, 26208), (173, 26280), (191, 26445), (205, 26559), (218, 26706), (220, 26721), (234, 26838), (240, 26907), (244, 26946), (245, 26952),

Gene: Lamberg_26 Start: 21283, Stop: 23532, Start Num: 20

Candidate Starts for Lamberg_26:

(Start: 20 @21283 has 63 MA's), (36, 21361), (39, 21385), (41, 21391), (43, 21394), (46, 21424), (50, 21496), (51, 21499), (53, 21523), (68, 21643), (88, 22030), (108, 22255), (139, 22477), (142, 22501), (169, 22729), (191, 22921), (197, 22975), (199, 22993), (216, 23176), (220, 23197), (221, 23212), (234, 23314), (240, 23383), (244, 23422), (245, 23428),

Gene: Leonard_38 Start: 33219, Stop: 35447, Start Num: 27

Candidate Starts for Leonard_38:

(12, 33054), (Start: 26 @33213 has 1 MA's), (Start: 27 @33219 has 17 MA's), (33, 33264), (35, 33267), (41, 33303), (43, 33306), (61, 33528), (62, 33534), (65, 33549), (68, 33561), (82, 33825), (87, 33939), (108, 34173), (115, 34218), (119, 34248), (123, 34266), (124, 34287), (128, 34302), (130, 34317), (139, 34398), (142, 34422), (143, 34431), (145, 34455), (160, 34605), (186, 34761), (197, 34896), (205, 34956), (213, 35070), (214, 35076), (220, 35118), (221, 35133), (224, 35157), (232, 35217), (234, 35235), (245, 35349), (250, 35394), (254, 35430), (255, 35442),

Gene: Lilbeanie_35 Start: 28340, Stop: 30439, Start Num: 20

Candidate Starts for Lilbeanie_35:

(Start: 20 @28340 has 63 MA's), (30, 28385), (31, 28400), (42, 28448), (67, 28691), (74, 28748), (80, 28832), (85, 28970), (89, 29027), (95, 29141), (99, 29156), (100, 29159), (108, 29231), (111, 29261), (122, 29318), (124, 29342), (127, 29354), (133, 29372), (154, 29570), (164, 29645), (178, 29720), (188, 29795), (194, 29852), (205, 29942), (210, 30026), (211, 30035), (213, 30056), (216, 30083), (220, 30104), (224, 30143), (231, 30197), (234, 30221), (236, 30233), (238, 30251), (239, 30272), (241, 30305), (244, 30329), (245, 30335), (247, 30350), (250, 30383), (254, 30419), (256, 30434),

Gene: LordFarquaad_28 Start: 22589, Stop: 24844, Start Num: 22

Candidate Starts for LordFarquaad_28:

(16, 22556), (Start: 22 @22589 has 15 MA's), (29, 22625), (39, 22688), (45, 22724), (47, 22772), (51, 22805), (68, 22955), (97, 23477), (108, 23567), (115, 23609), (120, 23645), (134, 23747), (136, 23753), (138, 23786), (142, 23813), (143, 23822), (144, 23843), (160, 23996), (173, 24068), (175, 24074), (191, 24233), (205, 24347), (218, 24494), (220, 24509), (234, 24626), (240, 24695), (244, 24734), (245, 24740),

Gene: Madavieve_28 Start: 25069, Stop: 27330, Start Num: 20

Candidate Starts for Madavieve_28:

(Start: 20 @25069 has 63 MA's), (Start: 24 @25084 has 8 MA's), (32, 25141), (41, 25180), (48, 25279), (57, 25366), (60, 25399), (66, 25423), (68, 25432), (70, 25456), (97, 25954), (108, 26044), (109, 26059), (117, 26104), (121, 26131), (138, 26272), (142, 26299), (143, 26308), (144, 26329), (160, 26482), (173, 26554), (175, 26560), (191, 26719), (196, 26755), (205, 26833), (210, 26917), (216, 26974), (218, 26980), (220, 26995), (234, 27112), (240, 27181), (241, 27196), (244, 27220),

Gene: Madeline_28 Start: 25087, Stop: 27345, Start Num: 20

Candidate Starts for Madeline_28:

(Start: 20 @25087 has 63 MA's), (Start: 24 @25102 has 8 MA's), (32, 25159), (41, 25198), (48, 25297), (57, 25384), (60, 25417), (66, 25441), (68, 25450), (70, 25474), (97, 25972), (108, 26062), (109, 26077), (117, 26122), (121, 26149), (138, 26290), (142, 26317), (143, 26326), (144, 26347), (160, 26500), (173, 26572), (175, 26578), (181, 26635), (191, 26737), (203, 26833), (205, 26851), (218, 26998), (220, 27013), (234, 27130), (238, 27157), (239, 27178), (240, 27196), (241, 27211), (244, 27235),

Gene: Manasvini_30 Start: 24786, Stop: 27047, Start Num: 20

Candidate Starts for Manasvini_30:

(Start: 20 @24786 has 63 MA's), (Start: 24 @24801 has 8 MA's), (32, 24858), (41, 24897), (48, 24996), (57, 25083), (60, 25116), (66, 25140), (68, 25149), (70, 25173), (97, 25671), (108, 25761), (109, 25776), (117, 25821), (121, 25848), (138, 25989), (142, 26016), (143, 26025), (144, 26046), (160, 26199), (173, 26271), (191, 26436), (205, 26550), (218, 26697), (220, 26712), (234, 26829), (240, 26898), (244, 26937), (245, 26943),

Gene: Maridalia_29 Start: 24786, Stop: 27047, Start Num: 20

Candidate Starts for Maridalia_29:

(Start: 20 @24786 has 63 MA's), (Start: 24 @24801 has 8 MA's), (32, 24858), (41, 24897), (48, 24996), (57, 25083), (60, 25116), (66, 25140), (68, 25149), (70, 25173), (78, 25266), (97, 25671), (108, 25761), (109, 25776), (117, 25821), (121, 25848), (138, 25989), (142, 26016), (143, 26025), (144, 26046), (160, 26199), (173, 26271), (191, 26436), (205, 26550), (218, 26697), (220, 26712), (234, 26829), (240, 26898), (244, 26937), (245, 26943),

Gene: MelBins_39 Start: 33368, Stop: 35593, Start Num: 27

Candidate Starts for MelBins_39:

(12, 33203), (Start: 26 @33362 has 1 MA's), (Start: 27 @33368 has 17 MA's), (33, 33413), (35, 33416), (41, 33452), (43, 33455), (61, 33677), (62, 33683), (68, 33710), (82, 33974), (87, 34088), (108, 34322), (115, 34364), (128, 34448), (130, 34463), (140, 34550), (141, 34553), (144, 34598), (160, 34751), (186, 34907), (196, 35024), (197, 35042), (205, 35102), (210, 35186), (213, 35216), (217, 35246), (220, 35264), (232, 35363), (245, 35495), (251, 35543), (254, 35576), (255, 35588),

Gene: Mocha12_28 Start: 22596, Stop: 24848, Start Num: 22

Candidate Starts for Mocha12_28:

(16, 22563), (Start: 22 @22596 has 15 MA's), (39, 22695), (45, 22731), (51, 22812), (53, 22836), (68, 22962), (97, 23484), (108, 23574), (115, 23616), (120, 23652), (134, 23754), (136, 23760), (138, 23793), (142, 23820), (143, 23829), (157, 23970), (189, 24204), (196, 24276), (203, 24336), (205, 24354), (216, 24495), (218, 24501), (220, 24516), (221, 24531), (234, 24633), (237, 24660), (244, 24738), (245, 24744),

Gene: Natkenzie_40 Start: 34761, Stop: 36998, Start Num: 27

Candidate Starts for Natkenzie_40:

(12, 34596), (Start: 26 @34755 has 1 MA's), (Start: 27 @34761 has 17 MA's), (33, 34806), (40, 34839), (41, 34845), (43, 34848), (50, 34950), (51, 34953), (52, 34968), (56, 35025), (68, 35103), (70, 35127), (72, 35133), (107, 35706), (108, 35715), (112, 35760), (119, 35793), (125, 35838), (129, 35853), (131, 35874), (134, 35907), (142, 35973), (145, 36006), (182, 36294), (186, 36312), (196, 36429), (197, 36447), (213, 36621), (220, 36669), (221, 36684), (224, 36708), (232, 36768), (234, 36786), (239, 36837), (245, 36900), (255, 36993),

Gene: Neobush_30 Start: 24786, Stop: 27047, Start Num: 20

Candidate Starts for Neobush_30:

(Start: 20 @24786 has 63 MA's), (Start: 24 @24801 has 8 MA's), (32, 24858), (41, 24897), (48, 24996), (57, 25083), (60, 25116), (66, 25140), (68, 25149), (70, 25173), (97, 25671), (108, 25761), (109, 25776), (117, 25821), (121, 25848), (138, 25989), (142, 26016), (143, 26025), (144, 26046), (160, 26199), (173, 26271), (191, 26436), (205, 26550), (218, 26697), (220, 26712), (234, 26829), (240, 26898), (244, 26937), (245, 26943),

Gene: Nettuno_26 Start: 21283, Stop: 23532, Start Num: 20

Candidate Starts for Nettuno_26:

(Start: 20 @21283 has 63 MA's), (36, 21361), (39, 21385), (41, 21391), (43, 21394), (46, 21424), (50, 21496), (51, 21499), (53, 21523), (68, 21643), (88, 22030), (108, 22255), (139, 22477), (142, 22501), (169, 22729), (191, 22921), (197, 22975), (199, 22993), (216, 23176), (220, 23197), (221, 23212), (234, 23314), (240, 23383), (244, 23422), (245, 23428),

Gene: Nubi_35 Start: 30466, Stop: 32403, Start Num: 20

Candidate Starts for Nubi_35:

(Start: 20 @30466 has 63 MA's), (39, 30568), (41, 30574), (43, 30577), (51, 30682), (53, 30706), (62, 30805), (63, 30808), (68, 30832), (88, 31219), (103, 31402), (108, 31444), (109, 31459), (123, 31537), (129, 31579), (131, 31600), (138, 31672), (145, 31732), (160, 31882), (173, 31954),

Gene: Nymphadora_28 Start: 24789, Stop: 27047, Start Num: 20

Candidate Starts for Nymphadora_28:

(Start: 20 @24789 has 63 MA's), (Start: 24 @24804 has 8 MA's), (32, 24861), (41, 24900), (48, 24999), (57, 25086), (60, 25119), (66, 25143), (68, 25152), (70, 25176), (97, 25674), (108, 25764), (109, 25779), (117, 25824), (121, 25851), (138, 25992), (142, 26019), (143, 26028), (144, 26049), (160, 26202), (173, 26274), (191, 26439), (205, 26553), (218, 26700), (220, 26715), (234, 26832), (237, 26859), (239, 26880), (241, 26913), (244, 26937), (245, 26943),

Gene: Ohgeesy_28 Start: 24412, Stop: 26673, Start Num: 20

Candidate Starts for Ohgeesy_28:

(Start: 20 @24412 has 63 MA's), (Start: 24 @24427 has 8 MA's), (32, 24484), (41, 24523), (48, 24622), (57, 24709), (60, 24742), (66, 24766), (68, 24775), (70, 24799), (97, 25297), (108, 25387), (109, 25402), (117, 25447), (121, 25474), (138, 25615), (142, 25642), (143, 25651), (144, 25672), (146, 25678), (153, 25750), (160, 25825), (173, 25897), (175, 25903), (191, 26062), (196, 26098), (203, 26158), (205, 26176), (216, 26317), (218, 26323), (220, 26338), (221, 26353), (234, 26455), (240, 26524), (244, 26563), (245, 26569),

Gene: PCoral7_32 Start: 25556, Stop: 27817, Start Num: 20

Candidate Starts for PCoral7_32:

(2, 25139), (10, 25397), (Start: 20 @25556 has 63 MA's), (49, 25781), (54, 25823), (68, 25931), (70, 25955), (97, 26453), (108, 26543), (115, 26585), (120, 26621), (134, 26723), (136, 26729), (138, 26762), (142, 26789), (143, 26798), (155, 26909), (157, 26939), (191, 27209), (196, 27245), (205, 27323), (210, 27407), (213, 27437), (220, 27485), (224, 27524), (234, 27602), (238, 27632), (239, 27653), (240, 27671), (255, 27812),

Gene: PantheRoc_29 Start: 23984, Stop: 26245, Start Num: 20

Candidate Starts for PantheRoc_29:

(Start: 20 @23984 has 63 MA's), (Start: 24 @23999 has 8 MA's), (32, 24056), (41, 24095), (48, 24194), (57, 24281), (60, 24314), (66, 24338), (68, 24347), (70, 24371), (97, 24869), (108, 24959), (109, 24974), (117, 25019), (121, 25046), (138, 25187), (142, 25214), (143, 25223), (144, 25244), (160, 25397), (173, 25469), (175, 25475), (191, 25634), (205, 25748), (218, 25895), (220, 25910), (234, 26027), (240, 26096), (244, 26135), (245, 26141),

Gene: Phauci_31 Start: 29808, Stop: 32033, Start Num: 27

Candidate Starts for Phauci_31:

(12, 29643), (Start: 26 @29802 has 1 MA's), (Start: 27 @29808 has 17 MA's), (33, 29853), (35, 29856), (41, 29892), (43, 29895), (61, 30117), (62, 30123), (68, 30150), (82, 30414), (87, 30528), (108, 30762), (115, 30804), (128, 30888), (140, 30990), (141, 30993), (144, 31038), (152, 31116), (160, 31191), (186, 31347), (196, 31464), (197, 31482), (205, 31542), (210, 31626), (213, 31656), (217, 31686), (220, 31704), (232, 31803), (245, 31935), (251, 31983), (254, 32016), (255, 32028),

Gene: Phinally_38 Start: 33216, Stop: 35444, Start Num: 27

Candidate Starts for Phinally_38:

(12, 33051), (Start: 26 @33210 has 1 MA's), (Start: 27 @33216 has 17 MA's), (33, 33261), (35, 33264), (41, 33300), (43, 33303), (61, 33525), (62, 33531), (65, 33546), (68, 33558), (82, 33822), (87, 33936), (108, 34170), (115, 34215), (119, 34245), (123, 34263), (124, 34284), (128, 34299), (130, 34314), (139, 34395), (142, 34419), (143, 34428), (145, 34452), (160, 34602), (186, 34758), (197, 34893), (205, 34953), (213, 35067), (214, 35073), (220, 35115), (221, 35130), (224, 35154), (232, 35214), (234, 35232), (245, 35346), (250, 35391), (254, 35427), (255, 35439),

Gene: Phlop_35 Start: 30548, Stop: 32812, Start Num: 20

Candidate Starts for Phlop_35:

(Start: 20 @30548 has 63 MA's), (39, 30650), (41, 30656), (43, 30659), (51, 30764), (53, 30788), (62, 30887), (63, 30890), (68, 30914), (88, 31301), (103, 31484), (108, 31526), (109, 31541), (123, 31619), (129, 31661), (131, 31682), (138, 31754), (145, 31814), (160, 31964), (173, 32036), (190, 32180), (191, 32201), (205, 32315), (216, 32456), (220, 32477), (221, 32492), (222, 32495), (234, 32594), (240, 32663), (241, 32678), (244, 32702), (245, 32708),

Gene: PinkCoffee_38 Start: 30649, Stop: 32916, Start Num: 20

Candidate Starts for PinkCoffee_38:

(Start: 20 @30649 has 63 MA's), (39, 30754), (41, 30760), (43, 30763), (50, 30865), (51, 30868), (53, 30892), (62, 30991), (63, 30994), (68, 31018), (88, 31405), (103, 31588), (108, 31630), (109, 31645), (123, 31723), (129, 31765), (131, 31786), (138, 31858), (145, 31918), (160, 32068), (173, 32140), (190, 32284), (191, 32305), (205, 32419), (220, 32581), (221, 32596), (222, 32599), (234, 32698), (240, 32767), (241, 32782), (244, 32806), (245, 32812),

Gene: Polly_27 Start: 24244, Stop: 26490, Start Num: 24

Candidate Starts for Polly_27:

(Start: 20 @24229 has 63 MA's), (Start: 24 @24244 has 8 MA's), (32, 24301), (41, 24340), (48, 24439), (57, 24526), (60, 24559), (66, 24583), (68, 24592), (70, 24616), (97, 25114), (108, 25204), (109,

25219), (117, 25264), (121, 25291), (138, 25432), (142, 25459), (143, 25468), (144, 25489), (160, 25642), (173, 25714), (191, 25879), (205, 25993), (218, 26140), (220, 26155), (234, 26272), (240, 26341), (244, 26380), (245, 26386),

Gene: Portcullis_36 Start: 29961, Stop: 32228, Start Num: 20

Candidate Starts for Portcullis_36:

(Start: 20 @29961 has 63 MA's), (41, 30072), (43, 30075), (50, 30177), (51, 30180), (53, 30204), (62, 30303), (63, 30306), (68, 30330), (88, 30717), (103, 30900), (108, 30942), (109, 30957), (123, 31035), (129, 31077), (131, 31098), (138, 31170), (145, 31230), (160, 31380), (173, 31452), (190, 31596), (191, 31617), (205, 31731), (220, 31893), (221, 31908), (222, 31911), (234, 32010), (240, 32079), (241, 32094), (244, 32118), (245, 32124), (248, 32142),

Gene: PotPie_28 Start: 22694, Stop: 24688, Start Num: 25

Candidate Starts for PotPie_28:

(Start: 25 @22694 has 1 MA's), (32, 22751), (38, 22778), (44, 22796), (50, 22898), (53, 22925), (55, 22949), (64, 23018), (79, 23123), (94, 23396), (98, 23414), (100, 23423), (104, 23468), (106, 23489), (135, 23684), (172, 23957), (174, 23975), (176, 23984), (184, 24029), (187, 24050), (225, 24410), (235, 24485), (236, 24491), (238, 24509), (239, 24530), (240, 24548), (243, 24581), (245, 24593), (249, 24617), (250, 24644), (253, 24677),

Gene: Powerball_26 Start: 22581, Stop: 24839, Start Num: 20

Candidate Starts for Powerball_26:

(Start: 20 @22581 has 63 MA's), (39, 22680), (41, 22686), (50, 22791), (51, 22794), (53, 22818), (68, 22938), (70, 22965), (108, 23553), (129, 23682), (137, 23760), (139, 23778), (140, 23784), (142, 23802), (144, 23832), (150, 23886), (159, 23961), (161, 23991), (163, 24003), (173, 24066), (178, 24102), (179, 24117), (190, 24210), (206, 24372), (210, 24429), (213, 24459), (220, 24507), (225, 24555), (230, 24579), (232, 24606), (234, 24624), (235, 24630), (239, 24675), (241, 24708), (244, 24732), (245, 24738), (255, 24831),

Gene: PullumCavea_35 Start: 30548, Stop: 32812, Start Num: 20

Candidate Starts for PullumCavea_35:

(Start: 20 @30548 has 63 MA's), (39, 30650), (41, 30656), (43, 30659), (51, 30764), (53, 30788), (62, 30887), (63, 30890), (68, 30914), (88, 31301), (103, 31484), (108, 31526), (109, 31541), (123, 31619), (129, 31661), (131, 31682), (138, 31754), (145, 31814), (160, 31964), (173, 32036), (190, 32180), (191, 32201), (205, 32315), (216, 32456), (220, 32477), (221, 32492), (222, 32495), (234, 32594), (240, 32663), (241, 32678), (244, 32702), (245, 32708),

Gene: Pumpkiney_41 Start: 32084, Stop: 34312, Start Num: 27

Candidate Starts for Pumpkiney_41:

(Start: 26 @32078 has 1 MA's), (Start: 27 @32084 has 17 MA's), (33, 32129), (40, 32162), (41, 32168), (43, 32171), (50, 32273), (51, 32276), (52, 32291), (56, 32348), (59, 32381), (68, 32426), (70, 32450), (72, 32456), (108, 33038), (115, 33083), (123, 33131), (128, 33167), (139, 33263), (142, 33287), (143, 33296), (145, 33320), (160, 33470), (186, 33626), (197, 33761), (205, 33821), (213, 33935), (214, 33941), (220, 33983), (221, 33998), (224, 34022), (232, 34082), (234, 34100), (245, 34214), (255, 34307),

Gene: Reyja_28 Start: 21885, Stop: 24134, Start Num: 20

Candidate Starts for Reyja_28:

(Start: 20 @21885 has 63 MA's), (30, 21933), (36, 21963), (39, 21987), (41, 21993), (43, 21996), (51, 22101), (68, 22245), (72, 22275), (108, 22857), (115, 22899), (116, 22905), (139, 23079), (142, 23103), (165, 23301), (197, 23577), (204, 23631), (205, 23637), (216, 23778), (220, 23799), (234, 23916), (240, 23985), (245, 24030), (254, 24114),

Gene: RogerDodger_39 Start: 30790, Stop: 33057, Start Num: 20

Candidate Starts for RogerDodger_39:

(Start: 20 @30790 has 63 MA's), (41, 30901), (43, 30904), (50, 31006), (51, 31009), (53, 31033), (62, 31132), (63, 31135), (68, 31159), (88, 31546), (103, 31729), (108, 31771), (109, 31786), (123, 31864), (129, 31906), (131, 31927), (138, 31999), (145, 32059), (160, 32209), (173, 32281), (175, 32287), (190, 32425), (191, 32446), (205, 32560), (220, 32722), (221, 32737), (222, 32740), (233, 32833), (234, 32839), (240, 32908), (241, 32923), (244, 32947), (245, 32953),

Gene: Salvador_35 Start: 30462, Stop: 32726, Start Num: 20

Candidate Starts for Salvador_35:

(Start: 20 @30462 has 63 MA's), (39, 30564), (41, 30570), (43, 30573), (51, 30678), (53, 30702), (62, 30801), (63, 30804), (68, 30828), (88, 31215), (103, 31398), (108, 31440), (109, 31455), (123, 31533), (129, 31575), (131, 31596), (138, 31668), (145, 31728), (160, 31878), (173, 31950), (190, 32094), (191, 32115), (205, 32229), (216, 32370), (220, 32391), (221, 32406), (222, 32409), (234, 32508), (240, 32577), (241, 32592), (244, 32616), (245, 32622),

Gene: Sampson_40 Start: 34706, Stop: 36943, Start Num: 27

Candidate Starts for Sampson_40:

(12, 34541), (Start: 26 @34700 has 1 MA's), (Start: 27 @34706 has 17 MA's), (33, 34751), (40, 34784), (41, 34790), (43, 34793), (50, 34895), (51, 34898), (52, 34913), (56, 34970), (68, 35048), (70, 35072), (72, 35078), (107, 35651), (108, 35660), (112, 35705), (119, 35738), (125, 35783), (129, 35798), (131, 35819), (134, 35852), (142, 35918), (145, 35951), (182, 36239), (186, 36257), (196, 36374), (197, 36392), (213, 36566), (220, 36614), (221, 36629), (224, 36653), (232, 36713), (234, 36731), (239, 36782), (245, 36845), (255, 36938),

Gene: Savage_28 Start: 22596, Stop: 24848, Start Num: 22

Candidate Starts for Savage_28:

(16, 22563), (Start: 22 @22596 has 15 MA's), (39, 22695), (45, 22731), (51, 22812), (53, 22836), (68, 22962), (97, 23484), (108, 23574), (115, 23616), (120, 23652), (134, 23754), (136, 23760), (138, 23793), (142, 23820), (143, 23829), (157, 23970), (189, 24204), (196, 24276), (203, 24336), (205, 24354), (216, 24495), (218, 24501), (220, 24516), (221, 24531), (234, 24633), (237, 24660), (244, 24738), (245, 24744),

Gene: Savbucketdawg_35 Start: 30243, Stop: 32507, Start Num: 20

Candidate Starts for Savbucketdawg_35:

(Start: 20 @30243 has 63 MA's), (39, 30345), (41, 30351), (43, 30354), (51, 30459), (53, 30483), (62, 30582), (63, 30585), (68, 30609), (88, 30996), (103, 31179), (108, 31221), (109, 31236), (123, 31314), (129, 31356), (131, 31377), (138, 31449), (145, 31509), (160, 31659), (173, 31731), (190, 31875), (191, 31896), (205, 32010), (216, 32151), (220, 32172), (221, 32187), (222, 32190), (234, 32289), (240, 32358), (241, 32373), (244, 32397), (245, 32403),

Gene: Scioto_40 Start: 34761, Stop: 36584, Start Num: 27

Candidate Starts for Scioto_40:

(12, 34596), (Start: 26 @34755 has 1 MA's), (Start: 27 @34761 has 17 MA's), (33, 34806), (40, 34839), (41, 34845), (43, 34848), (50, 34950), (51, 34953), (52, 34968), (56, 35025), (68, 35103), (70, 35127), (72, 35133), (107, 35706), (108, 35715), (112, 35760), (119, 35793), (125, 35838), (129, 35853), (131, 35874), (134, 35907), (142, 35973), (145, 36006), (182, 36294), (186, 36312), (196, 36429), (197, 36447),

Gene: Shinji_36 Start: 29902, Stop: 32169, Start Num: 20

Candidate Starts for Shinji_36:

(Start: 20 @29902 has 63 MA's), (41, 30013), (43, 30016), (50, 30118), (51, 30121), (53, 30145), (62, 30244), (63, 30247), (68, 30271), (88, 30658), (108, 30883), (109, 30898), (123, 30976), (129, 31018),

(131, 31039), (145, 31171), (160, 31321), (186, 31477), (196, 31594), (205, 31672), (216, 31813), (220, 31834), (221, 31849), (222, 31852), (234, 31951), (235, 31957), (240, 32020), (241, 32035), (244, 32059), (245, 32065),

Gene: Sidious_30 Start: 25196, Stop: 27475, Start Num: 20

Candidate Starts for Sidious_30:

(Start: 20 @25196 has 63 MA's), (Start: 24 @25211 has 8 MA's), (32, 25268), (57, 25493), (60, 25526), (62, 25532), (66, 25550), (68, 25559), (70, 25583), (100, 26093), (113, 26231), (114, 26234), (115, 26237), (131, 26348), (140, 26429), (191, 26867), (196, 26903), (205, 26981), (216, 27122), (218, 27128), (220, 27143), (234, 27260), (238, 27287), (241, 27341), (244, 27365), (245, 27371), (246, 27383), (251, 27422),

Gene: SmokingBunny_35 Start: 30453, Stop: 32717, Start Num: 20

Candidate Starts for SmokingBunny_35:

(Start: 20 @30453 has 63 MA's), (39, 30555), (41, 30561), (43, 30564), (51, 30669), (53, 30693), (62, 30792), (63, 30795), (68, 30819), (88, 31206), (103, 31389), (108, 31431), (109, 31446), (123, 31524), (129, 31566), (131, 31587), (138, 31659), (145, 31719), (160, 31869), (173, 31941), (190, 32085), (191, 32106), (205, 32220), (216, 32361), (220, 32382), (221, 32397), (222, 32400), (234, 32499), (240, 32568), (241, 32583), (244, 32607), (245, 32613),

Gene: SoilAssassin_28 Start: 22589, Stop: 24844, Start Num: 22

Candidate Starts for SoilAssassin_28:

(16, 22556), (Start: 22 @22589 has 15 MA's), (29, 22625), (39, 22688), (45, 22724), (47, 22772), (51, 22805), (68, 22955), (97, 23477), (108, 23567), (115, 23609), (120, 23645), (134, 23747), (136, 23753), (138, 23786), (142, 23813), (143, 23822), (144, 23843), (160, 23996), (173, 24068), (175, 24074), (191, 24233), (205, 24347), (218, 24494), (220, 24509), (234, 24626), (240, 24695), (244, 24734), (245, 24740),

Gene: Sproutie_28 Start: 22596, Stop: 24848, Start Num: 22

Candidate Starts for Sproutie_28:

(16, 22563), (Start: 22 @22596 has 15 MA's), (39, 22695), (45, 22731), (51, 22812), (53, 22836), (68, 22962), (97, 23484), (108, 23574), (115, 23616), (120, 23652), (134, 23754), (136, 23760), (138, 23793), (142, 23820), (143, 23829), (157, 23970), (189, 24204), (196, 24276), (203, 24336), (205, 24354), (216, 24495), (218, 24501), (220, 24516), (221, 24531), (234, 24633), (237, 24660), (244, 24738), (245, 24744),

Gene: Suscepit_30 Start: 24802, Stop: 27048, Start Num: 24

Candidate Starts for Suscepit_30:

(15, 24721), (Start: 24 @24802 has 8 MA's), (32, 24859), (41, 24898), (48, 24997), (57, 25084), (60, 25117), (66, 25141), (68, 25150), (70, 25174), (97, 25672), (108, 25762), (109, 25777), (117, 25822), (121, 25849), (138, 25990), (142, 26017), (143, 26026), (144, 26047), (160, 26200), (173, 26272), (191, 26437), (205, 26551), (218, 26698), (220, 26713), (234, 26830), (240, 26899), (244, 26938), (245, 26944),

Gene: Tardus_41 Start: 34125, Stop: 36353, Start Num: 27

Candidate Starts for Tardus_41:

(12, 33960), (Start: 26 @34119 has 1 MA's), (Start: 27 @34125 has 17 MA's), (33, 34170), (40, 34203), (41, 34209), (43, 34212), (50, 34314), (51, 34317), (52, 34332), (56, 34389), (59, 34422), (68, 34467), (70, 34491), (72, 34497), (108, 35079), (115, 35124), (119, 35154), (123, 35172), (124, 35193), (128, 35208), (139, 35304), (142, 35328), (143, 35337), (145, 35361), (160, 35511), (186, 35667), (197, 35802), (205, 35862), (213, 35976), (214, 35982), (220, 36024), (221, 36039), (224, 36063), (232, 36123), (234, 36141), (245, 36255), (254, 36336), (255, 36348),

Gene: Tayonia_30 Start: 24801, Stop: 27047, Start Num: 24

Candidate Starts for Tayonia_30:

(Start: 20 @24786 has 63 MA's), (Start: 24 @24801 has 8 MA's), (32, 24858), (41, 24897), (48, 24996), (57, 25083), (60, 25116), (66, 25140), (68, 25149), (70, 25173), (97, 25671), (108, 25761), (109, 25776), (117, 25821), (121, 25848), (138, 25989), (142, 26016), (143, 26025), (144, 26046), (160, 26199), (173, 26271), (191, 26436), (205, 26550), (218, 26697), (220, 26712), (234, 26829), (240, 26898), (244, 26937), (245, 26943),

Gene: ThankyouJordi_27 Start: 24782, Stop: 26872, Start Num: 24

Candidate Starts for ThankyouJordi_27:

(Start: 20 @24767 has 63 MA's), (Start: 24 @24782 has 8 MA's), (32, 24839), (48, 24977), (57, 25064), (60, 25097), (66, 25121), (68, 25130), (70, 25154), (88, 25370), (103, 25553), (108, 25595), (129, 25721), (139, 25817), (142, 25841), (157, 25991), (196, 26297), (205, 26375), (218, 26522), (220, 26537), (221, 26552), (223, 26570), (234, 26654), (238, 26684), (239, 26705), (242, 26747), (244, 26762), (245, 26768), (246, 26780), (251, 26819), (252, 26822), (255, 26864),

Gene: TillyBobJoe_35 Start: 30257, Stop: 32521, Start Num: 20

Candidate Starts for TillyBobJoe_35:

(Start: 20 @30257 has 63 MA's), (39, 30359), (41, 30365), (43, 30368), (51, 30473), (53, 30497), (62, 30596), (63, 30599), (68, 30623), (88, 31010), (103, 31193), (108, 31235), (109, 31250), (123, 31328), (129, 31370), (131, 31391), (138, 31463), (145, 31523), (160, 31673), (173, 31745), (175, 31751), (190, 31889), (191, 31910), (205, 32024), (216, 32165), (220, 32186), (221, 32201), (234, 32303), (240, 32372), (241, 32387), (244, 32411), (245, 32417),

Gene: TimTam_28 Start: 24789, Stop: 27047, Start Num: 20

Candidate Starts for TimTam_28:

(Start: 20 @24789 has 63 MA's), (Start: 24 @24804 has 8 MA's), (32, 24861), (41, 24900), (48, 24999), (57, 25086), (60, 25119), (66, 25143), (68, 25152), (70, 25176), (97, 25674), (108, 25764), (109, 25779), (117, 25824), (121, 25851), (138, 25992), (142, 26019), (143, 26028), (144, 26049), (160, 26202), (173, 26274), (191, 26439), (205, 26553), (218, 26700), (220, 26715), (234, 26832), (237, 26859), (239, 26880), (241, 26913), (244, 26937), (245, 26943),

Gene: Toast_32 Start: 25556, Stop: 27817, Start Num: 20

Candidate Starts for Toast_32:

(2, 25139), (10, 25397), (Start: 20 @25556 has 63 MA's), (49, 25781), (54, 25823), (68, 25931), (70, 25955), (97, 26453), (108, 26543), (115, 26585), (120, 26621), (134, 26723), (136, 26729), (138, 26762), (142, 26789), (143, 26798), (155, 26909), (157, 26939), (191, 27209), (196, 27245), (205, 27323), (210, 27407), (213, 27437), (220, 27485), (224, 27524), (234, 27602), (238, 27632), (239, 27653), (240, 27671), (255, 27812),

Gene: Togo_35 Start: 30453, Stop: 32717, Start Num: 20

Candidate Starts for Togo_35:

(Start: 20 @30453 has 63 MA's), (39, 30555), (41, 30561), (43, 30564), (51, 30669), (53, 30693), (62, 30792), (63, 30795), (68, 30819), (88, 31206), (103, 31389), (108, 31431), (109, 31446), (123, 31524), (129, 31566), (131, 31587), (138, 31659), (145, 31719), (160, 31869), (173, 31941), (190, 32085), (191, 32106), (205, 32220), (216, 32361), (220, 32382), (221, 32397), (222, 32400), (234, 32499), (240, 32568), (241, 32583), (244, 32607), (245, 32613),

Gene: Trumpet_30 Start: 24787, Stop: 27048, Start Num: 20

Candidate Starts for Trumpet_30:

(Start: 20 @24787 has 63 MA's), (Start: 24 @24802 has 8 MA's), (32, 24859), (41, 24898), (48, 24997), (57, 25084), (60, 25117), (66, 25141), (68, 25150), (70, 25174), (97, 25672), (108, 25762), (109, 25777), (117, 25822), (121, 25849), (138, 25990), (142, 26017), (143, 26026), (144, 26047), (160,

26200), (173, 26272), (191, 26437), (205, 26551), (218, 26698), (220, 26713), (234, 26830), (240, 26899), (244, 26938), (245, 26944),

Gene: TuertoX_28 Start: 22596, Stop: 24848, Start Num: 22

Candidate Starts for TuertoX_28:

(16, 22563), (Start: 22 @22596 has 15 MA's), (39, 22695), (45, 22731), (51, 22812), (53, 22836), (68, 22962), (97, 23484), (108, 23574), (115, 23616), (120, 23652), (134, 23754), (136, 23760), (138, 23793), (142, 23820), (143, 23829), (157, 23970), (189, 24204), (196, 24276), (203, 24336), (205, 24354), (216, 24495), (218, 24501), (220, 24516), (221, 24531), (234, 24633), (237, 24660), (244, 24738), (245, 24744),

Gene: Twister6_38 Start: 30353, Stop: 32620, Start Num: 20

Candidate Starts for Twister6_38:

(Start: 20 @30353 has 63 MA's), (41, 30464), (43, 30467), (50, 30569), (51, 30572), (53, 30596), (62, 30695), (63, 30698), (68, 30722), (88, 31109), (103, 31292), (108, 31334), (109, 31349), (123, 31427), (129, 31469), (131, 31490), (138, 31562), (145, 31622), (160, 31772), (173, 31844), (190, 31988), (191, 32009), (205, 32123), (220, 32285), (221, 32300), (222, 32303), (234, 32402), (240, 32471), (241, 32486), (244, 32510), (245, 32516), (248, 32534),

Gene: Valary_38 Start: 31398, Stop: 33662, Start Num: 20

Candidate Starts for Valary_38:

(Start: 20 @31398 has 63 MA's), (39, 31500), (41, 31506), (43, 31509), (51, 31614), (53, 31638), (62, 31737), (63, 31740), (68, 31764), (88, 32151), (103, 32334), (108, 32376), (109, 32391), (123, 32469), (129, 32511), (131, 32532), (138, 32604), (145, 32664), (160, 32814), (173, 32886), (175, 32892), (190, 33030), (191, 33051), (205, 33165), (220, 33327), (221, 33342), (222, 33345), (233, 33438), (234, 33444), (240, 33513), (241, 33528), (244, 33552), (245, 33558),

Gene: VanDeWege_39 Start: 30687, Stop: 32954, Start Num: 20

Candidate Starts for VanDeWege_39:

(Start: 20 @30687 has 63 MA's), (39, 30792), (41, 30798), (43, 30801), (50, 30903), (51, 30906), (53, 30930), (62, 31029), (63, 31032), (68, 31056), (88, 31443), (103, 31626), (108, 31668), (109, 31683), (123, 31761), (129, 31803), (131, 31824), (138, 31896), (145, 31956), (160, 32106), (173, 32178), (190, 32322), (191, 32343), (205, 32457), (216, 32598), (220, 32619), (221, 32634), (222, 32637), (234, 32736), (240, 32805), (241, 32820), (244, 32844), (245, 32850),

Gene: VanLee_25 Start: 21022, Stop: 22797, Start Num: 20

Candidate Starts for VanLee_25:

(Start: 20 @21022 has 63 MA's), (36, 21094), (51, 21229), (68, 21373), (69, 21388), (73, 21412), (75, 21457), (83, 21613), (89, 21691), (91, 21754), (118, 21955), (126, 22006), (132, 22024), (149, 22195), (154, 22225), (164, 22300), (171, 22333), (178, 22375), (188, 22450), (192, 22495), (200, 22549), (207, 22615), (210, 22648), (226, 22777), (227, 22786), (228, 22789),

Gene: Verity_39 Start: 34948, Stop: 37185, Start Num: 27

Candidate Starts for Verity_39:

(12, 34783), (Start: 26 @34942 has 1 MA's), (Start: 27 @34948 has 17 MA's), (33, 34993), (40, 35026), (41, 35032), (43, 35035), (50, 35137), (51, 35140), (52, 35155), (56, 35212), (68, 35290), (70, 35314), (72, 35320), (107, 35893), (108, 35902), (112, 35947), (119, 35980), (125, 36025), (129, 36040), (131, 36061), (134, 36094), (142, 36160), (145, 36193), (182, 36481), (186, 36499), (196, 36616), (197, 36634), (213, 36808), (220, 36856), (221, 36871), (224, 36895), (232, 36955), (234, 36973), (245, 37087), (254, 37168), (255, 37180),

Gene: ViaConlectus_40 Start: 33397, Stop: 35634, Start Num: 27

Candidate Starts for ViaConlectus_40:

(12, 33232), (Start: 26 @33391 has 1 MA's), (Start: 27 @33397 has 17 MA's), (33, 33442), (40, 33475), (41, 33481), (43, 33484), (50, 33586), (51, 33589), (52, 33604), (56, 33661), (68, 33739), (70, 33763), (72, 33769), (107, 34342), (108, 34351), (112, 34396), (119, 34429), (125, 34474), (129, 34489), (131, 34510), (134, 34543), (142, 34609), (145, 34642), (160, 34792), (186, 34948), (197, 35083), (213, 35257), (220, 35305), (221, 35320), (224, 35344), (232, 35404), (234, 35422), (245, 35536), (255, 35629),

Gene: WelcomeAyanna_27 Start: 24767, Stop: 27019, Start Num: 20

Candidate Starts for WelcomeAyanna_27:

(Start: 20 @24767 has 63 MA's), (Start: 24 @24782 has 8 MA's), (32, 24839), (48, 24977), (57, 25064), (60, 25097), (66, 25121), (68, 25130), (70, 25154), (88, 25517), (103, 25700), (108, 25742), (129, 25868), (139, 25964), (142, 25988), (157, 26138), (196, 26444), (205, 26522), (218, 26669), (220, 26684), (221, 26699), (223, 26717), (234, 26801), (238, 26831), (239, 26852), (242, 26894), (244, 26909), (245, 26915), (246, 26927), (251, 26966), (252, 26969), (255, 27011),

Gene: Whiteclaw_28 Start: 22596, Stop: 24848, Start Num: 22

Candidate Starts for Whiteclaw_28:

(16, 22563), (Start: 22 @22596 has 15 MA's), (39, 22695), (45, 22731), (51, 22812), (53, 22836), (68, 22962), (97, 23484), (108, 23574), (115, 23616), (120, 23652), (134, 23754), (136, 23760), (138, 23793), (142, 23820), (143, 23829), (157, 23970), (189, 24204), (196, 24276), (203, 24336), (205, 24354), (216, 24495), (218, 24501), (220, 24516), (221, 24531), (234, 24633), (237, 24660), (244, 24738), (245, 24744),

Gene: William_32 Start: 25382, Stop: 27646, Start Num: 20

Candidate Starts for William_32:

(Start: 20 @25382 has 63 MA's), (36, 25469), (49, 25607), (54, 25649), (68, 25757), (70, 25781), (97, 26279), (108, 26369), (110, 26399), (115, 26411), (123, 26459), (139, 26591), (142, 26615), (163, 26813), (189, 27002), (197, 27092), (205, 27152), (210, 27236), (213, 27266), (216, 27293), (220, 27314), (229, 27383), (234, 27431), (238, 27461), (240, 27500), (255, 27641),

Gene: Wizard_35 Start: 30596, Stop: 32860, Start Num: 20

Candidate Starts for Wizard_35:

(Start: 20 @30596 has 63 MA's), (39, 30698), (41, 30704), (43, 30707), (51, 30812), (53, 30836), (62, 30935), (63, 30938), (68, 30962), (88, 31349), (103, 31532), (108, 31574), (109, 31589), (123, 31667), (129, 31709), (131, 31730), (138, 31802), (145, 31862), (160, 32012), (173, 32084), (190, 32228), (191, 32249), (205, 32363), (216, 32504), (220, 32525), (221, 32540), (222, 32543), (234, 32642), (240, 32711), (241, 32726), (244, 32750), (245, 32756),

Gene: Yeet412_28 Start: 22589, Stop: 24844, Start Num: 22

Candidate Starts for Yeet412_28:

(16, 22556), (Start: 22 @22589 has 15 MA's), (29, 22625), (39, 22688), (45, 22724), (47, 22772), (51, 22805), (68, 22955), (97, 23477), (108, 23567), (115, 23609), (120, 23645), (134, 23747), (136, 23753), (138, 23786), (142, 23813), (143, 23822), (144, 23843), (160, 23996), (173, 24068), (175, 24074), (191, 24233), (205, 24347), (218, 24494), (220, 24509), (234, 24626), (240, 24695), (244, 24734), (245, 24740),

Gene: Yeezy_30 Start: 24023, Stop: 26269, Start Num: 24

Candidate Starts for Yeezy_30:

(Start: 20 @24008 has 63 MA's), (Start: 24 @24023 has 8 MA's), (32, 24080), (41, 24119), (48, 24218), (57, 24305), (60, 24338), (66, 24362), (68, 24371), (70, 24395), (97, 24893), (108, 24983), (109, 24998), (117, 25043), (138, 25211), (142, 25238), (143, 25247), (144, 25268), (160, 25421), (173, 25493), (175, 25499), (191, 25658), (203, 25754), (205, 25772), (218, 25919), (220, 25934), (234, 26051), (240, 26120), (244, 26159), (245, 26165),

Gene: Zameen_30 Start: 24801, Stop: 27047, Start Num: 24

Candidate Starts for Zameen_30:

(Start: 20 @24786 has 63 MA's), (Start: 24 @24801 has 8 MA's), (32, 24858), (41, 24897), (48, 24996), (57, 25083), (60, 25116), (66, 25140), (68, 25149), (70, 25173), (97, 25671), (108, 25761), (109, 25776), (117, 25821), (121, 25848), (138, 25989), (142, 26016), (143, 26025), (144, 26046), (160, 26199), (173, 26271), (191, 26436), (205, 26550), (218, 26697), (220, 26712), (234, 26829), (240, 26898), (244, 26937), (245, 26943),

Gene: Zipp_39 Start: 34851, Stop: 37088, Start Num: 27

Candidate Starts for Zipp_39:

(Start: 26 @34845 has 1 MA's), (Start: 27 @34851 has 17 MA's), (33, 34896), (40, 34929), (41, 34935), (43, 34938), (50, 35040), (51, 35043), (52, 35058), (56, 35115), (68, 35193), (70, 35217), (72, 35223), (107, 35796), (108, 35805), (112, 35850), (119, 35883), (125, 35928), (129, 35943), (131, 35964), (134, 35997), (142, 36063), (145, 36096), (182, 36384), (186, 36402), (196, 36519), (197, 36537), (213, 36711), (220, 36759), (221, 36774), (224, 36798), (232, 36858), (234, 36876), (239, 36927), (245, 36990), (255, 37083),

Gene: Zirinka_28 Start: 24801, Stop: 27062, Start Num: 20

Candidate Starts for Zirinka_28:

(Start: 20 @24801 has 63 MA's), (Start: 24 @24816 has 8 MA's), (32, 24873), (41, 24912), (48, 25011), (57, 25098), (60, 25131), (66, 25155), (68, 25164), (70, 25188), (97, 25686), (108, 25776), (109, 25791), (117, 25836), (121, 25863), (138, 26004), (142, 26031), (143, 26040), (144, 26061), (160, 26214), (173, 26286), (190, 26430), (191, 26451), (203, 26547), (205, 26565), (218, 26712), (220, 26727), (221, 26742), (231, 26820), (234, 26844), (240, 26913), (241, 26928), (244, 26952), (245, 26958),

Gene: Zitch_41 Start: 32654, Stop: 34882, Start Num: 27

Candidate Starts for Zitch_41:

(12, 32489), (Start: 26 @32648 has 1 MA's), (Start: 27 @32654 has 17 MA's), (33, 32699), (40, 32732), (41, 32738), (43, 32741), (50, 32843), (51, 32846), (52, 32861), (56, 32918), (59, 32951), (68, 32996), (70, 33020), (72, 33026), (108, 33608), (115, 33653), (123, 33701), (128, 33737), (130, 33752), (139, 33833), (142, 33857), (143, 33866), (145, 33890), (160, 34040), (186, 34196), (197, 34331), (210, 34475), (213, 34505), (220, 34553), (221, 34568), (224, 34592), (232, 34652), (234, 34670), (245, 34784), (250, 34829), (255, 34877),