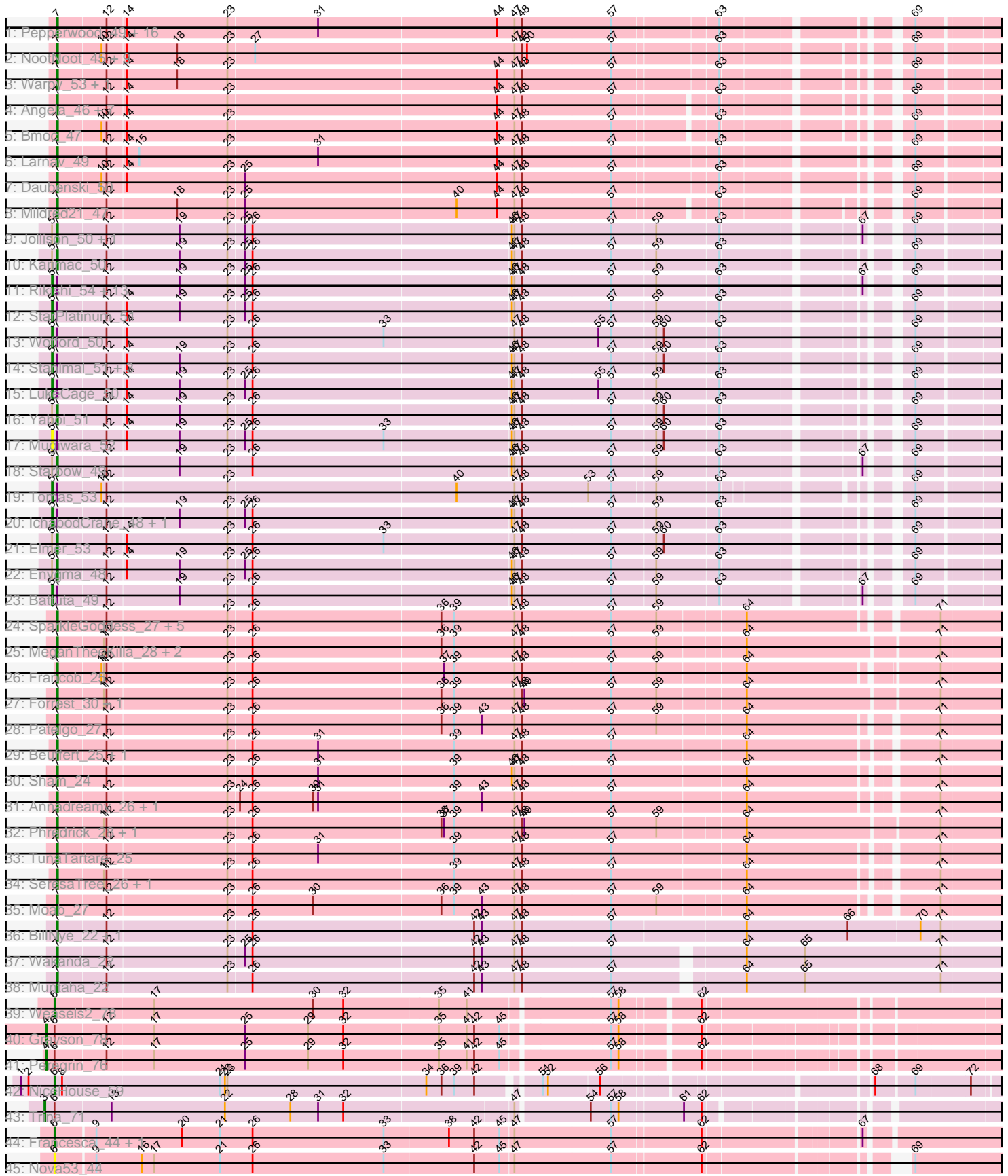


Zoomed Pham 214131



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 214131 Report

This analysis was run 02/22/25 on database version 588.

Pham number 214131 has 110 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Pepperwood_49, HangryHippo_49, Tribute_47, Shuckle_47, PacManQ_48, Sushi23_49, EGole_50, Cross_49, BlueOtter_49, Peebs_48, Scheme_50, Watermoore_49, Lululemon_48, Samisti12_49, Teutsch_49, Cursive_47, Leo04_50
- Track 2 : NootNoot_45, Liandry_48, Persimmon_45, Squillium_48, Bartholomune_47, PinkiePie_47, Braelyn_48, WhereRU_46, Navo_47, Paradiddles_45
- Track 3 : Warpy_53, Marsus_48
- Track 4 : Angela_46, Jay2Jay_54, Evy_50, MulchMansion_46, Targaryen_50, LilMartin_46, Riptide_47, Anedea_47
- Track 5 : Bmoc_47
- Track 6 : Larnav_49
- Track 7 : Daubenski_50
- Track 8 : Mildred21_47
- Track 9 : Jollison_50, Gibbi_55
- Track 10 : Karimac_50
- Track 11 : Rikishi_54, TomSawyer_49, Wipeout_49, KentuckyRacer_51, Bordeaux_49, Birchlyn_48, JimJam_51, Spelly_51, MindFlayer_49, Amabiko_51, CeilingFan_50, Quaran19_51, PumpkinSpice_50, SaltySpittoon_51
- Track 12 : StarPlatinum_51
- Track 13 : Wofford_50
- Track 14 : Stanimal_51, Sollertia_51, Genie2_51, BoomerJR_51
- Track 15 : LukeCage_50
- Track 16 : Yaboi_51
- Track 17 : Mugiwara_52
- Track 18 : Starbow_49
- Track 19 : Tomas_53
- Track 20 : IchabodCrane_48, Spilled_52
- Track 21 : Elmer_53
- Track 22 : Enygma_48
- Track 23 : Battuta_49
- Track 24 : SparkleGoddess_27, Belfort_28, Stigma_27, Comrade_27, Westy_27, Karp_26
- Track 25 : MeganTheeKilla_28, Gilson_30, Emma1919_30
- Track 26 : Francob_25
- Track 27 : Forrest_30, Jada_28
- Track 28 : Patelgo_27

- Track 29 : Beuffert_25, Blueeyedbeauty_28
- Track 30 : Sham_24
- Track 31 : Annadreamy_26, Limpid_26
- Track 32 : Phredrick_28, Kenrey_30
- Track 33 : TunaTartare_25
- Track 34 : SeresaTree_26, Faust_26
- Track 35 : Moab_27
- Track 36 : BillNye_22, Circinus_24
- Track 37 : Wakanda_22
- Track 38 : Muntaha_22
- Track 39 : Weasels2_78
- Track 40 : Grayson_78
- Track 41 : Peregrin_76
- Track 42 : NiceHouse_59
- Track 43 : Trina_71
- Track 44 : Francesca_44, Dorin_45
- Track 45 : Nova53_44

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

The start number called the most often in the published annotations is 7, it was called in 69 of the 100 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anedeaa_47, Angela_46, Annadreamy_26, Bartholomune_47, Belfort_28, Beuffert_25, BillNye_22, BlueOtter_49, Blueeyedbeauty_28, Bmoc_47, Braelyn_48, Circinus_24, Comrade_27, Cross_49, Cursive_47, Daubenski_50, EGole_50, Elmer_53, Emma1919_30, Enygma_48, Evy_50, Faust_26, Forrest_30, Francob_25, Gibbi_55, Gilson_30, HangryHippo_49, Jada_28, Jay2Jay_54, Jollison_50, Karimac_50, Karp_26, Kenrey_30, Larnav_49, Leo04_50, Liandry_48, LilMartin_46, Limpid_26, Lululemon_48, Marsus_48, MeganTheeKilla_28, Mildred21_47, Moab_27, MulchMansion_46, Muntaha_22, Navo_47, NootNoot_45, PacManQ_48, Paradiddles_45, Patelgo_27, Peebs_48, Pepperwood_49, Persimmon_45, Phredrick_28, PinkiePie_47, Riptide_47, Samisti12_49, Scheme_50, SeresaTree_26, Sham_24, Shuckle_47, SparkleGoddess_27, Squillium_48, Starbow_49, Stigma_27, Sushi23_49, Targaryen_50, Teutsch_49, Tribute_47, TunaTartare_25, Wakanda_22, Warpy_53, Watermoore_49, Westy_27, WhereRU_46, Yaboi_51,

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

- Amabiko_51, Battuta_49, Birchlyn_48, BoomerJR_51, Bordeaux_49, CeilingFan_50, Genie2_51, IchabodCrane_48, JimJam_51, KentuckyRacer_51, LukeCage_50, MindFlayer_49, Mugiwara_52, PumpkinSpice_50, Quarant19_51, Rikishi_54, SaltySpittoon_51, Sollertia_51, Spelly_51, Spilled_52, Stanimal_51, StarPlatinum_51, TomSawyer_49, Tomas_53, Wipeout_49, Wofford_50,

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

- Dorin_45, Francesca_44, Grayson_78, NiceHouse_59, Nova53_44, Peregrin_76, Trina_71, Weasels2_78,

Summary by start number:

Start 3:

- Found in 1 of 110 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 100
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trina_71 (CE),

Start 4:

- Found in 2 of 110 (1.8%) of genes in pham
- Manual Annotations of this start: 2 of 100
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Grayson_78 (CB), Peregrin_76 (CB),

Start 5:

- Found in 33 of 110 (30.0%) of genes in pham
- Manual Annotations of this start: 24 of 100
- Called 78.8% of time when present
- Phage (with cluster) where this start called: Amabiko_51 (BE2), Battuta_49 (BE2), Birchlyn_48 (BE2), BoomerJR_51 (BE2), Bordeaux_49 (BE2), CeilingFan_50 (BE2), Genie2_51 (BE2), IchabodCrane_48 (BE2), JimJam_51 (BE2), KentuckyRacer_51 (BE2), LukeCage_50 (BE2), MindFlayer_49 (BE2), Mugiwara_52 (BE2), PumpkinSpice_50 (BE2), Quarant19_51 (BE2), Rikishi_54 (BE2), SaltySpittoon_51 (BE2), Sollertia_51 (BE2), Spelly_51 (BE2), Spilled_52 (BE2), Stanimal_51 (BE2), StarPlatinum_51 (BE2), TomSawyer_49 (BE2), Tomas_53 (BE2), Wipeout_49 (BE2), Wofford_50 (BE2),

Start 6:

- Found in 8 of 110 (7.3%) of genes in pham
- Manual Annotations of this start: 4 of 100
- Called 62.5% of time when present
- Phage (with cluster) where this start called: Dorin_45 (CG), Francesca_44 (CG), NiceHouse_59 (CE), Nova53_44 (CG), Weasels2_78 (CB),

Start 7:

- Found in 102 of 110 (92.7%) of genes in pham
- Manual Annotations of this start: 69 of 100
- Called 74.5% of time when present
- Phage (with cluster) where this start called: Anedea_47 (BE1), Angela_46 (BE1), Annadreamy_26 (BK1), Bartholomune_47 (BE1), Belfort_28 (BK1), Beuffert_25 (BK1), BillNye_22 (BK2), BlueOtter_49 (BE1), Blueeyedbeauty_28 (BK1), Bmoc_47 (BE1), Braelyn_48 (BE1), Circinus_24 (BK2), Comrade_27 (BK1), Cross_49 (BE1), Cursive_47 (BE1), Daubenski_50 (BE1), EGole_50 (BE1), Elmer_53 (BE2), Emma1919_30 (BK1), Enygma_48 (BE2), Evy_50 (BE1), Faust_26 (BK1), Forrest_30 (BK1), Francob_25 (BK1), Gibbi_55 (BE2), Gilson_30 (BK1), HangryHippo_49 (BE1), Jada_28 (BK1), Jay2Jay_54 (BE1), Jollison_50 (BE2), Karimac_50 (BE2), Karp_26 (BK1), Kenrey_30 (BK1), Larnav_49 (BE1), Leo04_50 (BE1), Liandry_48 (BE1), LilMartin_46 (BE1), Limpid_26 (BK1), Lululemon_48 (BE1), Marsus_48 (BE1), MeganTheeKilla_28 (BK1), Mildred21_47 (BE1), Moab_27 (BK1), MulchMansion_46 (BE1), Muntaha_22 (BK2), Navo_47 (BE1), NootNoot_45 (BE1), PacManQ_48 (BE1), Paradiddles_45 (BE1), Patelgo_27 (BK1), Peebs_48 (BE1), Pepperwood_49 (BE1), Persimmon_45 (BE1), Phredrick_28 (BK1), PinkiePie_47 (BE1), Riptide_47 (BE1), Samisti12_49 (BE1), Scheme_50 (BE1), SeresaTree_26 (BK1), Sham_24 (BK1), Shuckle_47 (BE1), SparkleGoddess_27 (BK1), Squillium_48 (BE1), Starbow_49

(BE2), Stigma_27 (BK1), Sushi23_49 (BE1), Targaryen_50 (BE1), Teutsch_49 (BE1), Tribute_47 (BE1), TunaTartare_25 (BK1), Wakanda_22 (BK2), Warpy_53 (BE1), Watermoore_49 (BE1), Westy_27 (BK1), WhereRU_46 (BE1), Yaboi_51 (BE2),

Summary by clusters:

There are 7 clusters represented in this pham: CB, CG, CE, BK1, BK2, BE2, BE1,

Info for manual annotations of cluster BE1:

- Start number 7 was manually annotated 37 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 5 was manually annotated 24 times for cluster BE2.
- Start number 7 was manually annotated 6 times for cluster BE2.

Info for manual annotations of cluster BK1:

- Start number 7 was manually annotated 22 times for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 7 was manually annotated 4 times for cluster BK2.

Info for manual annotations of cluster CB:

- Start number 4 was manually annotated 2 times for cluster CB.
- Start number 6 was manually annotated 1 time for cluster CB.

Info for manual annotations of cluster CE:

- Start number 3 was manually annotated 1 time for cluster CE.
- Start number 6 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster CG:

- Start number 6 was manually annotated 2 times for cluster CG.

Gene Information:

Gene: Amabiko_51 Start: 26737, Stop: 28029, Start Num: 5

Candidate Starts for Amabiko_51:

(Start: 5 @26737 has 24 MA's), (Start: 7 @26743 has 69 MA's), (12, 26797), (19, 26881), (23, 26938), (25, 26956), (26, 26965), (46, 27268), (47, 27271), (48, 27280), (57, 27385), (59, 27436), (63, 27508), (67, 27652), (69, 27691),

Gene: Anedea_47 Start: 26276, Stop: 27547, Start Num: 7

Candidate Starts for Anedea_47:

(Start: 7 @26276 has 69 MA's), (12, 26330), (14, 26351), (23, 26471), (44, 26786), (47, 26807), (48, 26816), (57, 26921), (63, 27032), (69, 27209),

Gene: Angela_46 Start: 25756, Stop: 27027, Start Num: 7

Candidate Starts for Angela_46:

(Start: 7 @25756 has 69 MA's), (12, 25810), (14, 25831), (23, 25951), (44, 26266), (47, 26287), (48, 26296), (57, 26401), (63, 26512), (69, 26689),

Gene: Annadreamy_26 Start: 15166, Stop: 16485, Start Num: 7

Candidate Starts for Annadreamy_26:

(Start: 7 @15166 has 69 MA's), (12, 15220), (23, 15361), (24, 15373), (26, 15388), (30, 15460), (31, 15466), (39, 15625), (43, 15658), (47, 15697), (48, 15706), (57, 15811), (64, 15967), (71, 16168), (77, 16381),

Gene: Bartholomune_47 Start: 26053, Stop: 27330, Start Num: 7

Candidate Starts for Bartholomune_47:

(Start: 7 @26053 has 69 MA's), (10, 26101), (12, 26107), (14, 26128), (18, 26188), (23, 26248), (27, 26278), (47, 26584), (48, 26593), (50, 26599), (57, 26698), (63, 26815), (69, 26992),

Gene: Battuta_49 Start: 26711, Stop: 28003, Start Num: 5

Candidate Starts for Battuta_49:

(Start: 5 @26711 has 24 MA's), (Start: 7 @26717 has 69 MA's), (12, 26771), (19, 26855), (23, 26912), (26, 26939), (46, 27242), (47, 27245), (48, 27254), (57, 27359), (59, 27410), (63, 27482), (67, 27626), (69, 27665),

Gene: Belfort_28 Start: 15851, Stop: 17170, Start Num: 7

Candidate Starts for Belfort_28:

(Start: 7 @15851 has 69 MA's), (12, 15905), (23, 16046), (26, 16073), (36, 16295), (39, 16310), (47, 16382), (48, 16391), (57, 16496), (59, 16550), (64, 16649), (71, 16850),

Gene: Beuffert_25 Start: 14850, Stop: 16169, Start Num: 7

Candidate Starts for Beuffert_25:

(Start: 7 @14850 has 69 MA's), (12, 14904), (23, 15045), (26, 15072), (31, 15150), (39, 15309), (47, 15381), (48, 15390), (57, 15495), (64, 15651), (71, 15852), (77, 16065),

Gene: BillNye_22 Start: 15556, Stop: 16902, Start Num: 7

Candidate Starts for BillNye_22:

(Start: 7 @15556 has 69 MA's), (12, 15610), (23, 15751), (26, 15778), (42, 16039), (43, 16048), (47, 16087), (48, 16096), (57, 16201), (64, 16357), (66, 16477), (70, 16561), (71, 16585), (74, 16699),

Gene: Birchlyn_48 Start: 24594, Stop: 25886, Start Num: 5

Candidate Starts for Birchlyn_48:

(Start: 5 @24594 has 24 MA's), (Start: 7 @24600 has 69 MA's), (12, 24654), (19, 24738), (23, 24795), (25, 24813), (26, 24822), (46, 25125), (47, 25128), (48, 25137), (57, 25242), (59, 25293), (63, 25365), (67, 25509), (69, 25548),

Gene: BlueOtter_49 Start: 27406, Stop: 28689, Start Num: 7

Candidate Starts for BlueOtter_49:

(Start: 7 @27406 has 69 MA's), (12, 27460), (14, 27481), (23, 27601), (31, 27706), (44, 27916), (47, 27937), (48, 27946), (57, 28051), (63, 28168), (69, 28351), (76, 28567),

Gene: Blueeyedbeauty_28 Start: 15660, Stop: 16979, Start Num: 7

Candidate Starts for Blueeyedbeauty_28:

(Start: 7 @15660 has 69 MA's), (12, 15714), (23, 15855), (26, 15882), (31, 15960), (39, 16119), (47, 16191), (48, 16200), (57, 16305), (64, 16461), (71, 16662), (77, 16875),

Gene: Bmoc_47 Start: 26061, Stop: 27332, Start Num: 7

Candidate Starts for Bmoc_47:

(Start: 7 @26061 has 69 MA's), (10, 26109), (12, 26115), (14, 26136), (23, 26256), (44, 26571), (47, 26592), (48, 26601), (57, 26706), (63, 26817), (69, 26994),

Gene: BoomerJR_51 Start: 26592, Stop: 27887, Start Num: 5

Candidate Starts for BoomerJR_51:

(Start: 5 @26592 has 24 MA's), (Start: 7 @26598 has 69 MA's), (12, 26652), (14, 26673), (19, 26736), (23, 26793), (26, 26820), (46, 27123), (47, 27126), (48, 27135), (57, 27240), (59, 27291), (60, 27300), (63, 27363), (69, 27546),

Gene: Bordeaux_49 Start: 26866, Stop: 28158, Start Num: 5

Candidate Starts for Bordeaux_49:

(Start: 5 @26866 has 24 MA's), (Start: 7 @26872 has 69 MA's), (12, 26926), (19, 27010), (23, 27067), (25, 27085), (26, 27094), (46, 27397), (47, 27400), (48, 27409), (57, 27514), (59, 27565), (63, 27637), (67, 27781), (69, 27820),

Gene: Braelyn_48 Start: 26820, Stop: 28097, Start Num: 7

Candidate Starts for Braelyn_48:

(Start: 7 @26820 has 69 MA's), (10, 26868), (12, 26874), (14, 26895), (18, 26955), (23, 27015), (27, 27045), (47, 27351), (48, 27360), (50, 27366), (57, 27465), (63, 27582), (69, 27759),

Gene: CeilingFan_50 Start: 26626, Stop: 27918, Start Num: 5

Candidate Starts for CeilingFan_50:

(Start: 5 @26626 has 24 MA's), (Start: 7 @26632 has 69 MA's), (12, 26686), (19, 26770), (23, 26827), (25, 26845), (26, 26854), (46, 27157), (47, 27160), (48, 27169), (57, 27274), (59, 27325), (63, 27397), (67, 27541), (69, 27580),

Gene: Circinus_24 Start: 15692, Stop: 17038, Start Num: 7

Candidate Starts for Circinus_24:

(Start: 7 @15692 has 69 MA's), (12, 15746), (23, 15887), (26, 15914), (42, 16175), (43, 16184), (47, 16223), (48, 16232), (57, 16337), (64, 16493), (66, 16613), (70, 16697), (71, 16721), (74, 16835),

Gene: Comrade_27 Start: 15466, Stop: 16785, Start Num: 7

Candidate Starts for Comrade_27:

(Start: 7 @15466 has 69 MA's), (12, 15520), (23, 15661), (26, 15688), (36, 15910), (39, 15925), (47, 15997), (48, 16006), (57, 16111), (59, 16165), (64, 16264), (71, 16465),

Gene: Cross_49 Start: 27407, Stop: 28690, Start Num: 7

Candidate Starts for Cross_49:

(Start: 7 @27407 has 69 MA's), (12, 27461), (14, 27482), (23, 27602), (31, 27707), (44, 27917), (47, 27938), (48, 27947), (57, 28052), (63, 28169), (69, 28352), (76, 28568),

Gene: Cursive_47 Start: 26932, Stop: 28215, Start Num: 7

Candidate Starts for Cursive_47:

(Start: 7 @26932 has 69 MA's), (12, 26986), (14, 27007), (23, 27127), (31, 27232), (44, 27442), (47, 27463), (48, 27472), (57, 27577), (63, 27694), (69, 27877), (76, 28093),

Gene: Daubenski_50 Start: 27161, Stop: 28444, Start Num: 7

Candidate Starts for Daubenski_50:

(Start: 7 @27161 has 69 MA's), (10, 27209), (12, 27215), (14, 27236), (23, 27356), (25, 27374), (44, 27671), (47, 27692), (48, 27701), (57, 27806), (63, 27923), (69, 28106),

Gene: Dorin_45 Start: 26479, Stop: 27768, Start Num: 6

Candidate Starts for Dorin_45:

(Start: 6 @26479 has 4 MA's), (9, 26524), (20, 26626), (21, 26671), (26, 26710), (33, 26866), (38, 26941), (42, 26971), (45, 27001), (47, 27016), (57, 27130), (62, 27232), (67, 27397),

Gene: EGole_50 Start: 28311, Stop: 29594, Start Num: 7

Candidate Starts for EGole_50:

(Start: 7 @28311 has 69 MA's), (12, 28365), (14, 28386), (23, 28506), (31, 28611), (44, 28821), (47, 28842), (48, 28851), (57, 28956), (63, 29073), (69, 29256), (76, 29472),

Gene: Elmer_53 Start: 27780, Stop: 29066, Start Num: 7

Candidate Starts for Elmer_53:

(Start: 5 @27774 has 24 MA's), (Start: 7 @27780 has 69 MA's), (12, 27834), (14, 27855), (23, 27975), (26, 28002), (33, 28158), (47, 28308), (48, 28317), (57, 28422), (59, 28473), (60, 28482), (63, 28545), (69, 28728),

Gene: Emma1919_30 Start: 16071, Stop: 17405, Start Num: 7

Candidate Starts for Emma1919_30:

(Start: 7 @16071 has 69 MA's), (11, 16122), (12, 16125), (23, 16266), (26, 16293), (36, 16515), (39, 16530), (47, 16602), (48, 16611), (57, 16716), (59, 16770), (64, 16869), (71, 17088),

Gene: Enygma_48 Start: 26693, Stop: 27979, Start Num: 7

Candidate Starts for Enygma_48:

(Start: 5 @26687 has 24 MA's), (Start: 7 @26693 has 69 MA's), (12, 26747), (14, 26768), (19, 26831), (23, 26888), (25, 26906), (26, 26915), (46, 27218), (47, 27221), (48, 27230), (57, 27335), (59, 27386), (63, 27458), (69, 27641),

Gene: Evy_50 Start: 27415, Stop: 28692, Start Num: 7

Candidate Starts for Evy_50:

(Start: 7 @27415 has 69 MA's), (12, 27469), (14, 27490), (23, 27610), (44, 27925), (47, 27946), (48, 27955), (57, 28060), (63, 28177), (69, 28354),

Gene: Faust_26 Start: 15321, Stop: 16640, Start Num: 7

Candidate Starts for Faust_26:

(Start: 7 @15321 has 69 MA's), (11, 15372), (12, 15375), (23, 15516), (26, 15543), (39, 15780), (47, 15852), (48, 15861), (57, 15966), (64, 16122), (71, 16320), (77, 16533),

Gene: Forrest_30 Start: 16194, Stop: 17528, Start Num: 7

Candidate Starts for Forrest_30:

(Start: 7 @16194 has 69 MA's), (11, 16245), (12, 16248), (23, 16389), (26, 16416), (36, 16638), (39, 16653), (47, 16725), (48, 16734), (49, 16737), (57, 16839), (59, 16893), (64, 16992), (71, 17211),

Gene: Francesca_44 Start: 26611, Stop: 27900, Start Num: 6

Candidate Starts for Francesca_44:

(Start: 6 @26611 has 4 MA's), (9, 26656), (20, 26758), (21, 26803), (26, 26842), (33, 26998), (38, 27073), (42, 27103), (45, 27133), (47, 27148), (57, 27262), (62, 27364), (67, 27529),

Gene: Francob_25 Start: 14465, Stop: 15784, Start Num: 7

Candidate Starts for Francob_25:

(Start: 7 @14465 has 69 MA's), (10, 14513), (11, 14516), (12, 14519), (23, 14660), (26, 14687), (37, 14912), (39, 14924), (47, 14996), (48, 15005), (57, 15110), (59, 15164), (64, 15263), (71, 15467),

Gene: Genie2_51 Start: 26706, Stop: 28001, Start Num: 5

Candidate Starts for Genie2_51:

(Start: 5 @26706 has 24 MA's), (Start: 7 @26712 has 69 MA's), (12, 26766), (14, 26787), (19, 26850), (23, 26907), (26, 26934), (46, 27237), (47, 27240), (48, 27249), (57, 27354), (59, 27405), (60, 27414), (63, 27477), (69, 27660),

Gene: Gibbi_55 Start: 26855, Stop: 28141, Start Num: 7

Candidate Starts for Gibbi_55:

(Start: 5 @26849 has 24 MA's), (Start: 7 @26855 has 69 MA's), (12, 26909), (19, 26993), (23, 27050), (25, 27068), (26, 27077), (46, 27380), (47, 27383), (48, 27392), (57, 27497), (59, 27548), (63, 27620), (67, 27764), (69, 27803),

Gene: Gilson_30 Start: 16024, Stop: 17358, Start Num: 7

Candidate Starts for Gilson_30:

(Start: 7 @16024 has 69 MA's), (11, 16075), (12, 16078), (23, 16219), (26, 16246), (36, 16468), (39, 16483), (47, 16555), (48, 16564), (57, 16669), (59, 16723), (64, 16822), (71, 17041),

Gene: Grayson_78 Start: 38978, Stop: 40285, Start Num: 4

Candidate Starts for Grayson_78:

(Start: 4 @38978 has 2 MA's), (Start: 6 @38987 has 4 MA's), (12, 39044), (17, 39098), (25, 39206), (29, 39281), (32, 39323), (35, 39434), (41, 39467), (42, 39476), (45, 39506), (57, 39626), (58, 39635), (62, 39719), (80, 40253), (81, 40265),

Gene: HangryHippo_49 Start: 27406, Stop: 28689, Start Num: 7

Candidate Starts for HangryHippo_49:

(Start: 7 @27406 has 69 MA's), (12, 27460), (14, 27481), (23, 27601), (31, 27706), (44, 27916), (47, 27937), (48, 27946), (57, 28051), (63, 28168), (69, 28351), (76, 28567),

Gene: IchabodCrane_48 Start: 26438, Stop: 27730, Start Num: 5

Candidate Starts for IchabodCrane_48:

(Start: 5 @26438 has 24 MA's), (Start: 7 @26444 has 69 MA's), (12, 26498), (19, 26582), (23, 26639), (25, 26657), (26, 26666), (46, 26969), (47, 26972), (48, 26981), (57, 27086), (59, 27137), (63, 27209), (69, 27392),

Gene: Jada_28 Start: 15376, Stop: 16710, Start Num: 7

Candidate Starts for Jada_28:

(Start: 7 @15376 has 69 MA's), (11, 15427), (12, 15430), (23, 15571), (26, 15598), (36, 15820), (39, 15835), (47, 15907), (48, 15916), (49, 15919), (57, 16021), (59, 16075), (64, 16174), (71, 16393),

Gene: Jay2Jay_54 Start: 28223, Stop: 29500, Start Num: 7

Candidate Starts for Jay2Jay_54:

(Start: 7 @28223 has 69 MA's), (12, 28277), (14, 28298), (23, 28418), (44, 28733), (47, 28754), (48, 28763), (57, 28868), (63, 28985), (69, 29162),

Gene: JimJam_51 Start: 26812, Stop: 28104, Start Num: 5

Candidate Starts for JimJam_51:

(Start: 5 @26812 has 24 MA's), (Start: 7 @26818 has 69 MA's), (12, 26872), (19, 26956), (23, 27013), (25, 27031), (26, 27040), (46, 27343), (47, 27346), (48, 27355), (57, 27460), (59, 27511), (63, 27583), (67, 27727), (69, 27766),

Gene: Jollison_50 Start: 26700, Stop: 27986, Start Num: 7

Candidate Starts for Jollison_50:

(Start: 5 @26694 has 24 MA's), (Start: 7 @26700 has 69 MA's), (12, 26754), (19, 26838), (23, 26895), (25, 26913), (26, 26922), (46, 27225), (47, 27228), (48, 27237), (57, 27342), (59, 27393), (63, 27465), (67, 27609), (69, 27648),

Gene: Karimac_50 Start: 26849, Stop: 28135, Start Num: 7

Candidate Starts for Karimac_50:

(Start: 5 @26843 has 24 MA's), (Start: 7 @26849 has 69 MA's), (12, 26903), (19, 26987), (23, 27044), (25, 27062), (26, 27071), (46, 27374), (47, 27377), (48, 27386), (57, 27491), (59, 27542), (63, 27614),

(69, 27797),

Gene: Karp_26 Start: 15067, Stop: 16386, Start Num: 7

Candidate Starts for Karp_26:

(Start: 7 @15067 has 69 MA's), (12, 15121), (23, 15262), (26, 15289), (36, 15511), (39, 15526), (47, 15598), (48, 15607), (57, 15712), (59, 15766), (64, 15865), (71, 16066),

Gene: Kenrey_30 Start: 16073, Stop: 17407, Start Num: 7

Candidate Starts for Kenrey_30:

(Start: 7 @16073 has 69 MA's), (11, 16124), (12, 16127), (23, 16268), (26, 16295), (36, 16517), (37, 16520), (39, 16532), (47, 16604), (48, 16613), (49, 16616), (57, 16718), (59, 16772), (64, 16871), (71, 17090),

Gene: KentuckyRacer_51 Start: 26627, Stop: 27919, Start Num: 5

Candidate Starts for KentuckyRacer_51:

(Start: 5 @26627 has 24 MA's), (Start: 7 @26633 has 69 MA's), (12, 26687), (19, 26771), (23, 26828), (25, 26846), (26, 26855), (46, 27158), (47, 27161), (48, 27170), (57, 27275), (59, 27326), (63, 27398), (67, 27542), (69, 27581),

Gene: Larnav_49 Start: 27391, Stop: 28674, Start Num: 7

Candidate Starts for Larnav_49:

(Start: 7 @27391 has 69 MA's), (12, 27445), (14, 27466), (15, 27481), (23, 27586), (31, 27691), (44, 27901), (47, 27922), (48, 27931), (57, 28036), (63, 28153), (69, 28336), (76, 28552),

Gene: Leo04_50 Start: 27906, Stop: 29189, Start Num: 7

Candidate Starts for Leo04_50:

(Start: 7 @27906 has 69 MA's), (12, 27960), (14, 27981), (23, 28101), (31, 28206), (44, 28416), (47, 28437), (48, 28446), (57, 28551), (63, 28668), (69, 28851), (76, 29067),

Gene: Liandry_48 Start: 26757, Stop: 28034, Start Num: 7

Candidate Starts for Liandry_48:

(Start: 7 @26757 has 69 MA's), (10, 26805), (12, 26811), (14, 26832), (18, 26892), (23, 26952), (27, 26982), (47, 27288), (48, 27297), (50, 27303), (57, 27402), (63, 27519), (69, 27696),

Gene: LilMartin_46 Start: 25704, Stop: 26975, Start Num: 7

Candidate Starts for LilMartin_46:

(Start: 7 @25704 has 69 MA's), (12, 25758), (14, 25779), (23, 25899), (44, 26214), (47, 26235), (48, 26244), (57, 26349), (63, 26460), (69, 26637),

Gene: Limpid_26 Start: 15165, Stop: 16484, Start Num: 7

Candidate Starts for Limpid_26:

(Start: 7 @15165 has 69 MA's), (12, 15219), (23, 15360), (24, 15372), (26, 15387), (30, 15459), (31, 15465), (39, 15624), (43, 15657), (47, 15696), (48, 15705), (57, 15810), (64, 15966), (71, 16167), (77, 16380),

Gene: LukeCage_50 Start: 26591, Stop: 27883, Start Num: 5

Candidate Starts for LukeCage_50:

(Start: 5 @26591 has 24 MA's), (Start: 7 @26597 has 69 MA's), (12, 26651), (14, 26672), (19, 26735), (23, 26792), (25, 26810), (26, 26819), (46, 27122), (47, 27125), (48, 27134), (55, 27224), (57, 27239), (59, 27290), (63, 27362), (69, 27545),

Gene: Lululemon_48 Start: 26787, Stop: 28070, Start Num: 7

Candidate Starts for Lululemon_48:

(Start: 7 @26787 has 69 MA's), (12, 26841), (14, 26862), (23, 26982), (31, 27087), (44, 27297), (47, 27318), (48, 27327), (57, 27432), (63, 27549), (69, 27732), (76, 27948),

Gene: Marsus_48 Start: 25976, Stop: 27247, Start Num: 7

Candidate Starts for Marsus_48:

(Start: 7 @25976 has 69 MA's), (12, 26030), (14, 26051), (18, 26111), (23, 26171), (44, 26486), (47, 26507), (48, 26516), (57, 26621), (63, 26732), (69, 26909),

Gene: MeganTheeKilla_28 Start: 15385, Stop: 16719, Start Num: 7

Candidate Starts for MeganTheeKilla_28:

(Start: 7 @15385 has 69 MA's), (11, 15436), (12, 15439), (23, 15580), (26, 15607), (36, 15829), (39, 15844), (47, 15916), (48, 15925), (57, 16030), (59, 16084), (64, 16183), (71, 16402),

Gene: Mildred21_47 Start: 25889, Stop: 27160, Start Num: 7

Candidate Starts for Mildred21_47:

(Start: 7 @25889 has 69 MA's), (12, 25943), (18, 26024), (23, 26084), (25, 26102), (40, 26351), (44, 26399), (47, 26420), (48, 26429), (57, 26534), (63, 26645), (69, 26822),

Gene: MindFlayer_49 Start: 26345, Stop: 27637, Start Num: 5

Candidate Starts for MindFlayer_49:

(Start: 5 @26345 has 24 MA's), (Start: 7 @26351 has 69 MA's), (12, 26405), (19, 26489), (23, 26546), (25, 26564), (26, 26573), (46, 26876), (47, 26879), (48, 26888), (57, 26993), (59, 27044), (63, 27116), (67, 27260), (69, 27299),

Gene: Moab_27 Start: 15410, Stop: 16726, Start Num: 7

Candidate Starts for Moab_27:

(Start: 7 @15410 has 69 MA's), (12, 15464), (23, 15605), (26, 15632), (30, 15704), (36, 15854), (39, 15869), (43, 15902), (47, 15941), (48, 15950), (57, 16055), (59, 16109), (64, 16208), (71, 16409),

Gene: Mugiwara_52 Start: 27090, Stop: 28382, Start Num: 5

Candidate Starts for Mugiwara_52:

(Start: 5 @27090 has 24 MA's), (Start: 7 @27096 has 69 MA's), (12, 27150), (14, 27171), (19, 27234), (23, 27291), (25, 27309), (26, 27318), (33, 27474), (46, 27621), (47, 27624), (48, 27633), (57, 27738), (59, 27789), (60, 27798), (63, 27861), (69, 28044), (76, 28260),

Gene: MulchMansion_46 Start: 25704, Stop: 26975, Start Num: 7

Candidate Starts for MulchMansion_46:

(Start: 7 @25704 has 69 MA's), (12, 25758), (14, 25779), (23, 25899), (44, 26214), (47, 26235), (48, 26244), (57, 26349), (63, 26460), (69, 26637),

Gene: Muntaha_22 Start: 14981, Stop: 16318, Start Num: 7

Candidate Starts for Muntaha_22:

(Start: 7 @14981 has 69 MA's), (12, 15035), (23, 15176), (26, 15203), (42, 15464), (43, 15473), (47, 15512), (48, 15521), (57, 15626), (64, 15767), (65, 15836), (71, 15998), (74, 16112), (77, 16211),

Gene: Navo_47 Start: 26715, Stop: 27992, Start Num: 7

Candidate Starts for Navo_47:

(Start: 7 @26715 has 69 MA's), (10, 26763), (12, 26769), (14, 26790), (18, 26850), (23, 26910), (27, 26940), (47, 27246), (48, 27255), (50, 27261), (57, 27360), (63, 27477), (69, 27654),

Gene: NiceHouse_59 Start: 32566, Stop: 33672, Start Num: 6

Candidate Starts for NiceHouse_59:

(1, 32527), (2, 32536), (Start: 6 @32566 has 4 MA's), (8, 32575), (21, 32758), (22, 32764), (23, 32767), (34, 33001), (36, 33019), (39, 33034), (42, 33058), (51, 33118), (52, 33124), (56, 33181), (68, 33457), (69, 33499), (72, 33562),

Gene: NootNoot_45 Start: 25671, Stop: 26948, Start Num: 7

Candidate Starts for NootNoot_45:

(Start: 7 @25671 has 69 MA's), (10, 25719), (12, 25725), (14, 25746), (18, 25806), (23, 25866), (27, 25896), (47, 26202), (48, 26211), (50, 26217), (57, 26316), (63, 26433), (69, 26610),

Gene: Nova53_44 Start: 26629, Stop: 27903, Start Num: 6

Candidate Starts for Nova53_44:

(Start: 6 @26629 has 4 MA's), (9, 26674), (16, 26728), (17, 26743), (21, 26821), (26, 26860), (33, 27016), (42, 27121), (45, 27151), (47, 27166), (57, 27280), (62, 27382), (69, 27577),

Gene: PacManQ_48 Start: 26787, Stop: 28070, Start Num: 7

Candidate Starts for PacManQ_48:

(Start: 7 @26787 has 69 MA's), (12, 26841), (14, 26862), (23, 26982), (31, 27087), (44, 27297), (47, 27318), (48, 27327), (57, 27432), (63, 27549), (69, 27732), (76, 27948),

Gene: Paradiddles_45 Start: 25932, Stop: 27209, Start Num: 7

Candidate Starts for Paradiddles_45:

(Start: 7 @25932 has 69 MA's), (10, 25980), (12, 25986), (14, 26007), (18, 26067), (23, 26127), (27, 26157), (47, 26463), (48, 26472), (50, 26478), (57, 26577), (63, 26694), (69, 26871),

Gene: Patelgo_27 Start: 15024, Stop: 16340, Start Num: 7

Candidate Starts for Patelgo_27:

(Start: 7 @15024 has 69 MA's), (12, 15078), (23, 15219), (26, 15246), (36, 15468), (39, 15483), (43, 15516), (47, 15555), (48, 15564), (57, 15669), (59, 15723), (64, 15822), (71, 16023),

Gene: Peebs_48 Start: 27144, Stop: 28427, Start Num: 7

Candidate Starts for Peebs_48:

(Start: 7 @27144 has 69 MA's), (12, 27198), (14, 27219), (23, 27339), (31, 27444), (44, 27654), (47, 27675), (48, 27684), (57, 27789), (63, 27906), (69, 28089), (76, 28305),

Gene: Pepperwood_49 Start: 27277, Stop: 28560, Start Num: 7

Candidate Starts for Pepperwood_49:

(Start: 7 @27277 has 69 MA's), (12, 27331), (14, 27352), (23, 27472), (31, 27577), (44, 27787), (47, 27808), (48, 27817), (57, 27922), (63, 28039), (69, 28222), (76, 28438),

Gene: Peregrin_76 Start: 37759, Stop: 39066, Start Num: 4

Candidate Starts for Peregrin_76:

(Start: 4 @37759 has 2 MA's), (Start: 6 @37768 has 4 MA's), (12, 37825), (17, 37879), (25, 37987), (29, 38062), (32, 38104), (35, 38215), (41, 38248), (42, 38257), (45, 38287), (57, 38407), (58, 38416), (62, 38500), (80, 39034), (81, 39046),

Gene: Persimmon_45 Start: 25646, Stop: 26923, Start Num: 7

Candidate Starts for Persimmon_45:

(Start: 7 @25646 has 69 MA's), (10, 25694), (12, 25700), (14, 25721), (18, 25781), (23, 25841), (27, 25871), (47, 26177), (48, 26186), (50, 26192), (57, 26291), (63, 26408), (69, 26585),

Gene: Phredrick_28 Start: 15279, Stop: 16613, Start Num: 7

Candidate Starts for Phredrick_28:

(Start: 7 @15279 has 69 MA's), (11, 15330), (12, 15333), (23, 15474), (26, 15501), (36, 15723), (37, 15726), (39, 15738), (47, 15810), (48, 15819), (49, 15822), (57, 15924), (59, 15978), (64, 16077), (71, 16296),

Gene: PinkiePie_47 Start: 26757, Stop: 28034, Start Num: 7

Candidate Starts for PinkiePie_47:

(Start: 7 @26757 has 69 MA's), (10, 26805), (12, 26811), (14, 26832), (18, 26892), (23, 26952), (27, 26982), (47, 27288), (48, 27297), (50, 27303), (57, 27402), (63, 27519), (69, 27696),

Gene: PumpkinSpice_50 Start: 26737, Stop: 28029, Start Num: 5

Candidate Starts for PumpkinSpice_50:

(Start: 5 @26737 has 24 MA's), (Start: 7 @26743 has 69 MA's), (12, 26797), (19, 26881), (23, 26938), (25, 26956), (26, 26965), (46, 27268), (47, 27271), (48, 27280), (57, 27385), (59, 27436), (63, 27508), (67, 27652), (69, 27691),

Gene: Quaran19_51 Start: 26728, Stop: 28020, Start Num: 5

Candidate Starts for Quaran19_51:

(Start: 5 @26728 has 24 MA's), (Start: 7 @26734 has 69 MA's), (12, 26788), (19, 26872), (23, 26929), (25, 26947), (26, 26956), (46, 27259), (47, 27262), (48, 27271), (57, 27376), (59, 27427), (63, 27499), (67, 27643), (69, 27682),

Gene: Rikishi_54 Start: 26643, Stop: 27935, Start Num: 5

Candidate Starts for Rikishi_54:

(Start: 5 @26643 has 24 MA's), (Start: 7 @26649 has 69 MA's), (12, 26703), (19, 26787), (23, 26844), (25, 26862), (26, 26871), (46, 27174), (47, 27177), (48, 27186), (57, 27291), (59, 27342), (63, 27414), (67, 27558), (69, 27597),

Gene: Riptide_47 Start: 25497, Stop: 26768, Start Num: 7

Candidate Starts for Riptide_47:

(Start: 7 @25497 has 69 MA's), (12, 25551), (14, 25572), (23, 25692), (44, 26007), (47, 26028), (48, 26037), (57, 26142), (63, 26253), (69, 26430),

Gene: SaltySpittoon_51 Start: 26737, Stop: 28029, Start Num: 5

Candidate Starts for SaltySpittoon_51:

(Start: 5 @26737 has 24 MA's), (Start: 7 @26743 has 69 MA's), (12, 26797), (19, 26881), (23, 26938), (25, 26956), (26, 26965), (46, 27268), (47, 27271), (48, 27280), (57, 27385), (59, 27436), (63, 27508), (67, 27652), (69, 27691),

Gene: Samisti12_49 Start: 28580, Stop: 29863, Start Num: 7

Candidate Starts for Samisti12_49:

(Start: 7 @28580 has 69 MA's), (12, 28634), (14, 28655), (23, 28775), (31, 28880), (44, 29090), (47, 29111), (48, 29120), (57, 29225), (63, 29342), (69, 29525), (76, 29741),

Gene: Scheme_50 Start: 27991, Stop: 29274, Start Num: 7

Candidate Starts for Scheme_50:

(Start: 7 @27991 has 69 MA's), (12, 28045), (14, 28066), (23, 28186), (31, 28291), (44, 28501), (47, 28522), (48, 28531), (57, 28636), (63, 28753), (69, 28936), (76, 29152),

Gene: SeresaTree_26 Start: 14711, Stop: 16030, Start Num: 7

Candidate Starts for SeresaTree_26:

(Start: 7 @14711 has 69 MA's), (11, 14762), (12, 14765), (23, 14906), (26, 14933), (39, 15170), (47, 15242), (48, 15251), (57, 15356), (64, 15512), (71, 15710), (77, 15923),

Gene: Sham_24 Start: 15770, Stop: 17089, Start Num: 7

Candidate Starts for Sham_24:

(Start: 7 @15770 has 69 MA's), (12, 15824), (23, 15965), (26, 15992), (31, 16070), (39, 16229), (46, 16298), (47, 16301), (48, 16310), (57, 16415), (64, 16571), (71, 16769),

Gene: Shuckle_47 Start: 27597, Stop: 28880, Start Num: 7

Candidate Starts for Shuckle_47:

(Start: 7 @27597 has 69 MA's), (12, 27651), (14, 27672), (23, 27792), (31, 27897), (44, 28107), (47, 28128), (48, 28137), (57, 28242), (63, 28359), (69, 28542), (76, 28758),

Gene: Sollertia_51 Start: 26706, Stop: 28001, Start Num: 5

Candidate Starts for Sollertia_51:

(Start: 5 @26706 has 24 MA's), (Start: 7 @26712 has 69 MA's), (12, 26766), (14, 26787), (19, 26850), (23, 26907), (26, 26934), (46, 27237), (47, 27240), (48, 27249), (57, 27354), (59, 27405), (60, 27414), (63, 27477), (69, 27660),

Gene: SparkleGoddess_27 Start: 15468, Stop: 16787, Start Num: 7

Candidate Starts for SparkleGoddess_27:

(Start: 7 @15468 has 69 MA's), (12, 15522), (23, 15663), (26, 15690), (36, 15912), (39, 15927), (47, 15999), (48, 16008), (57, 16113), (59, 16167), (64, 16266), (71, 16467),

Gene: Spelly_51 Start: 26692, Stop: 27984, Start Num: 5

Candidate Starts for Spelly_51:

(Start: 5 @26692 has 24 MA's), (Start: 7 @26698 has 69 MA's), (12, 26752), (19, 26836), (23, 26893), (25, 26911), (26, 26920), (46, 27223), (47, 27226), (48, 27235), (57, 27340), (59, 27391), (63, 27463), (67, 27607), (69, 27646),

Gene: Spilled_52 Start: 26809, Stop: 28101, Start Num: 5

Candidate Starts for Spilled_52:

(Start: 5 @26809 has 24 MA's), (Start: 7 @26815 has 69 MA's), (12, 26869), (19, 26953), (23, 27010), (25, 27028), (26, 27037), (46, 27340), (47, 27343), (48, 27352), (57, 27457), (59, 27508), (63, 27580), (69, 27763),

Gene: Squillium_48 Start: 26758, Stop: 28035, Start Num: 7

Candidate Starts for Squillium_48:

(Start: 7 @26758 has 69 MA's), (10, 26806), (12, 26812), (14, 26833), (18, 26893), (23, 26953), (27, 26983), (47, 27289), (48, 27298), (50, 27304), (57, 27403), (63, 27520), (69, 27697),

Gene: Stanimal_51 Start: 26595, Stop: 27890, Start Num: 5

Candidate Starts for Stanimal_51:

(Start: 5 @26595 has 24 MA's), (Start: 7 @26601 has 69 MA's), (12, 26655), (14, 26676), (19, 26739), (23, 26796), (26, 26823), (46, 27126), (47, 27129), (48, 27138), (57, 27243), (59, 27294), (60, 27303), (63, 27366), (69, 27549),

Gene: StarPlatinum_51 Start: 27233, Stop: 28525, Start Num: 5

Candidate Starts for StarPlatinum_51:

(Start: 5 @27233 has 24 MA's), (Start: 7 @27239 has 69 MA's), (12, 27293), (14, 27314), (19, 27377), (23, 27434), (25, 27452), (26, 27461), (46, 27764), (47, 27767), (48, 27776), (57, 27881), (59, 27932), (63, 28004), (69, 28187),

Gene: Starbow_49 Start: 26719, Stop: 28005, Start Num: 7

Candidate Starts for Starbow_49:

(Start: 5 @26713 has 24 MA's), (Start: 7 @26719 has 69 MA's), (12, 26773), (19, 26857), (23, 26914), (26, 26941), (46, 27244), (47, 27247), (48, 27256), (57, 27361), (59, 27412), (63, 27484), (67, 27628), (69, 27667),

Gene: Stigma_27 Start: 15469, Stop: 16788, Start Num: 7

Candidate Starts for Stigma_27:

(Start: 7 @15469 has 69 MA's), (12, 15523), (23, 15664), (26, 15691), (36, 15913), (39, 15928), (47, 16000), (48, 16009), (57, 16114), (59, 16168), (64, 16267), (71, 16468),

Gene: Sushi23_49 Start: 27502, Stop: 28785, Start Num: 7

Candidate Starts for Sushi23_49:

(Start: 7 @27502 has 69 MA's), (12, 27556), (14, 27577), (23, 27697), (31, 27802), (44, 28012), (47, 28033), (48, 28042), (57, 28147), (63, 28264), (69, 28447), (76, 28663),

Gene: Targaryen_50 Start: 28272, Stop: 29549, Start Num: 7

Candidate Starts for Targaryen_50:

(Start: 7 @28272 has 69 MA's), (12, 28326), (14, 28347), (23, 28467), (44, 28782), (47, 28803), (48, 28812), (57, 28917), (63, 29034), (69, 29211),

Gene: Teutsch_49 Start: 27771, Stop: 29054, Start Num: 7

Candidate Starts for Teutsch_49:

(Start: 7 @27771 has 69 MA's), (12, 27825), (14, 27846), (23, 27966), (31, 28071), (44, 28281), (47, 28302), (48, 28311), (57, 28416), (63, 28533), (69, 28716), (76, 28932),

Gene: TomSawyer_49 Start: 26331, Stop: 27623, Start Num: 5

Candidate Starts for TomSawyer_49:

(Start: 5 @26331 has 24 MA's), (Start: 7 @26337 has 69 MA's), (12, 26391), (19, 26475), (23, 26532), (25, 26550), (26, 26559), (46, 26862), (47, 26865), (48, 26874), (57, 26979), (59, 27030), (63, 27102), (67, 27246), (69, 27285),

Gene: Tomas_53 Start: 29052, Stop: 30332, Start Num: 5

Candidate Starts for Tomas_53:

(Start: 5 @29052 has 24 MA's), (Start: 7 @29058 has 69 MA's), (10, 29106), (12, 29112), (23, 29253), (40, 29520), (47, 29589), (48, 29598), (53, 29676), (57, 29703), (59, 29751), (63, 29823), (69, 29994),

Gene: Tribute_47 Start: 26971, Stop: 28254, Start Num: 7

Candidate Starts for Tribute_47:

(Start: 7 @26971 has 69 MA's), (12, 27025), (14, 27046), (23, 27166), (31, 27271), (44, 27481), (47, 27502), (48, 27511), (57, 27616), (63, 27733), (69, 27916), (76, 28132),

Gene: Trina_71 Start: 36327, Stop: 37640, Start Num: 3

Candidate Starts for Trina_71:

(Start: 3 @36327 has 1 MA's), (Start: 6 @36339 has 4 MA's), (13, 36402), (22, 36537), (28, 36615), (31, 36648), (32, 36678), (47, 36873), (54, 36954), (57, 36978), (58, 36987), (61, 37059), (62, 37080), (75, 37431), (79, 37542),

Gene: TunaTartare_25 Start: 16060, Stop: 17379, Start Num: 7

Candidate Starts for TunaTartare_25:

(Start: 7 @16060 has 69 MA's), (12, 16114), (23, 16255), (26, 16282), (31, 16360), (39, 16519), (47, 16591), (48, 16600), (57, 16705), (64, 16861), (71, 17059),

Gene: Wakanda_22 Start: 14907, Stop: 16244, Start Num: 7

Candidate Starts for Wakanda_22:

(Start: 7 @14907 has 69 MA's), (12, 14961), (23, 15102), (25, 15120), (26, 15129), (42, 15390), (43, 15399), (47, 15438), (48, 15447), (57, 15552), (64, 15693), (65, 15762), (71, 15924), (74, 16038), (77, 16137),

Gene: Warpy_53 Start: 27736, Stop: 29013, Start Num: 7

Candidate Starts for Warpy_53:

(Start: 7 @27736 has 69 MA's), (12, 27790), (14, 27811), (18, 27871), (23, 27931), (44, 28246), (47, 28267), (48, 28276), (57, 28381), (63, 28498), (69, 28675),

Gene: Watermoore_49 Start: 27978, Stop: 29261, Start Num: 7

Candidate Starts for Watermoore_49:

(Start: 7 @27978 has 69 MA's), (12, 28032), (14, 28053), (23, 28173), (31, 28278), (44, 28488), (47, 28509), (48, 28518), (57, 28623), (63, 28740), (69, 28923), (76, 29139),

Gene: Weasels2_78 Start: 38617, Stop: 39924, Start Num: 6

Candidate Starts for Weasels2_78:

(Start: 6 @38617 has 4 MA's), (17, 38728), (30, 38917), (32, 38953), (35, 39064), (41, 39097), (57, 39256), (58, 39265), (62, 39349), (73, 39697), (78, 39826),

Gene: Westy_27 Start: 15469, Stop: 16788, Start Num: 7

Candidate Starts for Westy_27:

(Start: 7 @15469 has 69 MA's), (12, 15523), (23, 15664), (26, 15691), (36, 15913), (39, 15928), (47, 16000), (48, 16009), (57, 16114), (59, 16168), (64, 16267), (71, 16468),

Gene: WhereRU_46 Start: 26237, Stop: 27514, Start Num: 7

Candidate Starts for WhereRU_46:

(Start: 7 @26237 has 69 MA's), (10, 26285), (12, 26291), (14, 26312), (18, 26372), (23, 26432), (27, 26462), (47, 26768), (48, 26777), (50, 26783), (57, 26882), (63, 26999), (69, 27176),

Gene: Wipeout_49 Start: 27082, Stop: 28374, Start Num: 5

Candidate Starts for Wipeout_49:

(Start: 5 @27082 has 24 MA's), (Start: 7 @27088 has 69 MA's), (12, 27142), (19, 27226), (23, 27283), (25, 27301), (26, 27310), (46, 27613), (47, 27616), (48, 27625), (57, 27730), (59, 27781), (63, 27853), (67, 27997), (69, 28036),

Gene: Wofford_50 Start: 27737, Stop: 29029, Start Num: 5

Candidate Starts for Wofford_50:

(Start: 5 @27737 has 24 MA's), (Start: 7 @27743 has 69 MA's), (12, 27797), (14, 27818), (23, 27938), (26, 27965), (33, 28121), (47, 28271), (48, 28280), (55, 28370), (57, 28385), (59, 28436), (60, 28445), (63, 28508), (69, 28691),

Gene: Yaboi_51 Start: 26689, Stop: 27978, Start Num: 7

Candidate Starts for Yaboi_51:

(Start: 5 @26683 has 24 MA's), (Start: 7 @26689 has 69 MA's), (12, 26743), (14, 26764), (19, 26827), (23, 26884), (26, 26911), (46, 27214), (47, 27217), (48, 27226), (57, 27331), (59, 27382), (60, 27391), (63, 27454), (69, 27637),