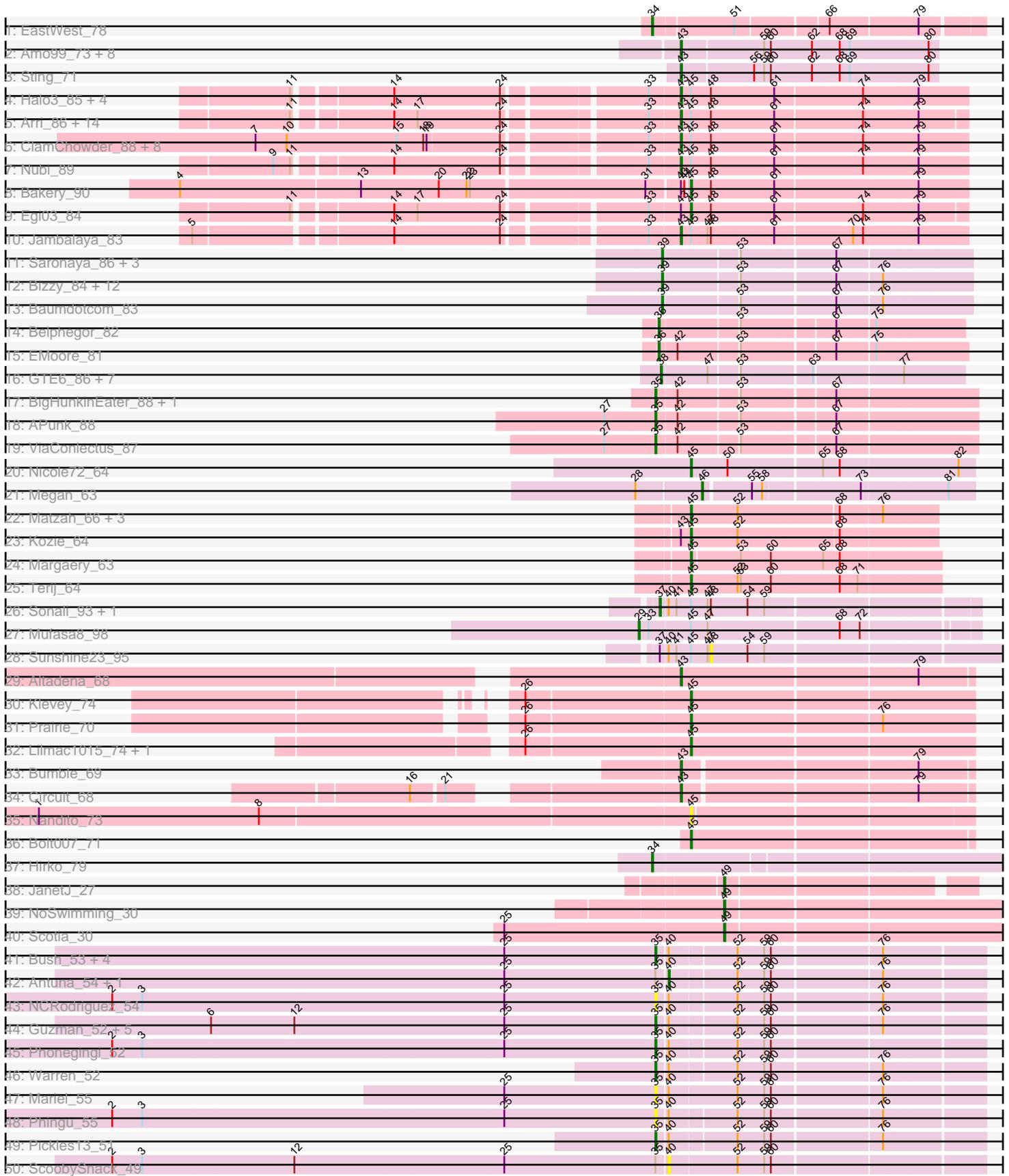
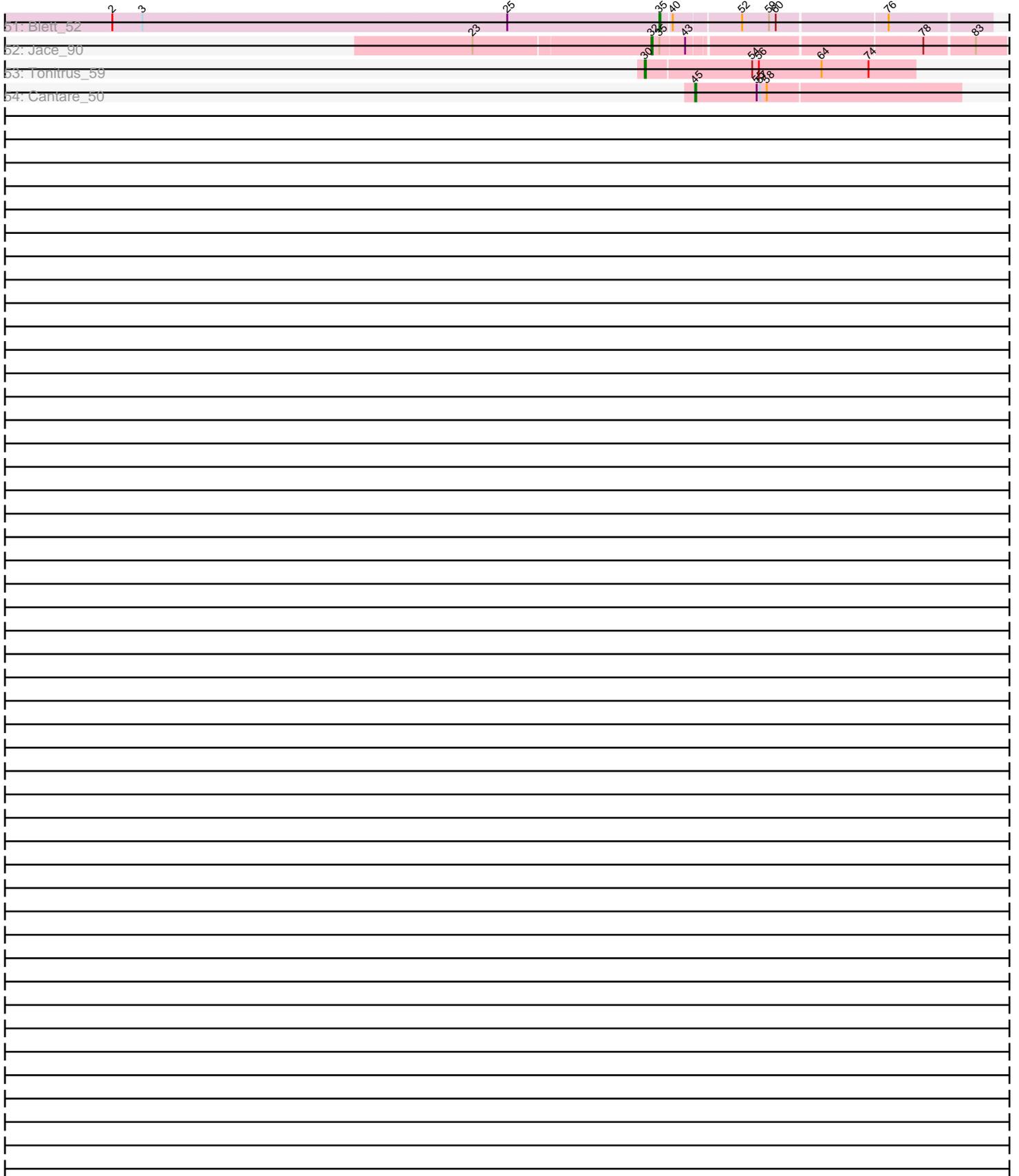


Pham 290967



Pham 290967



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 290967 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290967 has 126 members, 23 are drafts.

Phages represented in each track:

- Track 1 : EastWest_78
- Track 2 : Amo99_73, Purplicious_71, Stillion_72, KingstonB_73, DonTron_72, Jollymon_72, ColdSoup_73, Soos_68, Grumio_72
- Track 3 : Sting_71
- Track 4 : Halo3_85, SmokingBunny_87, Salvador_86, Evamon_86, Togo_86
- Track 5 : Arri_86, Twister6_85, Wizard_81, PullumCavea_84, VanDeWege_88, Fireball_89, Gezellig_82, CherryCola_86, RogerDodger_89, Savbucketdawg_81, KimmyK_84, Valary_87, Phlop_83, Portcullis_86, Shinji_85
- Track 6 : ClamChowder_88, Barb_89, PinkCoffee_87, Danyall_86, TillyBobJoe_84, YungMoney_85, Fugax_89, CoveyB_87, Mutzi_85
- Track 7 : Nubi_89
- Track 8 : Bakery_90
- Track 9 : Egi03_84
- Track 10 : Jambalaya_83
- Track 11 : Saronaya_86, StorminNorm_85, Gustavo_86, Gaea_85
- Track 12 : Bizzy_84, Kroos_84, YorkOnyx_83, Derg_77, Ribeye_84, Tycho_84, Tangerine_84, Ashertheman_84, Flatwoods_84, LilHam_78, SchottB_83, JKSyngboy_81, Kwobi_86
- Track 13 : Baumdotcom_83
- Track 14 : Belphegor_82
- Track 15 : EMoore_81
- Track 16 : GTE6_86, Chickadee_87, Twonlo_84, RoadKill_84, Tiamoceli_80, EdmundFerry_85, Dextert_82, Kwekel_87
- Track 17 : BigHunkinEater_88, Zitch_90
- Track 18 : APunk_88
- Track 19 : ViaConlectus_87
- Track 20 : Nicole72_64
- Track 21 : Megan_63
- Track 22 : Matzah_66, MementoMori_65, Cressida_67, Cinna_64
- Track 23 : Kozie_64
- Track 24 : Margaery_63
- Track 25 : Terij_64
- Track 26 : Sonali_93, Maruru_94
- Track 27 : Mufasa8_98
- Track 28 : Sunshine23_95
- Track 29 : Altadena_68
- Track 30 : Klevey_74

- Track 31 : Prairie_70
- Track 32 : Lilmac1015_74, CalWood4100_74
- Track 33 : Bumble_69
- Track 34 : Circuit_68
- Track 35 : Nandito_73
- Track 36 : Bolt007_71
- Track 37 : Hirko_79
- Track 38 : JanetJ_27
- Track 39 : NoSwimming_30
- Track 40 : Scotia_30
- Track 41 : Bush_53, Violeta_54, Carrillo_54, Jakelyne_55, MenE_54
- Track 42 : Antuna_54, Losacky_54
- Track 43 : NCRodriguez_54
- Track 44 : Guzman_52, Winchester007_68, CookieDog_52, Dropshot_52, Appa_52, PhillyJawn_53
- Track 45 : Phonegingi_52
- Track 46 : Warren_52
- Track 47 : Mariel_55
- Track 48 : Phingu_55
- Track 49 : Pickles13_51
- Track 50 : ScoobySnack_49
- Track 51 : Blett_52
- Track 52 : Jace_90
- Track 53 : Tonitrus_59
- Track 54 : Cantare_50

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

The start number called the most often in the published annotations is 43, it was called in 36 of the 103 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Altadena_68, Amo99_73, Arri_86, Barb_89, Bumble_69, CherryCola_86, Circuit_68, ClamChowder_88, ColdSoup_73, CoveyB_87, Danyall_86, DonTron_72, Evamon_86, Fireball_89, Fugax_89, Gezellig_82, Grumio_72, Halo3_85, Jambalaya_83, Jollymon_72, KimmyK_84, KingstonB_73, Mutzi_85, Nubi_89, Phlop_83, PinkCoffee_87, Portcullis_86, PullumCavea_84, Purplicious_71, RogerDodger_89, Salvador_86, Savbucketdawg_81, Shinji_85, SmokingBunny_87, Soos_68, Stillion_72, Sting_71, TillyBobJoe_84, Togo_86, Twister6_85, Valary_87, VanDeWege_88, Wizard_81, YungMoney_85,

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

- Bakery_90, Egi03_84, Jace_90, Kozie_64,

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

- APunk_88, Antuna_54, Appa_52, Ashertheman_84, Baumdotcom_83, Belphegor_82, BigHunkinEater_88, Bizzy_84, Blett_52, Bolt007_71, Bush_53, CalWood4100_74, Cantare_50, Carrillo_54, Chickadee_87, Cinna_64, CookieDog_52, Cressida_67, Derg_77, Dexdert_82, Dropshot_52, EMoore_81, EastWest_78, EdmundFerry_85, Flatwoods_84, GTE6_86, Gaea_85, Gustavo_86,

Guzman_52, Hirko_79, JKSyngboy_81, Jakelyne_55, JanetJ_27, Klevey_74, Kroos_84, Kwekel_87, Kwobi_86, LilHam_78, Lilmac1015_74, Losacky_54, Margaery_63, Mariel_55, Maruru_94, Matzah_66, Megan_63, MementoMori_65, MenE_54, Mufasa8_98, NCRodriguez_54, Nandito_73, Nicole72_64, NoSwimming_30, PhillyJawn_53, Phingu_55, Phonegingi_52, Pickles13_51, Prairie_70, Ribeye_84, RoadKill_84, Saronaya_86, SchottB_83, ScoobySnack_49, Scotia_30, Sonali_93, StorminNorm_85, Sunshine23_95, Tangerine_84, Terij_64, Tiamoceli_80, Tonitrus_59, Twonlo_84, Tycho_84, ViaConlectus_87, Violeta_54, Warren_52, Winchester007_68, YorkOnyx_83, Zitch_90,

Summary by start number:

Start 29:

- Found in 1 of 126 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mufasa8_98 (FG),

Start 30:

- Found in 1 of 126 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Tonitrus_59 (singleton),

Start 32:

- Found in 1 of 126 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace_90 (singleton),

Start 34:

- Found in 2 of 126 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EastWest_78 (AO), Hirko_79 (FL),

Start 35:

- Found in 26 of 126 (20.6%) of genes in pham
- Manual Annotations of this start: 12 of 103
- Called 84.6% of time when present
- Phage (with cluster) where this start called: APunk_88 (DE4), Appa_52 (GA), BigHunkinEater_88 (DE4), Blett_52 (GA), Bush_53 (GA), Carrillo_54 (GA), CookieDog_52 (GA), Dropshot_52 (GA), Guzman_52 (GA), Jakelyne_55 (GA), Mariel_55 (GA), MenE_54 (GA), NCRodriguez_54 (GA), PhillyJawn_53 (GA), Phingu_55 (GA), Phonegingi_52 (GA), Pickles13_51 (GA), ViaConlectus_87 (DE4), Violeta_54 (GA), Warren_52 (GA), Winchester007_68 (GA), Zitch_90 (DE4),

Start 36:

- Found in 2 of 126 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belphegor_82 (DE2), EMoore_81 (DE2),

Start 37:

- Found in 3 of 126 (2.4%) of genes in pham
- Manual Annotations of this start: 2 of 103
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Maruru_94 (FG), Sonali_93 (FG),

Start 38:

- Found in 8 of 126 (6.3%) of genes in pham
- Manual Annotations of this start: 7 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chickadee_87 (DE3), Dextert_82 (DE3), EdmundFerry_85 (DE3), GTE6_86 (DE3), Kwekel_87 (DE3), RoadKill_84 (DE3), Tiamoceli_80 (DE3), Twonlo_84 (DE3),

Start 39:

- Found in 18 of 126 (14.3%) of genes in pham
- Manual Annotations of this start: 18 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ashertheman_84 (DE1), Baumdotcom_83 (DE1), Bizzy_84 (DE1), Derg_77 (DE1), Flatwoods_84 (DE1), Gaea_85 (DE1), Gustavo_86 (DE1), JKSyngboy_81 (DE1), Kroos_84 (DE1), Kwobi_86 (DE1), LilHam_78 (DE1), Ribeye_84 (DE1), Saronaya_86 (DE1), SchottB_83 (DE1), StorminNorm_85 (DE1), Tangerine_84 (DE1), Tycho_84 (DE1), YorkOnyx_83 (DE1),

Start 40:

- Found in 24 of 126 (19.0%) of genes in pham
- Manual Annotations of this start: 2 of 103
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Antuna_54 (GA), Losacky_54 (GA), ScoobySnack_49 (GA),

Start 43:

- Found in 48 of 126 (38.1%) of genes in pham
- Manual Annotations of this start: 36 of 103
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Altadena_68 (FH), Amo99_73 (CP), Arri_86 (DC1), Barb_89 (DC1), Bumble_69 (FH), CherryCola_86 (DC1), Circuit_68 (FH), ClamChowder_88 (DC1), ColdSoup_73 (CP), CoveyB_87 (DC1), Danyall_86 (DC1), DonTron_72 (CP), Evamon_86 (DC1), Fireball_89 (DC1), Fugax_89 (DC1), Gezellig_82 (DC1), Grumio_72 (CP), Halo3_85 (DC1), Jambalaya_83 (DC1), Jollymon_72 (CP), KimmyK_84 (DC1), KingstonB_73 (CP), Mutzi_85 (DC1), Nubi_89 (DC1), Phlop_83 (DC1), PinkCoffee_87 (DC1), Portcullis_86 (DC1), PullumCavea_84 (DC1), Purplicious_71 (CP), RogerDodger_89 (DC1), Salvador_86 (DC1), Savbucketdawg_81 (DC1), Shinji_85 (DC1), SmokingBunny_87 (DC1), Soos_68 (CP), Stillion_72 (CP), Sting_71 (CP), TillyBobJoe_84 (DC1), Togo_86 (DC1), Twister6_85 (DC1), Valary_87 (DC1), VanDeWege_88 (DC1), Wizard_81 (DC1), YungMoney_85 (DC1),

Start 45:

- Found in 52 of 126 (41.3%) of genes in pham
- Manual Annotations of this start: 15 of 103
- Called 32.7% of time when present

- Phage (with cluster) where this start called: Bakery_90 (DC1), Bolt007_71 (FH), CalWood4100_74 (FH), Cantare_50 (singleton), Cinna_64 (EI), Cressida_67 (EI), Egi03_84 (DC1), Klevey_74 (FH), Kozi_64 (EI), Lilmac1015_74 (FH), Margaery_63 (EI), Matzah_66 (EI), MementoMori_65 (EI), Nandito_73 (FH), Nicole72_64 (EC), Prairie_70 (FH), Terij_64 (EI),

Start 46:

- Found in 1 of 126 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Megan_63 (EC),

Start 48:

- Found in 36 of 126 (28.6%) of genes in pham
- No Manual Annotations of this start.
- Called 2.8% of time when present
- Phage (with cluster) where this start called: Sunshine23_95 (FG),

Start 49:

- Found in 3 of 126 (2.4%) of genes in pham
- Manual Annotations of this start: 3 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JanetJ_27 (FO), NoSwimming_30 (FO), Scotia_30 (FO),

Summary by clusters:

There are 15 clusters represented in this pham: singleton, CP, EI, DE1, DE2, DE3, DE4, EC, AO, GA, FG, FH, DC1, FL, FO,

Info for manual annotations of cluster AO:

- Start number 34 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster CP:

- Start number 43 was manually annotated 4 times for cluster CP.

Info for manual annotations of cluster DC1:

- Start number 43 was manually annotated 29 times for cluster DC1.
- Start number 45 was manually annotated 2 times for cluster DC1.

Info for manual annotations of cluster DE1:

- Start number 39 was manually annotated 18 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 36 was manually annotated 2 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 38 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 35 was manually annotated 3 times for cluster DE4.

Info for manual annotations of cluster EC:

- Start number 45 was manually annotated 1 time for cluster EC.
- Start number 46 was manually annotated 1 time for cluster EC.

Info for manual annotations of cluster EI:

- Start number 45 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster FG:

- Start number 29 was manually annotated 1 time for cluster FG.
- Start number 37 was manually annotated 2 times for cluster FG.

Info for manual annotations of cluster FH:

- Start number 43 was manually annotated 3 times for cluster FH.
- Start number 45 was manually annotated 4 times for cluster FH.

Info for manual annotations of cluster FL:

- Start number 34 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster FO:

- Start number 49 was manually annotated 3 times for cluster FO.

Info for manual annotations of cluster GA:

- Start number 35 was manually annotated 9 times for cluster GA.
- Start number 40 was manually annotated 2 times for cluster GA.

Gene Information:

Gene: APunk_88 Start: 58714, Stop: 58983, Start Num: 35

Candidate Starts for APunk_88:

(27, 58669), (Start: 35 @58714 has 12 MA's), (42, 58732), (53, 58783), (67, 58861),

Gene: Altadena_68 Start: 43198, Stop: 42947, Start Num: 43

Candidate Starts for Altadena_68:

(Start: 43 @43198 has 36 MA's), (79, 42994),

Gene: Amo99_73 Start: 48277, Stop: 48501, Start Num: 43

Candidate Starts for Amo99_73:

(Start: 43 @48277 has 36 MA's), (59, 48349), (60, 48355), (62, 48391), (68, 48415), (69, 48424), (80, 48493),

Gene: Antuna_54 Start: 32652, Stop: 32918, Start Num: 40

Candidate Starts for Antuna_54:

(25, 32508), (Start: 35 @32643 has 12 MA's), (Start: 40 @32652 has 2 MA's), (52, 32709), (59, 32733), (60, 32739), (76, 32832),

Gene: Appa_52 Start: 32408, Stop: 32683, Start Num: 35

Candidate Starts for Appa_52:

(6, 32012), (12, 32087), (25, 32273), (Start: 35 @32408 has 12 MA's), (Start: 40 @32417 has 2 MA's), (52, 32474), (59, 32498), (60, 32504), (76, 32597),

Gene: Arri_86 Start: 56263, Stop: 56015, Start Num: 43

Candidate Starts for Arri_86:

(11, 56575), (14, 56497), (17, 56476), (24, 56404), (33, 56290), (Start: 43 @56263 has 36 MA's),
(Start: 45 @56254 has 15 MA's), (48, 56236), (61, 56179), (74, 56104), (79, 56056),

Gene: Ashertheman_84 Start: 56563, Stop: 56823, Start Num: 39
Candidate Starts for Ashertheman_84:
(Start: 39 @56563 has 18 MA's), (53, 56626), (67, 56707), (76, 56746),

Gene: Bakery_90 Start: 58633, Stop: 58391, Start Num: 45
Candidate Starts for Bakery_90:
(4, 59074), (13, 58915), (20, 58846), (22, 58822), (23, 58819), (31, 58666), (Start: 43 @58639 has 36
MA's), (44, 58636), (Start: 45 @58633 has 15 MA's), (48, 58615), (61, 58558), (79, 58435),

Gene: Barb_89 Start: 56790, Stop: 56539, Start Num: 43
Candidate Starts for Barb_89:
(7, 57147), (10, 57120), (15, 57021), (18, 56997), (19, 56994), (24, 56931), (33, 56817), (Start: 43
@56790 has 36 MA's), (Start: 45 @56781 has 15 MA's), (48, 56763), (61, 56706), (74, 56631), (79,
56583),

Gene: Baumdotcom_83 Start: 56963, Stop: 57223, Start Num: 39
Candidate Starts for Baumdotcom_83:
(Start: 39 @56963 has 18 MA's), (53, 57026), (67, 57107), (76, 57146),

Gene: Belphegor_82 Start: 58991, Stop: 59245, Start Num: 36
Candidate Starts for Belphegor_82:
(Start: 36 @58991 has 2 MA's), (53, 59057), (67, 59135), (75, 59168),

Gene: BigHunkinEater_88 Start: 58349, Stop: 58618, Start Num: 35
Candidate Starts for BigHunkinEater_88:
(Start: 35 @58349 has 12 MA's), (42, 58367), (53, 58418), (67, 58496),

Gene: Bizzy_84 Start: 56320, Stop: 56580, Start Num: 39
Candidate Starts for Bizzy_84:
(Start: 39 @56320 has 18 MA's), (53, 56383), (67, 56464), (76, 56503),

Gene: Blett_52 Start: 32593, Stop: 32868, Start Num: 35
Candidate Starts for Blett_52:
(2, 32110), (3, 32137), (25, 32458), (Start: 35 @32593 has 12 MA's), (Start: 40 @32602 has 2 MA's),
(52, 32659), (59, 32683), (60, 32689), (76, 32782),

Gene: Bolt007_71 Start: 45075, Stop: 44833, Start Num: 45
Candidate Starts for Bolt007_71:
(Start: 45 @45075 has 15 MA's),

Gene: Bumble_69 Start: 44314, Stop: 44069, Start Num: 43
Candidate Starts for Bumble_69:
(Start: 43 @44314 has 36 MA's), (79, 44116),

Gene: Bush_53 Start: 32542, Stop: 32817, Start Num: 35
Candidate Starts for Bush_53:
(25, 32407), (Start: 35 @32542 has 12 MA's), (Start: 40 @32551 has 2 MA's), (52, 32608), (59, 32632),
(60, 32638), (76, 32731),

Gene: CalWood4100_74 Start: 45377, Stop: 45132, Start Num: 45

Candidate Starts for CalWood4100_74:
(26, 45521), (Start: 45 @45377 has 15 MA's),

Gene: Cantare_50 Start: 45879, Stop: 46109, Start Num: 45
Candidate Starts for Cantare_50:
(Start: 45 @45879 has 15 MA's), (55, 45933), (57, 45936), (58, 45942),

Gene: Carrillo_54 Start: 32516, Stop: 32791, Start Num: 35
Candidate Starts for Carrillo_54:
(25, 32381), (Start: 35 @32516 has 12 MA's), (Start: 40 @32525 has 2 MA's), (52, 32582), (59, 32606),
(60, 32612), (76, 32705),

Gene: CherryCola_86 Start: 56676, Stop: 56428, Start Num: 43
Candidate Starts for CherryCola_86:
(11, 56988), (14, 56910), (17, 56889), (24, 56817), (33, 56703), (Start: 43 @56676 has 36 MA's),
(Start: 45 @56667 has 15 MA's), (48, 56649), (61, 56592), (74, 56517), (79, 56469),

Gene: Chickadee_87 Start: 56050, Stop: 56301, Start Num: 38
Candidate Starts for Chickadee_87:
(Start: 38 @56050 has 7 MA's), (47, 56089), (53, 56113), (63, 56173), (77, 56248),

Gene: Cinna_64 Start: 43061, Stop: 43273, Start Num: 45
Candidate Starts for Cinna_64:
(Start: 45 @43061 has 15 MA's), (52, 43103), (68, 43190), (76, 43226),

Gene: Circuit_68 Start: 44623, Stop: 44378, Start Num: 43
Candidate Starts for Circuit_68:
(16, 44824), (21, 44797), (Start: 43 @44623 has 36 MA's), (79, 44425),

Gene: ClamChowder_88 Start: 56790, Stop: 56539, Start Num: 43
Candidate Starts for ClamChowder_88:
(7, 57147), (10, 57120), (15, 57021), (18, 56997), (19, 56994), (24, 56931), (33, 56817), (Start: 43
@56790 has 36 MA's), (Start: 45 @56781 has 15 MA's), (48, 56763), (61, 56706), (74, 56631), (79,
56583),

Gene: ColdSoup_73 Start: 48358, Stop: 48582, Start Num: 43
Candidate Starts for ColdSoup_73:
(Start: 43 @48358 has 36 MA's), (59, 48430), (60, 48436), (62, 48472), (68, 48496), (69, 48505), (80,
48574),

Gene: CookieDog_52 Start: 32516, Stop: 32791, Start Num: 35
Candidate Starts for CookieDog_52:
(6, 32120), (12, 32195), (25, 32381), (Start: 35 @32516 has 12 MA's), (Start: 40 @32525 has 2 MA's),
(52, 32582), (59, 32606), (60, 32612), (76, 32705),

Gene: CoveyB_87 Start: 56277, Stop: 56026, Start Num: 43
Candidate Starts for CoveyB_87:
(7, 56634), (10, 56607), (15, 56508), (18, 56484), (19, 56481), (24, 56418), (33, 56304), (Start: 43
@56277 has 36 MA's), (Start: 45 @56268 has 15 MA's), (48, 56250), (61, 56193), (74, 56118), (79,
56070),

Gene: Cressida_67 Start: 42667, Stop: 42879, Start Num: 45
Candidate Starts for Cressida_67:

(Start: 45 @42667 has 15 MA's), (52, 42709), (68, 42796), (76, 42832),

Gene: Danyall_86 Start: 55971, Stop: 55720, Start Num: 43

Candidate Starts for Danyall_86:

(7, 56328), (10, 56301), (15, 56202), (18, 56178), (19, 56175), (24, 56112), (33, 55998), (Start: 43 @55971 has 36 MA's), (Start: 45 @55962 has 15 MA's), (48, 55944), (61, 55887), (74, 55812), (79, 55764),

Gene: Derg_77 Start: 55217, Stop: 55477, Start Num: 39

Candidate Starts for Derg_77:

(Start: 39 @55217 has 18 MA's), (53, 55280), (67, 55361), (76, 55400),

Gene: Dexpert_82 Start: 54559, Stop: 54810, Start Num: 38

Candidate Starts for Dexpert_82:

(Start: 38 @54559 has 7 MA's), (47, 54598), (53, 54622), (63, 54682), (77, 54757),

Gene: DonTron_72 Start: 48395, Stop: 48619, Start Num: 43

Candidate Starts for DonTron_72:

(Start: 43 @48395 has 36 MA's), (59, 48467), (60, 48473), (62, 48509), (68, 48533), (69, 48542), (80, 48611),

Gene: Dropshot_52 Start: 32243, Stop: 32518, Start Num: 35

Candidate Starts for Dropshot_52:

(6, 31847), (12, 31922), (25, 32108), (Start: 35 @32243 has 12 MA's), (Start: 40 @32252 has 2 MA's), (52, 32309), (59, 32333), (60, 32339), (76, 32432),

Gene: EMoore_81 Start: 58164, Stop: 58421, Start Num: 36

Candidate Starts for EMoore_81:

(Start: 36 @58164 has 2 MA's), (42, 58179), (53, 58230), (67, 58308), (75, 58341),

Gene: EastWest_78 Start: 46071, Stop: 45799, Start Num: 34

Candidate Starts for EastWest_78:

(Start: 34 @46071 has 2 MA's), (51, 46002), (66, 45927), (79, 45852),

Gene: EdmundFerry_85 Start: 55426, Stop: 55677, Start Num: 38

Candidate Starts for EdmundFerry_85:

(Start: 38 @55426 has 7 MA's), (47, 55465), (53, 55489), (63, 55549), (77, 55624),

Gene: Egi03_84 Start: 55689, Stop: 55450, Start Num: 45

Candidate Starts for Egi03_84:

(11, 56010), (14, 55932), (17, 55911), (24, 55839), (33, 55725), (Start: 43 @55698 has 36 MA's), (Start: 45 @55689 has 15 MA's), (48, 55671), (61, 55614), (74, 55539), (79, 55491),

Gene: Evamon_86 Start: 56075, Stop: 55827, Start Num: 43

Candidate Starts for Evamon_86:

(11, 56387), (14, 56309), (24, 56216), (33, 56102), (Start: 43 @56075 has 36 MA's), (Start: 45 @56066 has 15 MA's), (48, 56048), (61, 55991), (74, 55916), (79, 55868),

Gene: Fireball_89 Start: 56537, Stop: 56289, Start Num: 43

Candidate Starts for Fireball_89:

(11, 56849), (14, 56771), (17, 56750), (24, 56678), (33, 56564), (Start: 43 @56537 has 36 MA's), (Start: 45 @56528 has 15 MA's), (48, 56510), (61, 56453), (74, 56378), (79, 56330),

Gene: Flatwoods_84 Start: 56131, Stop: 56391, Start Num: 39
Candidate Starts for Flatwoods_84:
(Start: 39 @56131 has 18 MA's), (53, 56194), (67, 56275), (76, 56314),

Gene: Fugax_89 Start: 56782, Stop: 56531, Start Num: 43
Candidate Starts for Fugax_89:
(7, 57139), (10, 57112), (15, 57013), (18, 56989), (19, 56986), (24, 56923), (33, 56809), (Start: 43 @56782 has 36 MA's), (Start: 45 @56773 has 15 MA's), (48, 56755), (61, 56698), (74, 56623), (79, 56575),

Gene: GTE6_86 Start: 56599, Stop: 56850, Start Num: 38
Candidate Starts for GTE6_86:
(Start: 38 @56599 has 7 MA's), (47, 56638), (53, 56662), (63, 56722), (77, 56797),

Gene: Gaea_85 Start: 56481, Stop: 56741, Start Num: 39
Candidate Starts for Gaea_85:
(Start: 39 @56481 has 18 MA's), (53, 56544), (67, 56625),

Gene: Gezellig_82 Start: 55921, Stop: 55673, Start Num: 43
Candidate Starts for Gezellig_82:
(11, 56233), (14, 56155), (17, 56134), (24, 56062), (33, 55948), (Start: 43 @55921 has 36 MA's), (Start: 45 @55912 has 15 MA's), (48, 55894), (61, 55837), (74, 55762), (79, 55714),

Gene: Grumio_72 Start: 47836, Stop: 48060, Start Num: 43
Candidate Starts for Grumio_72:
(Start: 43 @47836 has 36 MA's), (59, 47908), (60, 47914), (62, 47950), (68, 47974), (69, 47983), (80, 48052),

Gene: Gustavo_86 Start: 57313, Stop: 57573, Start Num: 39
Candidate Starts for Gustavo_86:
(Start: 39 @57313 has 18 MA's), (53, 57376), (67, 57457),

Gene: Guzman_52 Start: 32499, Stop: 32774, Start Num: 35
Candidate Starts for Guzman_52:
(6, 32103), (12, 32178), (25, 32364), (Start: 35 @32499 has 12 MA's), (Start: 40 @32508 has 2 MA's), (52, 32565), (59, 32589), (60, 32595), (76, 32688),

Gene: Halo3_85 Start: 56796, Stop: 56545, Start Num: 43
Candidate Starts for Halo3_85:
(11, 57108), (14, 57030), (24, 56937), (33, 56823), (Start: 43 @56796 has 36 MA's), (Start: 45 @56787 has 15 MA's), (48, 56769), (61, 56712), (74, 56637), (79, 56589),

Gene: Hirko_79 Start: 48513, Stop: 48205, Start Num: 34
Candidate Starts for Hirko_79:
(Start: 34 @48513 has 2 MA's),

Gene: JKSyngboy_81 Start: 56985, Stop: 57245, Start Num: 39
Candidate Starts for JKSyngboy_81:
(Start: 39 @56985 has 18 MA's), (53, 57048), (67, 57129), (76, 57168),

Gene: Jace_90 Start: 50456, Stop: 50166, Start Num: 32
Candidate Starts for Jace_90:

(23, 50609), (Start: 32 @50456 has 1 MA's), (Start: 35 @50450 has 12 MA's), (Start: 43 @50429 has 36 MA's), (78, 50234), (83, 50192),

Gene: Jakelyne_55 Start: 32609, Stop: 32884, Start Num: 35

Candidate Starts for Jakelyne_55:

(25, 32474), (Start: 35 @32609 has 12 MA's), (Start: 40 @32618 has 2 MA's), (52, 32675), (59, 32699), (60, 32705), (76, 32798),

Gene: Jambalaya_83 Start: 55378, Stop: 55127, Start Num: 43

Candidate Starts for Jambalaya_83:

(5, 55774), (14, 55612), (24, 55519), (33, 55405), (Start: 43 @55378 has 36 MA's), (Start: 45 @55369 has 15 MA's), (47, 55354), (48, 55351), (61, 55294), (70, 55228), (74, 55219), (79, 55171),

Gene: JanetJ_27 Start: 24007, Stop: 23804, Start Num: 49

Candidate Starts for JanetJ_27:

(Start: 49 @24007 has 3 MA's),

Gene: Jollymon_72 Start: 48358, Stop: 48582, Start Num: 43

Candidate Starts for Jollymon_72:

(Start: 43 @48358 has 36 MA's), (59, 48430), (60, 48436), (62, 48472), (68, 48496), (69, 48505), (80, 48574),

Gene: KimmyK_84 Start: 56368, Stop: 56120, Start Num: 43

Candidate Starts for KimmyK_84:

(11, 56680), (14, 56602), (17, 56581), (24, 56509), (33, 56395), (Start: 43 @56368 has 36 MA's), (Start: 45 @56359 has 15 MA's), (48, 56341), (61, 56284), (74, 56209), (79, 56161),

Gene: KingstonB_73 Start: 47833, Stop: 48057, Start Num: 43

Candidate Starts for KingstonB_73:

(Start: 43 @47833 has 36 MA's), (59, 47905), (60, 47911), (62, 47947), (68, 47971), (69, 47980), (80, 48049),

Gene: Klevey_74 Start: 45284, Stop: 45039, Start Num: 45

Candidate Starts for Klevey_74:

(26, 45428), (Start: 45 @45284 has 15 MA's),

Gene: Kozie_64 Start: 42302, Stop: 42514, Start Num: 45

Candidate Starts for Kozie_64:

(Start: 43 @42293 has 36 MA's), (Start: 45 @42302 has 15 MA's), (52, 42344), (68, 42431),

Gene: Kroos_84 Start: 56981, Stop: 57241, Start Num: 39

Candidate Starts for Kroos_84:

(Start: 39 @56981 has 18 MA's), (53, 57044), (67, 57125), (76, 57164),

Gene: Kwekel_87 Start: 55963, Stop: 56214, Start Num: 38

Candidate Starts for Kwekel_87:

(Start: 38 @55963 has 7 MA's), (47, 56002), (53, 56026), (63, 56086), (77, 56161),

Gene: Kwobi_86 Start: 57490, Stop: 57750, Start Num: 39

Candidate Starts for Kwobi_86:

(Start: 39 @57490 has 18 MA's), (53, 57553), (67, 57634), (76, 57673),

Gene: LilHam_78 Start: 54602, Stop: 54862, Start Num: 39

Candidate Starts for LilHam_78:
(Start: 39 @54602 has 18 MA's), (53, 54665), (67, 54746), (76, 54785),

Gene: Lilmac1015_74 Start: 45377, Stop: 45132, Start Num: 45
Candidate Starts for Lilmac1015_74:
(26, 45521), (Start: 45 @45377 has 15 MA's),

Gene: Losacky_54 Start: 32783, Stop: 33049, Start Num: 40
Candidate Starts for Losacky_54:
(25, 32639), (Start: 35 @32774 has 12 MA's), (Start: 40 @32783 has 2 MA's), (52, 32840), (59, 32864),
(60, 32870), (76, 32963),

Gene: Margaery_63 Start: 42267, Stop: 42482, Start Num: 45
Candidate Starts for Margaery_63:
(Start: 45 @42267 has 15 MA's), (53, 42309), (60, 42336), (65, 42381), (68, 42396),

Gene: Mariel_55 Start: 32980, Stop: 33258, Start Num: 35
Candidate Starts for Mariel_55:
(25, 32845), (Start: 35 @32980 has 12 MA's), (Start: 40 @32989 has 2 MA's), (52, 33049), (59, 33073),
(60, 33079), (76, 33172),

Gene: Maruru_94 Start: 57349, Stop: 57080, Start Num: 37
Candidate Starts for Maruru_94:
(Start: 37 @57349 has 2 MA's), (Start: 40 @57343 has 2 MA's), (41, 57337), (Start: 45 @57325 has 15
MA's), (47, 57310), (48, 57307), (54, 57274), (59, 57259),

Gene: Matzah_66 Start: 43128, Stop: 43340, Start Num: 45
Candidate Starts for Matzah_66:
(Start: 45 @43128 has 15 MA's), (52, 43170), (68, 43257), (76, 43293),

Gene: Megan_63 Start: 45613, Stop: 45837, Start Num: 46
Candidate Starts for Megan_63:
(28, 45556), (Start: 46 @45613 has 1 MA's), (55, 45652), (58, 45661), (73, 45739), (81, 45814),

Gene: MementoMori_65 Start: 42723, Stop: 42935, Start Num: 45
Candidate Starts for MementoMori_65:
(Start: 45 @42723 has 15 MA's), (52, 42765), (68, 42852), (76, 42888),

Gene: MenE_54 Start: 32665, Stop: 32940, Start Num: 35
Candidate Starts for MenE_54:
(25, 32530), (Start: 35 @32665 has 12 MA's), (Start: 40 @32674 has 2 MA's), (52, 32731), (59, 32755),
(60, 32761), (76, 32854),

Gene: Mufasa8_98 Start: 57231, Stop: 56944, Start Num: 29
Candidate Starts for Mufasa8_98:
(Start: 29 @57231 has 1 MA's), (33, 57222), (Start: 45 @57186 has 15 MA's), (47, 57171), (68, 57057),
(72, 57039),

Gene: Mutzi_85 Start: 56931, Stop: 56680, Start Num: 43
Candidate Starts for Mutzi_85:
(7, 57288), (10, 57261), (15, 57162), (18, 57138), (19, 57135), (24, 57072), (33, 56958), (Start: 43
@56931 has 36 MA's), (Start: 45 @56922 has 15 MA's), (48, 56904), (61, 56847), (74, 56772), (79,
56724),

Gene: NCRodriguez_54 Start: 32734, Stop: 33009, Start Num: 35

Candidate Starts for NCRodriguez_54:

(2, 32251), (3, 32278), (25, 32599), (Start: 35 @32734 has 12 MA's), (Start: 40 @32743 has 2 MA's), (52, 32800), (59, 32824), (60, 32830), (76, 32923),

Gene: Nandito_73 Start: 45609, Stop: 45370, Start Num: 45

Candidate Starts for Nandito_73:

(1, 46188), (8, 45990), (Start: 45 @45609 has 15 MA's),

Gene: Nicole72_64 Start: 46099, Stop: 46344, Start Num: 45

Candidate Starts for Nicole72_64:

(Start: 45 @46099 has 15 MA's), (50, 46132), (65, 46213), (68, 46228), (82, 46330),

Gene: NoSwimming_30 Start: 25642, Stop: 25406, Start Num: 49

Candidate Starts for NoSwimming_30:

(Start: 49 @25642 has 3 MA's),

Gene: Nubi_89 Start: 56334, Stop: 56083, Start Num: 43

Candidate Starts for Nubi_89:

(9, 56661), (11, 56646), (14, 56568), (24, 56475), (33, 56361), (Start: 43 @56334 has 36 MA's), (Start: 45 @56325 has 15 MA's), (48, 56307), (61, 56250), (74, 56175), (79, 56127),

Gene: PhillyJawn_53 Start: 32405, Stop: 32680, Start Num: 35

Candidate Starts for PhillyJawn_53:

(6, 32009), (12, 32084), (25, 32270), (Start: 35 @32405 has 12 MA's), (Start: 40 @32414 has 2 MA's), (52, 32471), (59, 32495), (60, 32501), (76, 32594),

Gene: Phingu_55 Start: 32629, Stop: 32904, Start Num: 35

Candidate Starts for Phingu_55:

(2, 32146), (3, 32173), (25, 32494), (Start: 35 @32629 has 12 MA's), (Start: 40 @32638 has 2 MA's), (52, 32695), (59, 32719), (60, 32725), (76, 32818),

Gene: Phlop_83 Start: 55971, Stop: 55723, Start Num: 43

Candidate Starts for Phlop_83:

(11, 56283), (14, 56205), (17, 56184), (24, 56112), (33, 55998), (Start: 43 @55971 has 36 MA's), (Start: 45 @55962 has 15 MA's), (48, 55944), (61, 55887), (74, 55812), (79, 55764),

Gene: Phonegingi_52 Start: 32447, Stop: 32722, Start Num: 35

Candidate Starts for Phonegingi_52:

(2, 31964), (3, 31991), (25, 32312), (Start: 35 @32447 has 12 MA's), (Start: 40 @32456 has 2 MA's), (52, 32513), (59, 32537), (60, 32543),

Gene: Pickles13_51 Start: 32723, Stop: 32998, Start Num: 35

Candidate Starts for Pickles13_51:

(Start: 35 @32723 has 12 MA's), (Start: 40 @32732 has 2 MA's), (52, 32789), (59, 32813), (60, 32819), (76, 32912),

Gene: PinkCoffee_87 Start: 55835, Stop: 55587, Start Num: 43

Candidate Starts for PinkCoffee_87:

(7, 56192), (10, 56165), (15, 56066), (18, 56042), (19, 56039), (24, 55976), (33, 55862), (Start: 43 @55835 has 36 MA's), (Start: 45 @55826 has 15 MA's), (48, 55808), (61, 55751), (74, 55676), (79, 55628),

Gene: Portcullis_86 Start: 55977, Stop: 55729, Start Num: 43

Candidate Starts for Portcullis_86:

(11, 56289), (14, 56211), (17, 56190), (24, 56118), (33, 56004), (Start: 43 @55977 has 36 MA's), (Start: 45 @55968 has 15 MA's), (48, 55950), (61, 55893), (74, 55818), (79, 55770),

Gene: Prairie_70 Start: 44683, Stop: 44438, Start Num: 45

Candidate Starts for Prairie_70:

(26, 44827), (Start: 45 @44683 has 15 MA's), (76, 44518),

Gene: PullumCavea_84 Start: 56148, Stop: 55900, Start Num: 43

Candidate Starts for PullumCavea_84:

(11, 56460), (14, 56382), (17, 56361), (24, 56289), (33, 56175), (Start: 43 @56148 has 36 MA's), (Start: 45 @56139 has 15 MA's), (48, 56121), (61, 56064), (74, 55989), (79, 55941),

Gene: Purplicious_71 Start: 47601, Stop: 47825, Start Num: 43

Candidate Starts for Purplicious_71:

(Start: 43 @47601 has 36 MA's), (59, 47673), (60, 47679), (62, 47715), (68, 47739), (69, 47748), (80, 47817),

Gene: Ribeye_84 Start: 56456, Stop: 56716, Start Num: 39

Candidate Starts for Ribeye_84:

(Start: 39 @56456 has 18 MA's), (53, 56519), (67, 56600), (76, 56639),

Gene: RoadKill_84 Start: 55492, Stop: 55743, Start Num: 38

Candidate Starts for RoadKill_84:

(Start: 38 @55492 has 7 MA's), (47, 55531), (53, 55555), (63, 55615), (77, 55690),

Gene: RogerDodger_89 Start: 56736, Stop: 56488, Start Num: 43

Candidate Starts for RogerDodger_89:

(11, 57048), (14, 56970), (17, 56949), (24, 56877), (33, 56763), (Start: 43 @56736 has 36 MA's), (Start: 45 @56727 has 15 MA's), (48, 56709), (61, 56652), (74, 56577), (79, 56529),

Gene: Salvador_86 Start: 56073, Stop: 55825, Start Num: 43

Candidate Starts for Salvador_86:

(11, 56385), (14, 56307), (24, 56214), (33, 56100), (Start: 43 @56073 has 36 MA's), (Start: 45 @56064 has 15 MA's), (48, 56046), (61, 55989), (74, 55914), (79, 55866),

Gene: Saronaya_86 Start: 57313, Stop: 57573, Start Num: 39

Candidate Starts for Saronaya_86:

(Start: 39 @57313 has 18 MA's), (53, 57376), (67, 57457),

Gene: Savbucketdawg_81 Start: 55415, Stop: 55167, Start Num: 43

Candidate Starts for Savbucketdawg_81:

(11, 55727), (14, 55649), (17, 55628), (24, 55556), (33, 55442), (Start: 43 @55415 has 36 MA's), (Start: 45 @55406 has 15 MA's), (48, 55388), (61, 55331), (74, 55256), (79, 55208),

Gene: SchottB_83 Start: 57376, Stop: 57636, Start Num: 39

Candidate Starts for SchottB_83:

(Start: 39 @57376 has 18 MA's), (53, 57439), (67, 57520), (76, 57559),

Gene: ScoobySnack_49 Start: 32220, Stop: 32489, Start Num: 40

Candidate Starts for ScoobySnack_49:

(2, 31728), (3, 31755), (12, 31890), (25, 32076), (Start: 35 @32211 has 12 MA's), (Start: 40 @32220 has 2 MA's), (52, 32280), (59, 32304), (60, 32310),

Gene: Scotia_30 Start: 25627, Stop: 25391, Start Num: 49
Candidate Starts for Scotia_30:
(25, 25822), (Start: 49 @25627 has 3 MA's),

Gene: Shinji_85 Start: 56154, Stop: 55906, Start Num: 43
Candidate Starts for Shinji_85:
(11, 56466), (14, 56388), (17, 56367), (24, 56295), (33, 56181), (Start: 43 @56154 has 36 MA's),
(Start: 45 @56145 has 15 MA's), (48, 56127), (61, 56070), (74, 55995), (79, 55947),

Gene: SmokingBunny_87 Start: 57069, Stop: 56821, Start Num: 43
Candidate Starts for SmokingBunny_87:
(11, 57381), (14, 57303), (24, 57210), (33, 57096), (Start: 43 @57069 has 36 MA's), (Start: 45 @57060 has 15 MA's), (48, 57042), (61, 56985), (74, 56910), (79, 56862),

Gene: Sonali_93 Start: 57959, Stop: 57690, Start Num: 37
Candidate Starts for Sonali_93:
(Start: 37 @57959 has 2 MA's), (Start: 40 @57953 has 2 MA's), (41, 57947), (Start: 45 @57935 has 15 MA's), (47, 57920), (48, 57917), (54, 57884), (59, 57869),

Gene: Soos_68 Start: 47562, Stop: 47786, Start Num: 43
Candidate Starts for Soos_68:
(Start: 43 @47562 has 36 MA's), (59, 47634), (60, 47640), (62, 47676), (68, 47700), (69, 47709), (80, 47778),

Gene: Stillion_72 Start: 48159, Stop: 48383, Start Num: 43
Candidate Starts for Stillion_72:
(Start: 43 @48159 has 36 MA's), (59, 48231), (60, 48237), (62, 48273), (68, 48297), (69, 48306), (80, 48375),

Gene: Sting_71 Start: 48001, Stop: 48225, Start Num: 43
Candidate Starts for Sting_71:
(Start: 43 @48001 has 36 MA's), (56, 48064), (59, 48073), (60, 48079), (62, 48115), (68, 48139), (69, 48148), (80, 48217),

Gene: StorminNorm_85 Start: 57257, Stop: 57517, Start Num: 39
Candidate Starts for StorminNorm_85:
(Start: 39 @57257 has 18 MA's), (53, 57320), (67, 57401),

Gene: Sunshine23_95 Start: 57525, Stop: 57268, Start Num: 48
Candidate Starts for Sunshine23_95:
(Start: 37 @57567 has 2 MA's), (Start: 40 @57561 has 2 MA's), (41, 57555), (Start: 45 @57543 has 15 MA's), (47, 57528), (48, 57525), (54, 57492), (59, 57477),

Gene: Tangerine_84 Start: 56314, Stop: 56574, Start Num: 39
Candidate Starts for Tangerine_84:
(Start: 39 @56314 has 18 MA's), (53, 56377), (67, 56458), (76, 56497),

Gene: Terij_64 Start: 41499, Stop: 41717, Start Num: 45
Candidate Starts for Terij_64:
(Start: 45 @41499 has 15 MA's), (52, 41541), (53, 41544), (60, 41571), (68, 41631), (71, 41646),

Gene: Tiamoceli_80 Start: 55382, Stop: 55633, Start Num: 38

Candidate Starts for Tiamoceli_80:

(Start: 38 @55382 has 7 MA's), (47, 55421), (53, 55445), (63, 55505), (77, 55580),

Gene: TillyBobJoe_84 Start: 55955, Stop: 55707, Start Num: 43

Candidate Starts for TillyBobJoe_84:

(7, 56312), (10, 56285), (15, 56186), (18, 56162), (19, 56159), (24, 56096), (33, 55982), (Start: 43 @55955 has 36 MA's), (Start: 45 @55946 has 15 MA's), (48, 55928), (61, 55871), (74, 55796), (79, 55748),

Gene: Togo_86 Start: 57069, Stop: 56821, Start Num: 43

Candidate Starts for Togo_86:

(11, 57381), (14, 57303), (24, 57210), (33, 57096), (Start: 43 @57069 has 36 MA's), (Start: 45 @57060 has 15 MA's), (48, 57042), (61, 56985), (74, 56910), (79, 56862),

Gene: Tonitrus_59 Start: 44270, Stop: 44503, Start Num: 30

Candidate Starts for Tonitrus_59:

(Start: 30 @44270 has 1 MA's), (54, 44363), (56, 44369), (64, 44423), (74, 44465),

Gene: Twister6_85 Start: 55418, Stop: 55170, Start Num: 43

Candidate Starts for Twister6_85:

(11, 55730), (14, 55652), (17, 55631), (24, 55559), (33, 55445), (Start: 43 @55418 has 36 MA's), (Start: 45 @55409 has 15 MA's), (48, 55391), (61, 55334), (74, 55259), (79, 55211),

Gene: Twonlo_84 Start: 56083, Stop: 56334, Start Num: 38

Candidate Starts for Twonlo_84:

(Start: 38 @56083 has 7 MA's), (47, 56122), (53, 56146), (63, 56206), (77, 56281),

Gene: Tycho_84 Start: 56791, Stop: 57051, Start Num: 39

Candidate Starts for Tycho_84:

(Start: 39 @56791 has 18 MA's), (53, 56854), (67, 56935), (76, 56974),

Gene: Valary_87 Start: 57061, Stop: 56813, Start Num: 43

Candidate Starts for Valary_87:

(11, 57373), (14, 57295), (17, 57274), (24, 57202), (33, 57088), (Start: 43 @57061 has 36 MA's), (Start: 45 @57052 has 15 MA's), (48, 57034), (61, 56977), (74, 56902), (79, 56854),

Gene: VanDeWege_88 Start: 56586, Stop: 56338, Start Num: 43

Candidate Starts for VanDeWege_88:

(11, 56898), (14, 56820), (17, 56799), (24, 56727), (33, 56613), (Start: 43 @56586 has 36 MA's), (Start: 45 @56577 has 15 MA's), (48, 56559), (61, 56502), (74, 56427), (79, 56379),

Gene: ViaConlectus_87 Start: 57801, Stop: 58070, Start Num: 35

Candidate Starts for ViaConlectus_87:

(27, 57756), (Start: 35 @57801 has 12 MA's), (42, 57819), (53, 57870), (67, 57948),

Gene: Violeta_54 Start: 32507, Stop: 32782, Start Num: 35

Candidate Starts for Violeta_54:

(25, 32372), (Start: 35 @32507 has 12 MA's), (Start: 40 @32516 has 2 MA's), (52, 32573), (59, 32597), (60, 32603), (76, 32696),

Gene: Warren_52 Start: 32462, Stop: 32737, Start Num: 35

Candidate Starts for Warren_52:

(Start: 35 @32462 has 12 MA's), (Start: 40 @32471 has 2 MA's), (52, 32528), (59, 32552), (60, 32558), (76, 32651),

Gene: Winchester007_68 Start: 38187, Stop: 38462, Start Num: 35

Candidate Starts for Winchester007_68:

(6, 37791), (12, 37866), (25, 38052), (Start: 35 @38187 has 12 MA's), (Start: 40 @38196 has 2 MA's), (52, 38253), (59, 38277), (60, 38283), (76, 38376),

Gene: Wizard_81 Start: 55921, Stop: 55673, Start Num: 43

Candidate Starts for Wizard_81:

(11, 56233), (14, 56155), (17, 56134), (24, 56062), (33, 55948), (Start: 43 @55921 has 36 MA's), (Start: 45 @55912 has 15 MA's), (48, 55894), (61, 55837), (74, 55762), (79, 55714),

Gene: YorkOnyx_83 Start: 56426, Stop: 56686, Start Num: 39

Candidate Starts for YorkOnyx_83:

(Start: 39 @56426 has 18 MA's), (53, 56489), (67, 56570), (76, 56609),

Gene: YungMoney_85 Start: 57771, Stop: 57520, Start Num: 43

Candidate Starts for YungMoney_85:

(7, 58128), (10, 58101), (15, 58002), (18, 57978), (19, 57975), (24, 57912), (33, 57798), (Start: 43 @57771 has 36 MA's), (Start: 45 @57762 has 15 MA's), (48, 57744), (61, 57687), (74, 57612), (79, 57564),

Gene: Zitch_90 Start: 58345, Stop: 58614, Start Num: 35

Candidate Starts for Zitch_90:

(Start: 35 @58345 has 12 MA's), (42, 58363), (53, 58414), (67, 58492),