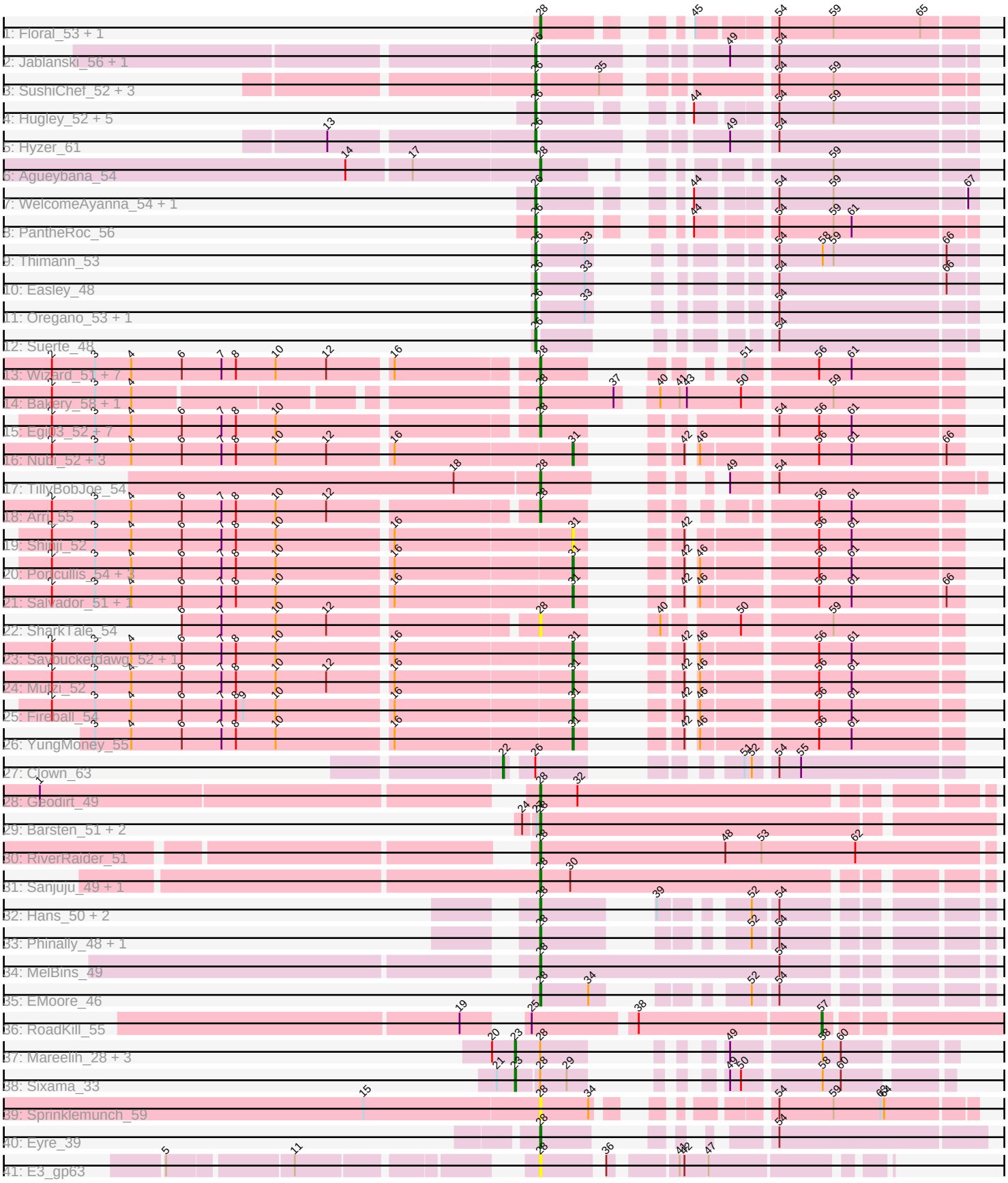
Pham 347508


1: Floral_53 + 1
2: Jablanski_56 + 1
3: SushiChef_52 + 3
4: Hugley_52 + 5
5: Hyzer_61
6: Agueybana_54
7: WelcomeAyanna_54 + 1
8: PantheRoc_56
9: Thimann_53
10: Easley_48
11: Oregano_53 + 1
12: Suerte_48
13: Wizard_51 + 7
14: Bakery_58 + 1
15: Egli03_52 + 7
16: Nudi_52 + 3
17: TillyBobJoe_54
18: Arri_55
19: Shiiji_52
20: Portcullis_54 + 3
21: Salvador_51 + 1
22: SharkTale_54
23: Saybuckeldawg_52 + 1
24: Mutzi_52
25: Fireball_54
26: YungMoney_55
27: Clown_63
28: Geodirt_49
29: Barsten_51 + 2
30: RiverRaider_51
31: Sanjuju_49 + 1
32: Hans_50 + 2
33: Phinally_48 + 1
34: MelBins_49
35: EMoore_46
36: RoadKill_55
37: Mareelih_28 + 3
38: Sixama_33
39: Sprinklemunch_59
40: Eyre_39
41: E3_gp63

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 347508 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347508 has 85 members, 10 are drafts.

Phages represented in each track:
• Track 1 : Floral_53, Pollux_55
• Track 2 : Jablanski_56, Pytheas_56
• Track 3 : SushiChef_52, Maridalia_56, Madavieve_50, Bunnybear_48
• Track 4 : Hugley_52, TimTam_56, Herod_54, Eviarto_56, BatStarr_55, Nymphadora_56
• Track 5 : Hyzer_61
• Track 6 : Agueybana_54
• Track 7 : WelcomeAyanna_54, ThankyouJordi_54
• Track 8 : PantheRoc_56
• Track 9 : Thimann_53
• Track 10 : Easley_48
• Track 11 : Oregano_53, Tuti_48
• Track 12 : Suerte_48
• Track 13 : Wizard_51, CoveyB_54, Valary_54, Gezellig_51, CherryCola_54, RogerDodger_55, VanDeWege_55, Halo3_53
• Track 14 : Bakery_58, Sixsevenium_56
• Track 15 : Egi03_52, ClamChowder_54, KimmyK_53, PinkCoffee_54, Barb_54, Phlop_51, Fugax_55, PullumCavea_51
• Track 16 : Nubi_52, SmokingBunny_52, Sendy_53, Togo_51
• Track 17 : TillyBobJoe_54
• Track 18 : Arri_55
• Track 19 : Shinji_52
• Track 20 : Portcullis_54, Danyall_54, Twister6_54, JohnPork_55
• Track 21 : Salvador_51, Evamon_51
• Track 22 : SharkTale_54
• Track 23 : Savbucketdawg_52, Jambalaya_52
• Track 24 : Mutzi_52
• Track 25 : Fireball_54
• Track 26 : YungMoney_55
• Track 27 : Clown_63
• Track 28 : Geodirt_49
• Track 29 : Barsten_51, FuegoCuervo_54, ChadMasterC_51
• Track 30 : RiverRaider_51
• Track 31 : Sanjuju_49, Fitzgerald_49
• Track 32 : Hans_50, Ali17_46, Inspectinfecti_49
• Track 33 : Phinally_48, Leonard_48
• Track 34 : MelBins_49

• Track 35 : EMoore_46
• Track 36 : RoadKill_55
• Track 37 : Mareelih_28, BlueNGold_28, Boopy_30, Forza_30
• Track 38 : Sixama_33
• Track 39 : Sprinklemunch_59
• Track 40 : Eyre_39
• Track 41 : E3_gp63

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

The start number called the most often in the published annotations is 28, it was called in 37 of the 75 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Agueybana_54, Ali17_46, Arri_55, Bakery_58, Barb_54, Barsten_51, ChadMasterC_51, CherryCola_54, ClamChowder_54, CoveyB_54, E3_gp63, EMoore_46, Egi03_52, Eyre_39, Fitzgerald_49, Floral_53, FuegoCuervo_54, Fugax_55, Geodirt_49, Gezellig_51, Halo3_53, Hans_50, Inspectinfecti_49, KimmyK_53, Leonard_48, MelBins_49, Phinally_48, Phlop_51, PinkCoffee_54, Pollux_55, PullumCavea_51, RiverRaider_51, RogerDodger_55, Sanjuju_49, SharkTale_54, Sixsevenium_56, Sprinklemunch_59, TillyBobJoe_54, Valary_54, VanDeWege_55, Wizard_51,

Genes that have the "Most Annotated" start but do not call it:
• BlueNGold_28, Boopy_30, Forza_30, Mareelih_28, Sixama_33,

Genes that do not have the "Most Annotated" start:
• BatStarr_55, Bunnybear_48, Clown_63, Danyall_54, Easley_48, Evamon_51, Eviarto_56, Fireball_54, Herod_54, Hugley_52, Hyzer_61, Jablanski_56, Jambalaya_52, JohnPork_55, Madavieve_50, Maridalia_56, Mutzi_52, Nubi_52, Nymphadora_56, Oregano_53, PantheRoc_56, Portcullis_54, Pytheas_56, RoadKill_55, Salvador_51, Savbucketdawg_52, Sendy_53, Shinji_52, SmokingBunny_52, Suerte_48, SushiChef_52, ThankyouJordi_54, Thimann_53, TimTam_56, Togo_51, Tuti_48, Twister6_54, WelcomeAyanna_54, YungMoney_55,

Summary by start number:

Start 22:
• Found in 1 of 85 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 75
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Clown_63 (DC2),

Start 23:
• Found in 5 of 85 (5.9%) of genes in pham
• Manual Annotations of this start: 5 of 75
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueNGold_28 (DS), Boopy_30 (DS), Forza_30 (DS), Mareelih_28 (DS), Sixama_33 (DS),

Start 26:
• Found in 22 of 85 (25.9%) of genes in pham
• Manual Annotations of this start: 18 of 75
• Called 95.5% of time when present
• Phage (with cluster) where this start called: BatStarr_55 (CZ1), Bunnybear_48 (CZ), Easley_48 (CZ4), Eviarto_56 (CZ1), Herod_54 (CZ1), Hugley_52 (CZ1), Hyzer_61 (CZ1), Jablanski_56 (CY3), Madavieve_50 (CZ1), Maridalia_56 (CZ1), Nymphadora_56 (CZ1), Oregano_53 (CZ4), PantheRoc_56 (CZ3), Pytheas_56 (CY3), Suerte_48 (CZ4), SushiChef_52 (CZ), ThankyouJordi_54 (CZ1), Thimann_53 (CZ4), TimTam_56 (CZ1), Tuti_48 (CZ4), WelcomeAyanna_54 (CZ1),

Start 28:
• Found in 46 of 85 (54.1%) of genes in pham
• Manual Annotations of this start: 37 of 75
• Called 89.1% of time when present
• Phage (with cluster) where this start called: Agueybana_54 (CZ1), Ali17_46 (DE2), Arri_55 (DC1), Bakery_58 (DC1), Barb_54 (DC1), Barsten_51 (DE1), ChadMasterC_51 (DE1), CherryCola_54 (DC1), ClamChowder_54 (DC1), CoveyB_54 (DC1), E3_gp63 (singleton), EMoore_46 (DE2), Egi03_52 (DC1), Eyre_39 (singleton), Fitzgerald_49 (DE1), Floral_53 (CY1), FuegoCuervo_54 (DE1), Fugax_55 (DC1), Geodirt_49 (DE1), Gezellig_51 (DC1), Halo3_53 (DC1), Hans_50 (DE2), Inspectinfecti_49 (DE2), KimmyK_53 (DC1), Leonard_48 (DE2), MelBins_49 (DE2), Phinally_48 (DE2), Phlop_51 (DC1), PinkCoffee_54 (DC1), Pollux_55 (CY1), PullumCavea_51 (DC1), RiverRaider_51 (DE1), RogerDodger_55 (DC1), Sanjuju_49 (DE1), SharkTale_54 (DC1), Sixsevenium_56 (DC1), Sprinklemunch_59 (DW), TillyBobJoe_54 (DC1), Valary_54 (DC1), VanDeWege_55 (DC1), Wizard_51 (DC1),

Start 31:
• Found in 16 of 85 (18.8%) of genes in pham
• Manual Annotations of this start: 13 of 75
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Danyall_54 (DC1), Evamon_51 (DC1), Fireball_54 (DC1), Jambalaya_52 (DC1), JohnPork_55 (DC1), Mutzi_52 (DC1), Nubi_52 (DC1), Portcullis_54 (DC1), Salvador_51 (DC1), Savbucketdawg_52 (DC1), Sendy_53 (DC1), Shinji_52 (DC1), SmokingBunny_52 (DC1), Togo_51 (DC1), Twister6_54 (DC1), YungMoney_55 (DC1),

Start 57:
• Found in 1 of 85 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 75
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RoadKill_55 (DE3),

Summary by clusters:

There are 14 clusters represented in this pham: CY3, CY1, CZ1, DE1, DE2, DE3, singleton, CZ4, CZ, CZ3, DW, DC2, DS, DC1,

Info for manual annotations of cluster CY1:
•Start number 28 was manually annotated 2 times for cluster CY1.

Info for manual annotations of cluster CY3:
•Start number 26 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CZ:
•Start number 26 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 26 was manually annotated 9 times for cluster CZ1.
•Start number 28 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ3:
•Start number 26 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster CZ4:
•Start number 26 was manually annotated 5 times for cluster CZ4.

Info for manual annotations of cluster DC1:
•Start number 28 was manually annotated 19 times for cluster DC1.
•Start number 31 was manually annotated 13 times for cluster DC1.

Info for manual annotations of cluster DC2:
•Start number 22 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:
•Start number 28 was manually annotated 7 times for cluster DE1.

Info for manual annotations of cluster DE2:
•Start number 28 was manually annotated 7 times for cluster DE2.

Info for manual annotations of cluster DE3:
•Start number 57 was manually annotated 1 time for cluster DE3.

Info for manual annotations of cluster DS:
•Start number 23 was manually annotated 5 times for cluster DS.

Gene Information:

Gene: Agueybana_54 Start: 39148, Stop: 39417, Start Num: 28
Candidate Starts for Agueybana_54:
(14, 38995), (17, 39046), (Start: 28 @39148 has 37 MA's), (59, 39301),

Gene: Ali17_46 Start: 41005, Stop: 41274, Start Num: 28
Candidate Starts for Ali17_46:
(Start: 28 @41005 has 37 MA's), (39, 41059), (52, 41113), (54, 41131),

Gene: Arri_55 Start: 40733, Stop: 40987, Start Num: 28
Candidate Starts for Arri_55:
(2, 40349), (3, 40385), (4, 40415), (6, 40457), (7, 40490), (8, 40502), (10, 40535), (12, 40577), (Start: 28 @40733 has 37 MA's), (56, 40871), (61, 40898),

Gene: Bakery_58 Start: 41850, Stop: 42167, Start Num: 28
Candidate Starts for Bakery_58:

(2, 41490), (3, 41526), (4, 41556), (Start: 28 @41850 has 37 MA's), (37, 41910), (40, 41928), (41, 41943), (43, 41949), (50, 41994), (59, 42063),

Gene: Barb_54 Start: 40852, Stop: 41124, Start Num: 28
Candidate Starts for Barb_54:
(2, 40468), (3, 40504), (4, 40534), (6, 40576), (7, 40609), (8, 40621), (10, 40654), (Start: 28 @40852 has 37 MA's), (54, 40975), (56, 41008), (61, 41035),

Gene: Barsten_51 Start: 42934, Stop: 43296, Start Num: 28
Candidate Starts for Barsten_51:
(24, 42922), (27, 42931), (Start: 28 @42934 has 37 MA's),

Gene: BatStarr_55 Start: 40436, Stop: 40723, Start Num: 26
Candidate Starts for BatStarr_55:
(Start: 26 @40436 has 18 MA's), (44, 40511), (54, 40565), (59, 40610),

Gene: BlueNGold_28 Start: 10066, Stop: 9809, Start Num: 23
Candidate Starts for BlueNGold_28:
(20, 10081), (Start: 23 @10066 has 5 MA's), (Start: 28 @10045 has 37 MA's), (49, 9976), (58, 9907), (60, 9892),

Gene: Boopy_30 Start: 10078, Stop: 9821, Start Num: 23
Candidate Starts for Boopy_30:
(20, 10093), (Start: 23 @10078 has 5 MA's), (Start: 28 @10057 has 37 MA's), (49, 9988), (58, 9919), (60, 9904),

Gene: Bunnybear_48 Start: 36890, Stop: 37207, Start Num: 26
Candidate Starts for Bunnybear_48:
(Start: 26 @36890 has 18 MA's), (35, 36938), (54, 37049), (59, 37094),

Gene: ChadMasterC_51 Start: 44333, Stop: 44695, Start Num: 28
Candidate Starts for ChadMasterC_51:
(24, 44321), (27, 44330), (Start: 28 @44333 has 37 MA's),

Gene: CherryCola_54 Start: 41506, Stop: 41757, Start Num: 28
Candidate Starts for CherryCola_54:
(2, 41122), (3, 41158), (4, 41188), (6, 41230), (7, 41263), (8, 41275), (10, 41308), (12, 41350), (16, 41398), (Start: 28 @41506 has 37 MA's), (51, 41587), (56, 41641), (61, 41668),

Gene: ClamChowder_54 Start: 40852, Stop: 41124, Start Num: 28
Candidate Starts for ClamChowder_54:
(2, 40468), (3, 40504), (4, 40534), (6, 40576), (7, 40609), (8, 40621), (10, 40654), (Start: 28 @40852 has 37 MA's), (54, 40975), (56, 41008), (61, 41035),

Gene: Clown_63 Start: 44726, Stop: 45010, Start Num: 22
Candidate Starts for Clown_63:
(Start: 22 @44726 has 1 MA's), (Start: 26 @44744 has 18 MA's), (51, 44840), (52, 44846), (54, 44861), (55, 44879),

Gene: CoveyB_54 Start: 40551, Stop: 40802, Start Num: 28
Candidate Starts for CoveyB_54:
(2, 40167), (3, 40203), (4, 40233), (6, 40275), (7, 40308), (8, 40320), (10, 40353), (12, 40395), (16, 40443), (Start: 28 @40551 has 37 MA's), (51, 40632), (56, 40686), (61, 40713),

Gene: Danyall_54 Start: 40589, Stop: 40831, Start Num: 31
Candidate Starts for Danyall_54:
(2, 40169), (3, 40205), (4, 40235), (6, 40277), (7, 40310), (8, 40322), (10, 40355), (16, 40445), (Start: 31 @40589 has 13 MA's), (42, 40625), (46, 40628), (56, 40715), (61, 40742),

Gene: E3_gp63 Start: 24893, Stop: 25126, Start Num: 28
Candidate Starts for E3_gp63:
(5, 24641), (11, 24737), (Start: 28 @24893 has 37 MA's), (36, 24935), (41, 24980), (42, 24983), (47, 25001),

Gene: EMoore_46 Start: 42206, Stop: 42475, Start Num: 28
Candidate Starts for EMoore_46:
(Start: 28 @42206 has 37 MA's), (34, 42245), (52, 42314), (54, 42332),

Gene: Easley_48 Start: 35265, Stop: 35531, Start Num: 26
Candidate Starts for Easley_48:
(Start: 26 @35265 has 18 MA's), (33, 35301), (54, 35373), (66, 35508),

Gene: Egi03_52 Start: 40333, Stop: 40605, Start Num: 28
Candidate Starts for Egi03_52:
(2, 39949), (3, 39985), (4, 40015), (6, 40057), (7, 40090), (8, 40102), (10, 40135), (Start: 28 @40333 has 37 MA's), (54, 40456), (56, 40489), (61, 40516),

Gene: Evamon_51 Start: 40608, Stop: 40850, Start Num: 31
Candidate Starts for Evamon_51:
(2, 40188), (3, 40224), (4, 40254), (6, 40296), (7, 40329), (8, 40341), (10, 40374), (16, 40464), (Start: 31 @40608 has 13 MA's), (42, 40644), (46, 40647), (56, 40734), (61, 40761), (66, 40836),

Gene: Eviarto_56 Start: 40411, Stop: 40698, Start Num: 26
Candidate Starts for Eviarto_56:
(Start: 26 @40411 has 18 MA's), (44, 40486), (54, 40540), (59, 40585),

Gene: Eyre_39 Start: 28551, Stop: 28820, Start Num: 28
Candidate Starts for Eyre_39:
(Start: 28 @28551 has 37 MA's), (54, 28653),

Gene: Fireball_54 Start: 41224, Stop: 41466, Start Num: 31
Candidate Starts for Fireball_54:
(2, 40804), (3, 40840), (4, 40870), (6, 40912), (7, 40945), (8, 40957), (9, 40963), (10, 40990), (16, 41080), (Start: 31 @41224 has 13 MA's), (42, 41260), (46, 41263), (56, 41350), (61, 41377),

Gene: Fitzgerald_49 Start: 43615, Stop: 43956, Start Num: 28
Candidate Starts for Fitzgerald_49:
(Start: 28 @43615 has 37 MA's), (30, 43639),

Gene: Floral_53 Start: 39990, Stop: 40280, Start Num: 28
Candidate Starts for Floral_53:
(Start: 28 @39990 has 37 MA's), (45, 40065), (54, 40119), (59, 40164), (65, 40236),

Gene: Forza_30 Start: 10118, Stop: 9861, Start Num: 23
Candidate Starts for Forza_30:

(20, 10133), (Start: 23 @10118 has 5 MA's), (Start: 28 @10097 has 37 MA's), (49, 10028), (58, 9959), (60, 9944),

Gene: FuegoCuervo_54 Start: 42204, Stop: 42566, Start Num: 28
Candidate Starts for FuegoCuervo_54:
(24, 42192), (27, 42201), (Start: 28 @42204 has 37 MA's),

Gene: Fugax_55 Start: 40844, Stop: 41116, Start Num: 28
Candidate Starts for Fugax_55:
(2, 40460), (3, 40496), (4, 40526), (6, 40568), (7, 40601), (8, 40613), (10, 40646), (Start: 28 @40844 has 37 MA's), (54, 40967), (56, 41000), (61, 41027),

Gene: Geodirt_49 Start: 43703, Stop: 44044, Start Num: 28
Candidate Starts for Geodirt_49:
(1, 43328), (Start: 28 @43703 has 37 MA's), (32, 43733),

Gene: Gezellig_51 Start: 40704, Stop: 40955, Start Num: 28
Candidate Starts for Gezellig_51:
(2, 40320), (3, 40356), (4, 40386), (6, 40428), (7, 40461), (8, 40473), (10, 40506), (12, 40548), (16, 40596), (Start: 28 @40704 has 37 MA's), (51, 40785), (56, 40839), (61, 40866),

Gene: Halo3_53 Start: 41289, Stop: 41540, Start Num: 28
Candidate Starts for Halo3_53:
(2, 40905), (3, 40941), (4, 40971), (6, 41013), (7, 41046), (8, 41058), (10, 41091), (12, 41133), (16, 41181), (Start: 28 @41289 has 37 MA's), (51, 41370), (56, 41424), (61, 41451),

Gene: Hans_50 Start: 41645, Stop: 41914, Start Num: 28
Candidate Starts for Hans_50:
(Start: 28 @41645 has 37 MA's), (39, 41699), (52, 41753), (54, 41771),

Gene: Herod_54 Start: 40455, Stop: 40742, Start Num: 26
Candidate Starts for Herod_54:
(Start: 26 @40455 has 18 MA's), (44, 40530), (54, 40584), (59, 40629),

Gene: Hugley_52 Start: 40435, Stop: 40722, Start Num: 26
Candidate Starts for Hugley_52:
(Start: 26 @40435 has 18 MA's), (44, 40510), (54, 40564), (59, 40609),

Gene: Hyzer_61 Start: 41797, Stop: 42114, Start Num: 26
Candidate Starts for Hyzer_61:
(13, 41635), (Start: 26 @41797 has 18 MA's), (49, 41923), (54, 41956),

Gene: Inspectinfecti_49 Start: 42091, Stop: 42360, Start Num: 28
Candidate Starts for Inspectinfecti_49:
(Start: 28 @42091 has 37 MA's), (39, 42145), (52, 42199), (54, 42217),

Gene: Jablanski_56 Start: 41463, Stop: 41780, Start Num: 26
Candidate Starts for Jablanski_56:
(Start: 26 @41463 has 18 MA's), (49, 41589), (54, 41622),

Gene: Jambalaya_52 Start: 40387, Stop: 40629, Start Num: 31
Candidate Starts for Jambalaya_52:

(2, 39967), (3, 40003), (4, 40033), (6, 40075), (7, 40108), (8, 40120), (10, 40153), (16, 40243), (Start: 31 @40387 has 13 MA's), (42, 40423), (46, 40426), (56, 40513), (61, 40540),

Gene: JohnPork_55 Start: 40400, Stop: 40642, Start Num: 31
Candidate Starts for JohnPork_55:
(2, 39980), (3, 40016), (4, 40046), (6, 40088), (7, 40121), (8, 40133), (10, 40166), (16, 40256), (Start: 31 @40400 has 13 MA's), (42, 40436), (46, 40439), (56, 40526), (61, 40553),

Gene: KimmyK_53 Start: 41286, Stop: 41558, Start Num: 28
Candidate Starts for KimmyK_53:
(2, 40902), (3, 40938), (4, 40968), (6, 41010), (7, 41043), (8, 41055), (10, 41088), (Start: 28 @41286 has 37 MA's), (54, 41409), (56, 41442), (61, 41469),

Gene: Leonard_48 Start: 41738, Stop: 42007, Start Num: 28
Candidate Starts for Leonard_48:
(Start: 28 @41738 has 37 MA's), (52, 41846), (54, 41864),

Gene: Madavieve_50 Start: 37846, Stop: 38163, Start Num: 26
Candidate Starts for Madavieve_50:
(Start: 26 @37846 has 18 MA's), (35, 37894), (54, 38005), (59, 38050),

Gene: Mareelih_28 Start: 9523, Stop: 9266, Start Num: 23
Candidate Starts for Mareelih_28:
(20, 9538), (Start: 23 @9523 has 5 MA's), (Start: 28 @9502 has 37 MA's), (49, 9433), (58, 9364), (60, 9349),

Gene: Maridalia_56 Start: 38636, Stop: 38953, Start Num: 26
Candidate Starts for Maridalia_56:
(Start: 26 @38636 has 18 MA's), (35, 38684), (54, 38795), (59, 38840),

Gene: MelBins_49 Start: 41918, Stop: 42259, Start Num: 28
Candidate Starts for MelBins_49:
(Start: 28 @41918 has 37 MA's), (54, 42116),

Gene: Mutzi_52 Start: 41716, Stop: 41958, Start Num: 31
Candidate Starts for Mutzi_52:
(2, 41296), (3, 41332), (4, 41362), (6, 41404), (7, 41437), (8, 41449), (10, 41482), (12, 41524), (16, 41572), (Start: 31 @41716 has 13 MA's), (42, 41752), (46, 41755), (56, 41842), (61, 41869),

Gene: Nubi_52 Start: 40713, Stop: 40955, Start Num: 31
Candidate Starts for Nubi_52:
(2, 40293), (3, 40329), (4, 40359), (6, 40401), (7, 40434), (8, 40446), (10, 40479), (12, 40521), (16, 40569), (Start: 31 @40713 has 13 MA's), (42, 40749), (46, 40752), (56, 40839), (61, 40866), (66, 40941),

Gene: Nymphadora_56 Start: 40435, Stop: 40722, Start Num: 26
Candidate Starts for Nymphadora_56:
(Start: 26 @40435 has 18 MA's), (44, 40510), (54, 40564), (59, 40609),

Gene: Oregano_53 Start: 35949, Stop: 36215, Start Num: 26
Candidate Starts for Oregano_53:
(Start: 26 @35949 has 18 MA's), (33, 35985), (54, 36057),

Gene: PantheRoc_56 Start: 39256, Stop: 39543, Start Num: 26
Candidate Starts for PantheRoc_56:
(Start: 26 @39256 has 18 MA's), (44, 39331), (54, 39385), (59, 39430), (61, 39445),

Gene: Phinally_48 Start: 41735, Stop: 42004, Start Num: 28
Candidate Starts for Phinally_48:
(Start: 28 @41735 has 37 MA's), (52, 41843), (54, 41861),

Gene: Phlop_51 Start: 40758, Stop: 41030, Start Num: 28
Candidate Starts for Phlop_51:
(2, 40374), (3, 40410), (4, 40440), (6, 40482), (7, 40515), (8, 40527), (10, 40560), (Start: 28 @40758 has 37 MA's), (54, 40881), (56, 40914), (61, 40941),

Gene: PinkCoffee_54 Start: 40861, Stop: 41133, Start Num: 28
Candidate Starts for PinkCoffee_54:
(2, 40477), (3, 40513), (4, 40543), (6, 40585), (7, 40618), (8, 40630), (10, 40663), (Start: 28 @40861 has 37 MA's), (54, 40984), (56, 41017), (61, 41044),

Gene: Pollux_55 Start: 39990, Stop: 40280, Start Num: 28
Candidate Starts for Pollux_55:
(Start: 28 @39990 has 37 MA's), (45, 40065), (54, 40119), (59, 40164), (65, 40236),

Gene: Portcullis_54 Start: 40400, Stop: 40642, Start Num: 31
Candidate Starts for Portcullis_54:
(2, 39980), (3, 40016), (4, 40046), (6, 40088), (7, 40121), (8, 40133), (10, 40166), (16, 40256), (Start: 31 @40400 has 13 MA's), (42, 40436), (46, 40439), (56, 40526), (61, 40553),

Gene: PullumCavea_51 Start: 40758, Stop: 41030, Start Num: 28
Candidate Starts for PullumCavea_51:
(2, 40374), (3, 40410), (4, 40440), (6, 40482), (7, 40515), (8, 40527), (10, 40560), (Start: 28 @40758 has 37 MA's), (54, 40881), (56, 40914), (61, 40941),

Gene: Pytheas_56 Start: 41462, Stop: 41779, Start Num: 26
Candidate Starts for Pytheas_56:
(Start: 26 @41462 has 18 MA's), (49, 41588), (54, 41621),

Gene: RiverRaider_51 Start: 41565, Stop: 41936, Start Num: 28
Candidate Starts for RiverRaider_51:
(Start: 28 @41565 has 37 MA's), (48, 41718), (53, 41748), (62, 41826),

Gene: RoadKill_55 Start: 43934, Stop: 44122, Start Num: 57
Candidate Starts for RoadKill_55:
(19, 43679), (25, 43709), (38, 43787), (Start: 57 @43934 has 1 MA's),

Gene: RogerDodger_55 Start: 40901, Stop: 41152, Start Num: 28
Candidate Starts for RogerDodger_55:
(2, 40517), (3, 40553), (4, 40583), (6, 40625), (7, 40658), (8, 40670), (10, 40703), (12, 40745), (16, 40793), (Start: 28 @40901 has 37 MA's), (51, 40982), (56, 41036), (61, 41063),

Gene: Salvador_51 Start: 40606, Stop: 40848, Start Num: 31
Candidate Starts for Salvador_51:
(2, 40186), (3, 40222), (4, 40252), (6, 40294), (7, 40327), (8, 40339), (10, 40372), (16, 40462), (Start: 31 @40606 has 13 MA's), (42, 40642), (46, 40645), (56, 40732), (61, 40759), (66, 40834),

Gene: Sanjuju_49 Start: 43748, Stop: 44089, Start Num: 28
Candidate Starts for Sanjuju_49:
(Start: 28 @43748 has 37 MA's), (30, 43772),

Gene: Savbucketdawg_52 Start: 40387, Stop: 40629, Start Num: 31
Candidate Starts for Savbucketdawg_52:
(2, 39967), (3, 40003), (4, 40033), (6, 40075), (7, 40108), (8, 40120), (10, 40153), (16, 40243), (Start: 31 @40387 has 13 MA's), (42, 40423), (46, 40426), (56, 40513), (61, 40540),

Gene: Sendy_53 Start: 40914, Stop: 41156, Start Num: 31
Candidate Starts for Sendy_53:
(2, 40494), (3, 40530), (4, 40560), (6, 40602), (7, 40635), (8, 40647), (10, 40680), (12, 40722), (16, 40770), (Start: 31 @40914 has 13 MA's), (42, 40950), (46, 40953), (56, 41040), (61, 41067), (66, 41142),

Gene: SharkTale_54 Start: 41692, Stop: 41967, Start Num: 28
Candidate Starts for SharkTale_54:
(6, 41416), (7, 41449), (10, 41494), (12, 41536), (Start: 28 @41692 has 37 MA's), (40, 41740), (50, 41794), (59, 41863),

Gene: Shinji_52 Start: 40150, Stop: 40392, Start Num: 31
Candidate Starts for Shinji_52:
(2, 39730), (3, 39766), (4, 39796), (6, 39838), (7, 39871), (8, 39883), (10, 39916), (16, 40006), (Start: 31 @40150 has 13 MA's), (42, 40186), (56, 40276), (61, 40303),

Gene: Sixama_33 Start: 11171, Stop: 10920, Start Num: 23
Candidate Starts for Sixama_33:
(21, 11183), (Start: 23 @11171 has 5 MA's), (Start: 28 @11153 has 37 MA's), (29, 11132), (49, 11084), (50, 11075), (58, 11015), (60, 11000),

Gene: Sixsevenium_56 Start: 41079, Stop: 41396, Start Num: 28
Candidate Starts for Sixsevenium_56:
(2, 40719), (3, 40755), (4, 40785), (Start: 28 @41079 has 37 MA's), (37, 41139), (40, 41157), (41, 41172), (43, 41178), (50, 41223), (59, 41292),

Gene: SmokingBunny_52 Start: 40699, Stop: 40941, Start Num: 31
Candidate Starts for SmokingBunny_52:
(2, 40279), (3, 40315), (4, 40345), (6, 40387), (7, 40420), (8, 40432), (10, 40465), (12, 40507), (16, 40555), (Start: 31 @40699 has 13 MA's), (42, 40735), (46, 40738), (56, 40825), (61, 40852), (66, 40927),

Gene: Sprinklemunch_59 Start: 41359, Stop: 41646, Start Num: 28
Candidate Starts for Sprinklemunch_59:
(15, 41215), (Start: 28 @41359 has 37 MA's), (34, 41398), (54, 41488), (59, 41533), (63, 41572), (64, 41575),

Gene: Suerte_48 Start: 35385, Stop: 35651, Start Num: 26
Candidate Starts for Suerte_48:
(Start: 26 @35385 has 18 MA's), (54, 35493),

Gene: SushiChef_52 Start: 39404, Stop: 39721, Start Num: 26
Candidate Starts for SushiChef_52:

(Start: 26 @39404 has 18 MA's), (35, 39452), (54, 39563), (59, 39608),

Gene: ThankyouJordi_54 Start: 40335, Stop: 40622, Start Num: 26
Candidate Starts for ThankyouJordi_54:
(Start: 26 @40335 has 18 MA's), (44, 40410), (54, 40464), (59, 40509), (67, 40614),

Gene: Thimann_53 Start: 36829, Stop: 37095, Start Num: 26
Candidate Starts for Thimann_53:
(Start: 26 @36829 has 18 MA's), (33, 36865), (54, 36937), (58, 36973), (59, 36982), (66, 37072),

Gene: TillyBobJoe_54 Start: 42186, Stop: 42452, Start Num: 28
Candidate Starts for TillyBobJoe_54:
(18, 42120), (Start: 28 @42186 has 37 MA's), (49, 42255), (54, 42288),

Gene: TimTam_56 Start: 40435, Stop: 40722, Start Num: 26
Candidate Starts for TimTam_56:
(Start: 26 @40435 has 18 MA's), (44, 40510), (54, 40564), (59, 40609),

Gene: Togo_51 Start: 40699, Stop: 40941, Start Num: 31
Candidate Starts for Togo_51:
(2, 40279), (3, 40315), (4, 40345), (6, 40387), (7, 40420), (8, 40432), (10, 40465), (12, 40507), (16, 40555), (Start: 31 @40699 has 13 MA's), (42, 40735), (46, 40738), (56, 40825), (61, 40852), (66, 40927),

Gene: Tuti_48 Start: 36697, Stop: 36963, Start Num: 26
Candidate Starts for Tuti_48:
(Start: 26 @36697 has 18 MA's), (33, 36733), (54, 36805),

Gene: Twister6_54 Start: 40500, Stop: 40742, Start Num: 31
Candidate Starts for Twister6_54:
(2, 40080), (3, 40116), (4, 40146), (6, 40188), (7, 40221), (8, 40233), (10, 40266), (16, 40356), (Start: 31 @40500 has 13 MA's), (42, 40536), (46, 40539), (56, 40626), (61, 40653),

Gene: Valary_54 Start: 41506, Stop: 41757, Start Num: 28
Candidate Starts for Valary_54:
(2, 41122), (3, 41158), (4, 41188), (6, 41230), (7, 41263), (8, 41275), (10, 41308), (12, 41350), (16, 41398), (Start: 28 @41506 has 37 MA's), (51, 41587), (56, 41641), (61, 41668),

Gene: VanDeWege_55 Start: 40798, Stop: 41049, Start Num: 28
Candidate Starts for VanDeWege_55:
(2, 40414), (3, 40450), (4, 40480), (6, 40522), (7, 40555), (8, 40567), (10, 40600), (12, 40642), (16, 40690), (Start: 28 @40798 has 37 MA's), (51, 40879), (56, 40933), (61, 40960),

Gene: WelcomeAyanna_54 Start: 40482, Stop: 40769, Start Num: 26
Candidate Starts for WelcomeAyanna_54:
(Start: 26 @40482 has 18 MA's), (44, 40557), (54, 40611), (59, 40656), (67, 40761),

Gene: Wizard_51 Start: 40704, Stop: 40955, Start Num: 28
Candidate Starts for Wizard_51:
(2, 40320), (3, 40356), (4, 40386), (6, 40428), (7, 40461), (8, 40473), (10, 40506), (12, 40548), (16, 40596), (Start: 28 @40704 has 37 MA's), (51, 40785), (56, 40839), (61, 40866),

Gene: YungMoney_55 Start: 44258, Stop: 44500, Start Num: 31

Candidate Starts for YungMoney_55:
(3, 43874), (4, 43904), (6, 43946), (7, 43979), (8, 43991), (10, 44024), (16, 44114), (Start: 31 @44258 has 13 MA's), (42, 44294), (46, 44297), (56, 44384), (61, 44411),