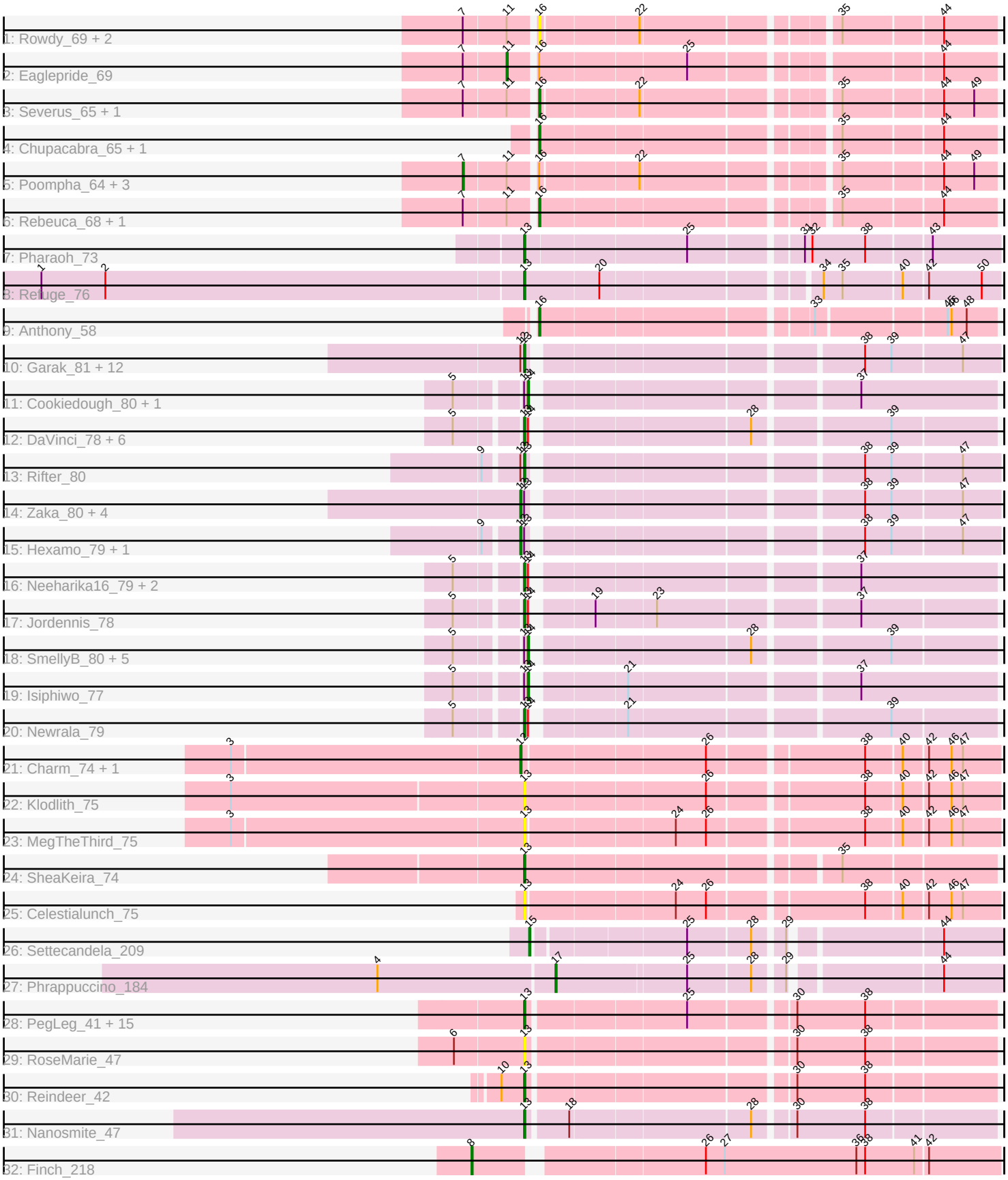
Pham 291054


1: Rowdy_69 + 2
2: Eaglepride_69
3: Severus_65 + 1
4: Chupacabra_65 + 1
5: Poompha_64 + 3
6: Rebeuca_68 + 1
7: Pharaoh_73
8: Refuge_76
9: Anthony_58
10: Garak_81 + 12
11: Cookiedough_80 + 1
12: DaVinci_78 + 6
13: Rifter_80
14: Zaka_80 + 4
15: Hexamo_79 + 1
16: Neeharika16_79 + 2
17: Jordennis_78
18: SmellyB_80 + 5
19: Isiphiwo_77
20: Newrala_79
21: Charm_74 + 1
22: Klodlith_75
23: MegTheThird_75
24: SheaKeira_74
25: Celestialunch_75
26: Settecandela_209
27: Phrappuccino_184
28: PegLeg_41 + 15
29: RoseMarie_47
30: Reindeer_42
31: Nanosmite_47
32: Finch_218

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 291054 Report

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

Pham number 291054 has 87 members, 13 are drafts.

Phages represented in each track:
• Track 1 : Rowdy_69, Shapes_69, DustyMartin_69
• Track 2 : Eaglepride_69
• Track 3 : Severus_65, KittenMittens_64
• Track 4 : Chupacabra_65, Goose_68
• Track 5 : Poompha_64, Trike_64, Drake94_65, PeaceMeal1_65
• Track 6 : Rebeuca_68, Kristoff_66
• Track 7 : Pharaoh_73
• Track 8 : Refuge_76
• Track 9 : Anthony_58
• Track 10 : Garak_81, Indra_83, Temprado_81, Tucker_80, ToneTone_77, BennyP_79, Koko_81, WunderPhul_80, Lilbunny_79, Helmet_82, BlessJoy_80, Roksolana_80, Wiks_79
• Track 11 : Cookiedough_80, DelvinSonDorr_76
• Track 12 : DaVinci_78, Kazan_81, Candra_78, SuperCallie99_77, Hoot_75, BABullseye_73, VohminGhazi_80
• Track 13 : Rifter_80
• Track 14 : Zaka_80, Yokurt_79, Zulu_81, Blue7_81, Artemis2UCLA_79
• Track 15 : Hexamo_79, CloudWang3_80
• Track 16 : Neeharika16_79, Pmask_79, SuperAwesome_80
• Track 17 : Jordennis_78
• Track 18 : SmellyB_80, GreedyLawyer_75, EricB_79, Kipper29_80, Dorothea_80, Chartreuse_79
• Track 19 : Isiphiwo_77
• Track 20 : Newrala_79
• Track 21 : Charm_74, DreamTeam1_74
• Track 22 : Klodlith_75
• Track 23 : MegTheThird_75
• Track 24 : SheaKeira_74
• Track 25 : Celestialunch_75
• Track 26 : Settecandela_209
• Track 27 : Phrappuccino_184
• Track 28 : PegLeg_41, LilhomieP_40, Diminimus_42, Bongo_41, Glaske16_42, SlimJimmy_40, Auspice_41, TpudiCK_43, Bricole_41, FreakyGoo_42, IPhane7_41, Izel_42, TyDawg_41, Dulcita_42, Skinny_42, KleverKiS_42
• Track 29 : RoseMarie_47
• Track 30 : Reindeer_42
• Track 31 : Nanosmite_47

• Track 32 : Finch_218

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

The start number called the most often in the published annotations is 13, it was called in 42 of the 74 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Auspice_41, BABullseye_73, BennyP_79, BlessJoy_80, Bongo_41, Bricole_41, Candra_78, Celestialunch_75, DaVinci_78, Diminimus_42, Dulcita_42, FreakyGoo_42, Garak_81, Glaske16_42, Helmet_82, Hoot_75, IPhane7_41, Indra_83, Izel_42, Jordennis_78, Kazan_81, KleverKiS_42, Klodlith_75, Koko_81, Lilbunny_79, LilhomieP_40, MegTheThird_75, Nanosmite_47, Neeharika16_79, Newrala_79, PegLeg_41, Pharaoh_73, Pmask_79, Refuge_76, Reindeer_42, Rifter_80, Roksolana_80, RoseMarie_47, SheaKeira_74, Skinny_42, SlimJimmy_40, SuperAwesome_80, SuperCallie99_77, Temprado_81, ToneTone_77, TpudiCK_43, Tucker_80, TyDawg_41, VohminGhazi_80, Wiks_79, WunderPhul_80,

Genes that have the "Most Annotated" start but do not call it:
• Artemis2UCLA_79, Blue7_81, Chartreuse_79, CloudWang3_80, Cookiedough_80, DelvinSonDorr_76, Dorothea_80, EricB_79, GreedyLawyer_75, Hexamo_79, Isiphiwo_77, Kipper29_80, SmellyB_80, Yokurt_79, Zaka_80, Zulu_81,

Genes that do not have the "Most Annotated" start:
• Anthony_58, Charm_74, Chupacabra_65, Drake94_65, DreamTeam1_74, DustyMartin_69, Eaglepride_69, Finch_218, Goose_68, KittenMittens_64, Kristoff_66, PeaceMeal1_65, Phrappuccino_184, Poompha_64, Rebeuca_68, Rowdy_69, Settecandela_209, Severus_65, Shapes_69, Trike_64,

Summary by start number:

Start 7:
• Found in 12 of 87 (13.8%) of genes in pham
• Manual Annotations of this start: 4 of 74
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Drake94_65 (A10), PeaceMeal1_65 (A10), Poompha_64 (A10), Trike_64 (A10),

Start 8:
• Found in 1 of 87 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 74
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Finch_218 (singleton),

Start 11:
• Found in 12 of 87 (13.8%) of genes in pham
• Manual Annotations of this start: 1 of 74
• Called 8.3% of time when present
• Phage (with cluster) where this start called: Eaglepride_69 (A10),

Start 12:
• Found in 23 of 87 (26.4%) of genes in pham
• Manual Annotations of this start: 9 of 74
• Called 39.1% of time when present
• Phage (with cluster) where this start called: Artemis2UCLA_79 (A6), Blue7_81 (A6), Charm_74 (A9), CloudWang3_80 (A6), DreamTeam1_74 (A9), Hexamo_79 (A6), Yokurt_79 (A6), Zaka_80 (A6), Zulu_81 (A6),

Start 13:
• Found in 67 of 87 (77.0%) of genes in pham
• Manual Annotations of this start: 42 of 74
• Called 76.1% of time when present
• Phage (with cluster) where this start called: Auspice_41 (M1), BABullseye_73 (A6), BennyP_79 (A6), BlessJoy_80 (A6), Bongo_41 (M1), Bricole_41 (M1), Candra_78 (A6), Celestialunch_75 (A9), DaVinci_78 (A6), Diminimus_42 (M1), Dulcita_42 (M1), FreakyGoo_42 (M1), Garak_81 (A6), Glaske16_42 (M1), Helmet_82 (A6), Hoot_75 (A6), IPhane7_41 (M1), Indra_83 (A6), Izel_42 (M1), Jordennis_78 (A6), Kazan_81 (A6), KleverKiS_42 (M1), Klodlith_75 (A9), Koko_81 (A6), Lilbunny_79 (A6), LilhomieP_40 (M1), MegTheThird_75 (A9), Nanosmite_47 (M3), Neeharika16_79 (A6), Newrala_79 (A6), PegLeg_41 (M1), Pharaoh_73 (A12), Pmask_79 (A6), Refuge_76 (A12), Reindeer_42 (M1), Rifter_80 (A6), Roksolana_80 (A6), RoseMarie_47 (M1), SheaKeira_74 (A9), Skinny_42 (M1), SlimJimmy_40 (M1), SuperAwesome_80 (A6), SuperCallie99_77 (A6), Temprado_81 (A6), ToneTone_77 (A6), TpudiCK_43 (M1), Tucker_80 (A6), TyDawg_41 (M1), VohminGhazi_80 (A6), Wiks_79 (A6), WunderPhul_80 (A6),

Start 14:
• Found in 21 of 87 (24.1%) of genes in pham
• Manual Annotations of this start: 8 of 74
• Called 42.9% of time when present
• Phage (with cluster) where this start called: Chartreuse_79 (A6), Cookiedough_80 (A6), DelvinSonDorr_76 (A6), Dorothea_80 (A6), EricB_79 (A6), GreedyLawyer_75 (A6), Isiphiwo_77 (A6), Kipper29_80 (A6), SmellyB_80 (A6),

Start 15:
• Found in 1 of 87 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 74
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Settecandela_209 (AA),

Start 16:
• Found in 15 of 87 (17.2%) of genes in pham
• Manual Annotations of this start: 7 of 74
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Anthony_58 (A20), Chupacabra_65 (A10), DustyMartin_69 (A10), Goose_68 (A10), KittenMittens_64 (A10), Kristoff_66 (A10), Rebeuca_68 (A10), Rowdy_69 (A10), Severus_65 (A10), Shapes_69 (A10),

Start 17:
• Found in 1 of 87 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 74
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phrappuccino_184 (AA),

Summary by clusters:

There are 9 clusters represented in this pham: A20, AA, singleton, A10, A12, M1, M3, A6, A9,

Info for manual annotations of cluster A10:
•Start number 7 was manually annotated 4 times for cluster A10.
•Start number 11 was manually annotated 1 time for cluster A10.
•Start number 16 was manually annotated 6 times for cluster A10.

Info for manual annotations of cluster A12:
•Start number 13 was manually annotated 2 times for cluster A12.

Info for manual annotations of cluster A20:
•Start number 16 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A6:
•Start number 12 was manually annotated 7 times for cluster A6.
•Start number 13 was manually annotated 23 times for cluster A6.
•Start number 14 was manually annotated 8 times for cluster A6.

Info for manual annotations of cluster A9:
•Start number 12 was manually annotated 2 times for cluster A9.
•Start number 13 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AA:
•Start number 15 was manually annotated 1 time for cluster AA.
•Start number 17 was manually annotated 1 time for cluster AA.

Info for manual annotations of cluster M1:
•Start number 13 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M3:
•Start number 13 was manually annotated 1 time for cluster M3.

Gene Information:

Gene: Anthony_58 Start: 37628, Stop: 37296, Start Num: 16
Candidate Starts for Anthony_58:
(Start: 16 @37628 has 7 MA's), (33, 37430), (45, 37334), (46, 37331), (48, 37319),

Gene: Artemis2UCLA_79 Start: 44616, Stop: 44272, Start Num: 12
Candidate Starts for Artemis2UCLA_79:
(Start: 12 @44616 has 9 MA's), (Start: 13 @44613 has 42 MA's), (38, 44376), (39, 44355), (47, 44301),

Gene: Auspice_41 Start: 33797, Stop: 33453, Start Num: 13
Candidate Starts for Auspice_41:
(Start: 13 @33797 has 42 MA's), (25, 33680), (30, 33605), (38, 33551),

Gene: BABullseye_73 Start: 43259, Stop: 42921, Start Num: 13

Candidate Starts for BABullseye_73:
(5, 43304), (Start: 13 @43259 has 42 MA's), (Start: 14 @43256 has 8 MA's), (28, 43100), (39, 43001),

Gene: BennyP_79 Start: 44778, Stop: 44437, Start Num: 13
Candidate Starts for BennyP_79:
(Start: 12 @44781 has 9 MA's), (Start: 13 @44778 has 42 MA's), (38, 44541), (39, 44520), (47, 44466),

Gene: BlessJoy_80 Start: 45134, Stop: 44793, Start Num: 13
Candidate Starts for BlessJoy_80:
(Start: 12 @45137 has 9 MA's), (Start: 13 @45134 has 42 MA's), (38, 44897), (39, 44876), (47, 44822),

Gene: Blue7_81 Start: 44835, Stop: 44491, Start Num: 12
Candidate Starts for Blue7_81:
(Start: 12 @44835 has 9 MA's), (Start: 13 @44832 has 42 MA's), (38, 44595), (39, 44574), (47, 44520),

Gene: Bongo_41 Start: 33797, Stop: 33453, Start Num: 13
Candidate Starts for Bongo_41:
(Start: 13 @33797 has 42 MA's), (25, 33680), (30, 33605), (38, 33551),

Gene: Bricole_41 Start: 33783, Stop: 33439, Start Num: 13
Candidate Starts for Bricole_41:
(Start: 13 @33783 has 42 MA's), (25, 33666), (30, 33591), (38, 33537),

Gene: Candra_78 Start: 44954, Stop: 44616, Start Num: 13
Candidate Starts for Candra_78:
(5, 44999), (Start: 13 @44954 has 42 MA's), (Start: 14 @44951 has 8 MA's), (28, 44795), (39, 44696),

Gene: Celestialunch_75 Start: 44883, Stop: 44533, Start Num: 13
Candidate Starts for Celestialunch_75:
(Start: 13 @44883 has 42 MA's), (24, 44772), (26, 44748), (38, 44634), (40, 44607), (42, 44589), (46, 44571), (47, 44562),

Gene: Charm_74 Start: 44815, Stop: 44462, Start Num: 12
Candidate Starts for Charm_74:
(3, 45040), (Start: 12 @44815 has 9 MA's), (26, 44677), (38, 44563), (40, 44536), (42, 44518), (46, 44500), (47, 44491),

Gene: Chartreuse_79 Start: 44262, Stop: 43927, Start Num: 14
Candidate Starts for Chartreuse_79:
(5, 44310), (Start: 13 @44265 has 42 MA's), (Start: 14 @44262 has 8 MA's), (28, 44106), (39, 44007),

Gene: Chupacabra_65 Start: 42016, Stop: 41687, Start Num: 16
Candidate Starts for Chupacabra_65:
(Start: 16 @42016 has 7 MA's), (35, 41803), (44, 41728),

Gene: CloudWang3_80 Start: 45127, Stop: 44783, Start Num: 12
Candidate Starts for CloudWang3_80:
(9, 45151), (Start: 12 @45127 has 9 MA's), (Start: 13 @45124 has 42 MA's), (38, 44887), (39, 44866), (47, 44812),

Gene: Cookiedough_80 Start: 45569, Stop: 45231, Start Num: 14
Candidate Starts for Cookiedough_80:
(5, 45617), (Start: 13 @45572 has 42 MA's), (Start: 14 @45569 has 8 MA's), (37, 45338),

Gene: DaVinci_78 Start: 44319, Stop: 43981, Start Num: 13
Candidate Starts for DaVinci_78:
(5, 44364), (Start: 13 @44319 has 42 MA's), (Start: 14 @44316 has 8 MA's), (28, 44160), (39, 44061),

Gene: DelvinSonDorr_76 Start: 44974, Stop: 44636, Start Num: 14
Candidate Starts for DelvinSonDorr_76:
(5, 45022), (Start: 13 @44977 has 42 MA's), (Start: 14 @44974 has 8 MA's), (37, 44743),

Gene: Diminimus_42 Start: 33796, Stop: 33452, Start Num: 13
Candidate Starts for Diminimus_42:
(Start: 13 @33796 has 42 MA's), (25, 33679), (30, 33604), (38, 33550),

Gene: Dorothea_80 Start: 45562, Stop: 45227, Start Num: 14
Candidate Starts for Dorothea_80:
(5, 45610), (Start: 13 @45565 has 42 MA's), (Start: 14 @45562 has 8 MA's), (28, 45406), (39, 45307),

Gene: Drake94_65 Start: 41184, Stop: 40807, Start Num: 7
Candidate Starts for Drake94_65:
(Start: 7 @41184 has 4 MA's), (Start: 11 @41151 has 1 MA's), (Start: 16 @41133 has 7 MA's), (22, 41061), (35, 40923), (44, 40848), (49, 40824),

Gene: DreamTeam1_74 Start: 44663, Stop: 44310, Start Num: 12
Candidate Starts for DreamTeam1_74:
(3, 44888), (Start: 12 @44663 has 9 MA's), (26, 44525), (38, 44411), (40, 44384), (42, 44366), (46, 44348), (47, 44339),

Gene: Dulcita_42 Start: 33797, Stop: 33453, Start Num: 13
Candidate Starts for Dulcita_42:
(Start: 13 @33797 has 42 MA's), (25, 33680), (30, 33605), (38, 33551),

Gene: DustyMartin_69 Start: 42169, Stop: 41843, Start Num: 16
Candidate Starts for DustyMartin_69:
(Start: 7 @42220 has 4 MA's), (Start: 11 @42187 has 1 MA's), (Start: 16 @42169 has 7 MA's), (22, 42097), (35, 41959), (44, 41884),

Gene: Eaglepride_69 Start: 42138, Stop: 41791, Start Num: 11
Candidate Starts for Eaglepride_69:
(Start: 7 @42171 has 4 MA's), (Start: 11 @42138 has 1 MA's), (Start: 16 @42120 has 7 MA's), (25, 42009), (44, 41832),

Gene: EricB_79 Start: 44908, Stop: 44573, Start Num: 14
Candidate Starts for EricB_79:
(5, 44956), (Start: 13 @44911 has 42 MA's), (Start: 14 @44908 has 8 MA's), (28, 44752), (39, 44653),

Gene: Finch_218 Start: 126837, Stop: 127232, Start Num: 8
Candidate Starts for Finch_218:
(Start: 8 @126837 has 1 MA's), (26, 127002), (27, 127017), (36, 127122), (38, 127128), (41, 127167), (42, 127176),

Gene: FreakyGoo_42 Start: 33797, Stop: 33453, Start Num: 13
Candidate Starts for FreakyGoo_42:
(Start: 13 @33797 has 42 MA's), (25, 33680), (30, 33605), (38, 33551),

Gene: Garak_81 Start: 45075, Stop: 44734, Start Num: 13
Candidate Starts for Garak_81:
(Start: 12 @45078 has 9 MA's), (Start: 13 @45075 has 42 MA's), (38, 44838), (39, 44817), (47, 44763),

Gene: Glaske16_42 Start: 33796, Stop: 33452, Start Num: 13
Candidate Starts for Glaske16_42:
(Start: 13 @33796 has 42 MA's), (25, 33679), (30, 33604), (38, 33550),

Gene: Goose_68 Start: 41832, Stop: 41503, Start Num: 16
Candidate Starts for Goose_68:
(Start: 16 @41832 has 7 MA's), (35, 41619), (44, 41544),

Gene: GreedyLawyer_75 Start: 44881, Stop: 44546, Start Num: 14
Candidate Starts for GreedyLawyer_75:
(5, 44929), (Start: 13 @44884 has 42 MA's), (Start: 14 @44881 has 8 MA's), (28, 44725), (39, 44626),

Gene: Helmet_82 Start: 45075, Stop: 44734, Start Num: 13
Candidate Starts for Helmet_82:
(Start: 12 @45078 has 9 MA's), (Start: 13 @45075 has 42 MA's), (38, 44838), (39, 44817), (47, 44763),

Gene: Hexamo_79 Start: 44613, Stop: 44269, Start Num: 12
Candidate Starts for Hexamo_79:
(9, 44637), (Start: 12 @44613 has 9 MA's), (Start: 13 @44610 has 42 MA's), (38, 44373), (39, 44352), (47, 44298),

Gene: Hoot_75 Start: 42769, Stop: 42431, Start Num: 13
Candidate Starts for Hoot_75:
(5, 42814), (Start: 13 @42769 has 42 MA's), (Start: 14 @42766 has 8 MA's), (28, 42610), (39, 42511),

Gene: IPhane7_41 Start: 33797, Stop: 33453, Start Num: 13
Candidate Starts for IPhane7_41:
(Start: 13 @33797 has 42 MA's), (25, 33680), (30, 33605), (38, 33551),

Gene: Indra_83 Start: 45076, Stop: 44735, Start Num: 13
Candidate Starts for Indra_83:
(Start: 12 @45079 has 9 MA's), (Start: 13 @45076 has 42 MA's), (38, 44839), (39, 44818), (47, 44764),

Gene: Isiphiwo_77 Start: 44936, Stop: 44598, Start Num: 14
Candidate Starts for Isiphiwo_77:
(5, 44984), (Start: 13 @44939 has 42 MA's), (Start: 14 @44936 has 8 MA's), (21, 44873), (37, 44705),

Gene: Izel_42 Start: 33796, Stop: 33452, Start Num: 13
Candidate Starts for Izel_42:
(Start: 13 @33796 has 42 MA's), (25, 33679), (30, 33604), (38, 33550),

Gene: Jordennis_78 Start: 45151, Stop: 44813, Start Num: 13
Candidate Starts for Jordennis_78:
(5, 45196), (Start: 13 @45151 has 42 MA's), (Start: 14 @45148 has 8 MA's), (19, 45109), (23, 45064), (37, 44917),

Gene: Kazan_81 Start: 44924, Stop: 44586, Start Num: 13
Candidate Starts for Kazan_81:

(5, 44969), (Start: 13 @44924 has 42 MA's), (Start: 14 @44921 has 8 MA's), (28, 44765), (39, 44666),

Gene: Kipper29_80 Start: 44934, Stop: 44599, Start Num: 14
Candidate Starts for Kipper29_80:
(5, 44982), (Start: 13 @44937 has 42 MA's), (Start: 14 @44934 has 8 MA's), (28, 44778), (39, 44679),

Gene: KittenMittens_64 Start: 41141, Stop: 40815, Start Num: 16
Candidate Starts for KittenMittens_64:
(Start: 7 @41192 has 4 MA's), (Start: 11 @41159 has 1 MA's), (Start: 16 @41141 has 7 MA's), (22, 41069), (35, 40931), (44, 40856), (49, 40832),

Gene: KleverKiS_42 Start: 33777, Stop: 33433, Start Num: 13
Candidate Starts for KleverKiS_42:
(Start: 13 @33777 has 42 MA's), (25, 33660), (30, 33585), (38, 33531),

Gene: Klodlith_75 Start: 44882, Stop: 44529, Start Num: 13
Candidate Starts for Klodlith_75:
(3, 45110), (Start: 13 @44882 has 42 MA's), (26, 44744), (38, 44630), (40, 44603), (42, 44585), (46, 44567), (47, 44558),

Gene: Koko_81 Start: 45465, Stop: 45124, Start Num: 13
Candidate Starts for Koko_81:
(Start: 12 @45468 has 9 MA's), (Start: 13 @45465 has 42 MA's), (38, 45228), (39, 45207), (47, 45153),

Gene: Kristoff_66 Start: 42458, Stop: 42129, Start Num: 16
Candidate Starts for Kristoff_66:
(Start: 7 @42509 has 4 MA's), (Start: 11 @42476 has 1 MA's), (Start: 16 @42458 has 7 MA's), (35, 42245), (44, 42170),

Gene: Lilbunny_79 Start: 44707, Stop: 44366, Start Num: 13
Candidate Starts for Lilbunny_79:
(Start: 12 @44710 has 9 MA's), (Start: 13 @44707 has 42 MA's), (38, 44470), (39, 44449), (47, 44395),

Gene: LilhomieP_40 Start: 33797, Stop: 33453, Start Num: 13
Candidate Starts for LilhomieP_40:
(Start: 13 @33797 has 42 MA's), (25, 33680), (30, 33605), (38, 33551),

Gene: MegTheThird_75 Start: 44883, Stop: 44533, Start Num: 13
Candidate Starts for MegTheThird_75:
(3, 45111), (Start: 13 @44883 has 42 MA's), (24, 44772), (26, 44748), (38, 44634), (40, 44607), (42, 44589), (46, 44571), (47, 44562),

Gene: Nanosmite_47 Start: 34908, Stop: 34564, Start Num: 13
Candidate Starts for Nanosmite_47:
(Start: 13 @34908 has 42 MA's), (18, 34878), (28, 34743), (30, 34716), (38, 34662),

Gene: Neeharika16_79 Start: 45023, Stop: 44682, Start Num: 13
Candidate Starts for Neeharika16_79:
(5, 45068), (Start: 13 @45023 has 42 MA's), (Start: 14 @45020 has 8 MA's), (37, 44789),

Gene: Newrala_79 Start: 45359, Stop: 45021, Start Num: 13
Candidate Starts for Newrala_79:
(5, 45404), (Start: 13 @45359 has 42 MA's), (Start: 14 @45356 has 8 MA's), (21, 45293), (39, 45101),

Gene: PeaceMeal1_65 Start: 41193, Stop: 40816, Start Num: 7
Candidate Starts for PeaceMeal1_65:
(Start: 7 @41193 has 4 MA's), (Start: 11 @41160 has 1 MA's), (Start: 16 @41142 has 7 MA's), (22, 41070), (35, 40932), (44, 40857), (49, 40833),

Gene: PegLeg_41 Start: 33796, Stop: 33452, Start Num: 13
Candidate Starts for PegLeg_41:
(Start: 13 @33796 has 42 MA's), (25, 33679), (30, 33604), (38, 33550),

Gene: Pharaoh_73 Start: 45524, Stop: 45174, Start Num: 13
Candidate Starts for Pharaoh_73:
(Start: 13 @45524 has 42 MA's), (25, 45404), (31, 45323), (32, 45317), (38, 45275), (43, 45227),

Gene: Phrappuccino_184 Start: 119829, Stop: 120152, Start Num: 17
Candidate Starts for Phrappuccino_184:
(4, 119691), (Start: 17 @119829 has 1 MA's), (25, 119928), (28, 119976), (29, 119997), (44, 120105),

Gene: Pmask_79 Start: 45560, Stop: 45219, Start Num: 13
Candidate Starts for Pmask_79:
(5, 45605), (Start: 13 @45560 has 42 MA's), (Start: 14 @45557 has 8 MA's), (37, 45326),

Gene: Poompha_64 Start: 41191, Stop: 40814, Start Num: 7
Candidate Starts for Poompha_64:
(Start: 7 @41191 has 4 MA's), (Start: 11 @41158 has 1 MA's), (Start: 16 @41140 has 7 MA's), (22, 41068), (35, 40930), (44, 40855), (49, 40831),

Gene: Rebeuca_68 Start: 42459, Stop: 42130, Start Num: 16
Candidate Starts for Rebeuca_68:
(Start: 7 @42510 has 4 MA's), (Start: 11 @42477 has 1 MA's), (Start: 16 @42459 has 7 MA's), (35, 42246), (44, 42171),

Gene: Refuge_76 Start: 46852, Stop: 46505, Start Num: 13
Candidate Starts for Refuge_76:
(1, 47230), (2, 47179), (Start: 13 @46852 has 42 MA's), (20, 46795), (34, 46639), (35, 46624), (40, 46579), (42, 46561), (50, 46519),

Gene: Reindeer_42 Start: 34429, Stop: 34085, Start Num: 13
Candidate Starts for Reindeer_42:
(10, 34447), (Start: 13 @34429 has 42 MA's), (30, 34237), (38, 34183),

Gene: Rifter_80 Start: 44237, Stop: 43896, Start Num: 13
Candidate Starts for Rifter_80:
(9, 44264), (Start: 12 @44240 has 9 MA's), (Start: 13 @44237 has 42 MA's), (38, 44000), (39, 43979), (47, 43925),

Gene: Roksolana_80 Start: 44971, Stop: 44630, Start Num: 13
Candidate Starts for Roksolana_80:
(Start: 12 @44974 has 9 MA's), (Start: 13 @44971 has 42 MA's), (38, 44734), (39, 44713), (47, 44659),

Gene: RoseMarie_47 Start: 37465, Stop: 37121, Start Num: 13
Candidate Starts for RoseMarie_47:
(6, 37519), (Start: 13 @37465 has 42 MA's), (30, 37273), (38, 37219),

Gene: Rowdy_69 Start: 42169, Stop: 41843, Start Num: 16
Candidate Starts for Rowdy_69:
(Start: 7 @42220 has 4 MA's), (Start: 11 @42187 has 1 MA's), (Start: 16 @42169 has 7 MA's), (22, 42097), (35, 41959), (44, 41884),

Gene: Settecandela_209 Start: 128664, Stop: 128999, Start Num: 15
Candidate Starts for Settecandela_209:
(Start: 15 @128664 has 1 MA's), (25, 128775), (28, 128823), (29, 128844), (44, 128952),

Gene: Severus_65 Start: 41140, Stop: 40814, Start Num: 16
Candidate Starts for Severus_65:
(Start: 7 @41191 has 4 MA's), (Start: 11 @41158 has 1 MA's), (Start: 16 @41140 has 7 MA's), (22, 41068), (35, 40930), (44, 40855), (49, 40831),

Gene: Shapes_69 Start: 42169, Stop: 41843, Start Num: 16
Candidate Starts for Shapes_69:
(Start: 7 @42220 has 4 MA's), (Start: 11 @42187 has 1 MA's), (Start: 16 @42169 has 7 MA's), (22, 42097), (35, 41959), (44, 41884),

Gene: SheaKeira_74 Start: 44691, Stop: 44347, Start Num: 13
Candidate Starts for SheaKeira_74:
(Start: 13 @44691 has 42 MA's), (35, 44463),

Gene: Skinny_42 Start: 34226, Stop: 33882, Start Num: 13
Candidate Starts for Skinny_42:
(Start: 13 @34226 has 42 MA's), (25, 34109), (30, 34034), (38, 33980),

Gene: SlimJimmy_40 Start: 33780, Stop: 33436, Start Num: 13
Candidate Starts for SlimJimmy_40:
(Start: 13 @33780 has 42 MA's), (25, 33663), (30, 33588), (38, 33534),

Gene: SmellyB_80 Start: 44915, Stop: 44580, Start Num: 14
Candidate Starts for SmellyB_80:
(5, 44963), (Start: 13 @44918 has 42 MA's), (Start: 14 @44915 has 8 MA's), (28, 44759), (39, 44660),

Gene: SuperAwesome_80 Start: 45599, Stop: 45258, Start Num: 13
Candidate Starts for SuperAwesome_80:
(5, 45644), (Start: 13 @45599 has 42 MA's), (Start: 14 @45596 has 8 MA's), (37, 45365),

Gene: SuperCallie99_77 Start: 45440, Stop: 45102, Start Num: 13
Candidate Starts for SuperCallie99_77:
(5, 45485), (Start: 13 @45440 has 42 MA's), (Start: 14 @45437 has 8 MA's), (28, 45281), (39, 45182),

Gene: Temprado_81 Start: 45075, Stop: 44734, Start Num: 13
Candidate Starts for Temprado_81:
(Start: 12 @45078 has 9 MA's), (Start: 13 @45075 has 42 MA's), (38, 44838), (39, 44817), (47, 44763),

Gene: ToneTone_77 Start: 44635, Stop: 44294, Start Num: 13
Candidate Starts for ToneTone_77:
(Start: 12 @44638 has 9 MA's), (Start: 13 @44635 has 42 MA's), (38, 44398), (39, 44377), (47, 44323),

Gene: TpudiCK_43 Start: 33796, Stop: 33452, Start Num: 13

Candidate Starts for TpudiCK_43:
(Start: 13 @33796 has 42 MA's), (25, 33679), (30, 33604), (38, 33550),

Gene: Trike_64 Start: 41195, Stop: 40818, Start Num: 7
Candidate Starts for Trike_64:
(Start: 7 @41195 has 4 MA's), (Start: 11 @41162 has 1 MA's), (Start: 16 @41144 has 7 MA's), (22, 41072), (35, 40934), (44, 40859), (49, 40835),

Gene: Tucker_80 Start: 44838, Stop: 44497, Start Num: 13
Candidate Starts for Tucker_80:
(Start: 12 @44841 has 9 MA's), (Start: 13 @44838 has 42 MA's), (38, 44601), (39, 44580), (47, 44526),

Gene: TyDawg_41 Start: 33797, Stop: 33453, Start Num: 13
Candidate Starts for TyDawg_41:
(Start: 13 @33797 has 42 MA's), (25, 33680), (30, 33605), (38, 33551),

Gene: VohminGhazi_80 Start: 44919, Stop: 44581, Start Num: 13
Candidate Starts for VohminGhazi_80:
(5, 44964), (Start: 13 @44919 has 42 MA's), (Start: 14 @44916 has 8 MA's), (28, 44760), (39, 44661),

Gene: Wiks_79 Start: 44706, Stop: 44365, Start Num: 13
Candidate Starts for Wiks_79:
(Start: 12 @44709 has 9 MA's), (Start: 13 @44706 has 42 MA's), (38, 44469), (39, 44448), (47, 44394),

Gene: WunderPhul_80 Start: 44704, Stop: 44363, Start Num: 13
Candidate Starts for WunderPhul_80:
(Start: 12 @44707 has 9 MA's), (Start: 13 @44704 has 42 MA's), (38, 44467), (39, 44446), (47, 44392),

Gene: Yokurt_79 Start: 44709, Stop: 44365, Start Num: 12
Candidate Starts for Yokurt_79:
(Start: 12 @44709 has 9 MA's), (Start: 13 @44706 has 42 MA's), (38, 44469), (39, 44448), (47, 44394),

Gene: Zaka_80 Start: 44709, Stop: 44365, Start Num: 12
Candidate Starts for Zaka_80:
(Start: 12 @44709 has 9 MA's), (Start: 13 @44706 has 42 MA's), (38, 44469), (39, 44448), (47, 44394),

Gene: Zulu_81 Start: 45087, Stop: 44743, Start Num: 12
Candidate Starts for Zulu_81:
(Start: 12 @45087 has 9 MA's), (Start: 13 @45084 has 42 MA's), (38, 44847), (39, 44826), (47, 44772),