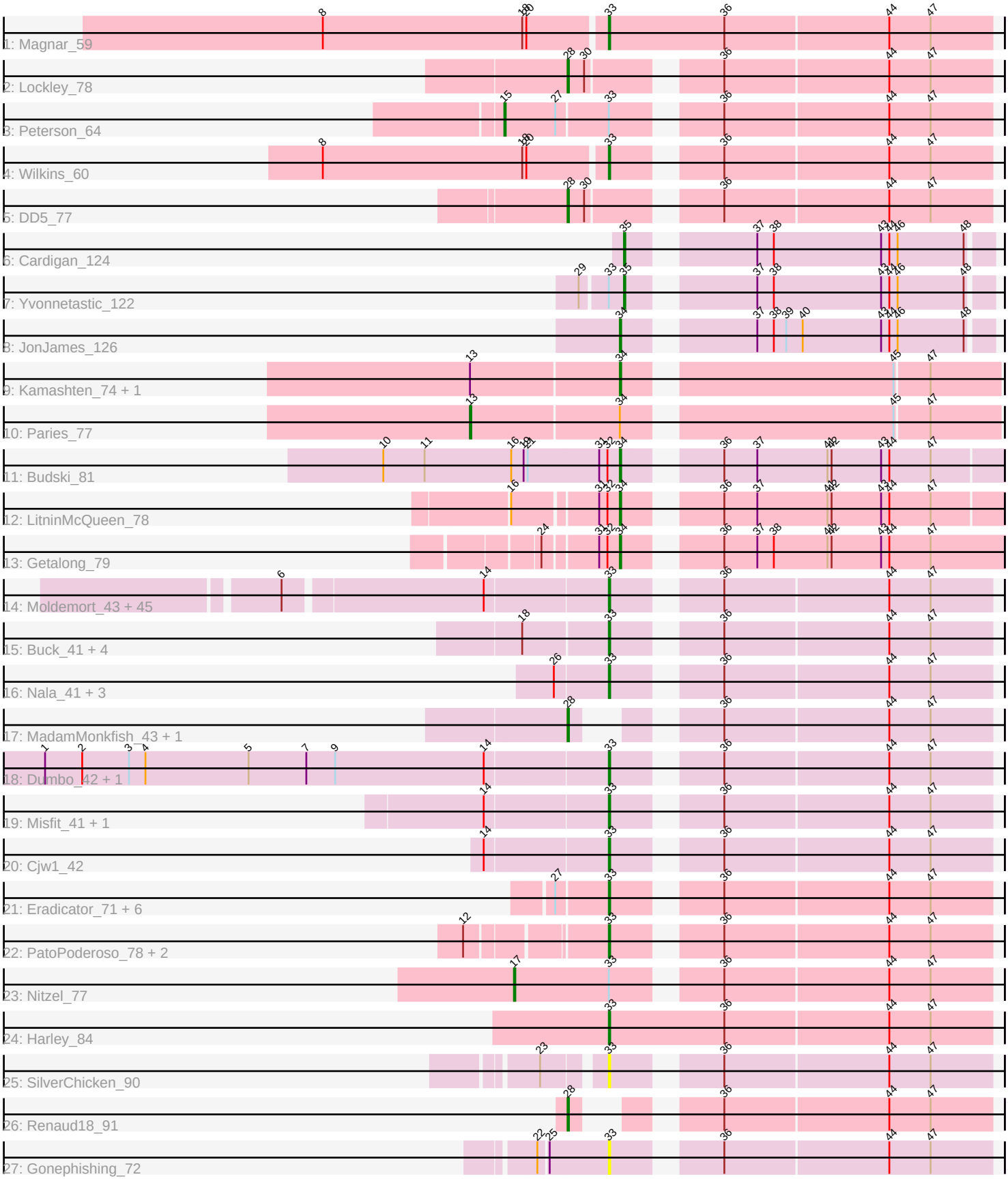
Pham 347482


1: Magnar_59
2: Lockley_78
3: Peterson_64
4: Wilkins_60
5: DD5_77
6: Cardigan_124
7: Yvonnetastic_122
8: JonJames_126
9: Kamashten_74 + 1
10: Paries_77
11: Budski_81
12: LitninMcQueen_78
13: Getalong_79
14: Moldemort_43 + 45
15: Buck_41 + 4
16: Nala_41 + 3
17: MadamMonkfish_43 + 1
18: Dumbo_42 + 1
19: Misfit_41 + 1
20: Cjw1_42
21: Eradicator_71 + 6
22: PatoPoderoso_78 + 2
23: Nitzel_77
24: Harley_84
25: SilverChicken_90
26: Renaud18_91
27: Gonephishing_72

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 347482 Report

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

Pham number 347482 has 91 members, 11 are drafts.

Phages represented in each track:
- Track 1 : Magnar_59
- Track 2 : Lockley_78
- Track 3 : Peterson_64
- Track 4 : Wilkins_60
- Track 5 : DD5_77
- Track 6 : Cardigan_124
- Track 7 : Yvonnetastic_122
- Track 8 : JonJames_126
- Track 9 : Kamashten_74, Thing3_74
- Track 10 : Paries_77
- Track 11 : Budski_81
- Track 12 : LitninMcQueen_78
- Track 13 : Getalong_79
- Track 14 : Moldemort_43, BugsBunny_39, Cactus_42, Stank_44, PhatBacter_41, Barbarian_40, Elite2014_41, GooberAzure_43, Nimrod_41, Goldilocks_42, StolenFromERC_43, Phaux_40, Murica_40, Gage_43, Murphy_42, NoSleep_42, Asriel_40, xkcd_42, Adnama_44, Gemini_44, Palpatine_41, Lilac_43, GoldenSpark_43, Icee_40, Rakim_42, AmericanBeauty_44, Kimchi_43, ChosenOne_42, HufflyPuff_40, Petra64142_43, Lilpickle_41, Greep_42, FireRed_41, Thresher_43, Maxxinista_42, Command613_42, Sotrice96_41, Livelaughbron_42, Thimble_42, Stark_42, RiverMonster_41, Bask21_41, Policronamos_41, Hoonter_43, Argent26_43, TBrady12_43
- Track 15 : Buck_41, TeamEdward_43, StormChicken_42, Rimmer_41, Youngblood_42
- Track 16 : Nala_41, MPhalcon_40, MISSy_40, Becksu_41
- Track 17 : MadamMonkfish_43, Bogg_43
- Track 18 : Dumbo_42, Easy2Say_43
- Track 19 : Misfit_41, Terminus_41
- Track 20 : Cjw1_42
- Track 21 : Eradicator_71, KashFlow_69, Cali_16, Sprinklers_15, BadAgartude_16, Tchotchke_77, SuperGrey_81
- Track 22 : PatoPoderoso_78, Corium_78, KingJulian_84
- Track 23 : Nitzel_77
- Track 24 : Harley_84
- Track 25 : SilverChicken_90
- Track 26 : Renaud18_91
- Track 27 : Gonephishing_72

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

The start number called the most often in the published annotations is 33, it was called in 65 of the 80 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adnama_44, AmericanBeauty_44, Argent26_43, Asriel_40, BadAgartude_16, Barbarian_40, Bask21_41, Becksu_41, Buck_41, BugsBunny_39, Cactus_42, Cali_16, ChosenOne_42, Cjw1_42, Command613_42, Corium_78, Dumbo_42, Easy2Say_43, Elite2014_41, Eradicator_71, FireRed_41, Gage_43, Gemini_44, GoldenSpark_43, Goldilocks_42, Gonephishing_72, GooberAzure_43, Greep_42, Harley_84, Hoonter_43, HufflyPuff_40, Icee_40, KashFlow_69, Kimchi_43, KingJulian_84, Lilac_43, Lilpickle_41, Livelaughbron_42, MISSy_40, MPhalcon_40, Magnar_59, Maxxinista_42, Misfit_41, Moldemort_43, Murica_40, Murphy_42, Nala_41, Nimrod_41, NoSleep_42, Palpatine_41, PatoPoderoso_78, Petra64142_43, PhatBacter_41, Phaux_40, Policronamos_41, Rakim_42, Rimmer_41, RiverMonster_41, SilverChicken_90, Sotrice96_41, Sprinklers_15, Stank_44, Stark_42, StolenFromERC_43, StormChicken_42, SuperGrey_81, TBrady12_43, Tchotchke_77, TeamEdward_43, Terminus_41, Thimble_42, Thresher_43, Wilkins_60, Youngblood_42, xkcd_42,

Genes that have the "Most Annotated" start but do not call it:
• Nitzel_77, Peterson_64, Yvonnetastic_122,

Genes that do not have the "Most Annotated" start:
• Bogg_43, Budski_81, Cardigan_124, DD5_77, Getalong_79, JonJames_126, Kamashten_74, LitninMcQueen_78, Lockley_78, MadamMonkfish_43, Paries_77, Renaud18_91, Thing3_74,

Summary by start number:

Start 13:
• Found in 3 of 91 (3.3%) of genes in pham
• Manual Annotations of this start: 1 of 80
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Paries_77 (DE1),

Start 15:
• Found in 1 of 91 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 80
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Peterson_64 (A1),

Start 17:
• Found in 1 of 91 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 80
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Nitzel_77 (F1),

Start 28:
• Found in 5 of 91 (5.5%) of genes in pham
• Manual Annotations of this start: 4 of 80
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bogg_43 (E), DD5_77 (A1), Lockley_78 (A1), MadamMonkfish_43 (E), Renaud18_91 (F4),

Start 33:
• Found in 78 of 91 (85.7%) of genes in pham
• Manual Annotations of this start: 65 of 80
• Called 96.2% of time when present
• Phage (with cluster) where this start called: Adnama_44 (E), AmericanBeauty_44 (E), Argent26_43 (E), Asriel_40 (E), BadAgartude_16 (C1), Barbarian_40 (E), Bask21_41 (E), Becksu_41 (E), Buck_41 (E), BugsBunny_39 (E), Cactus_42 (E), Cali_16 (C1), ChosenOne_42 (E), Cjw1_42 (E), Command613_42 (E), Corium_78 (F1), Dumbo_42 (E), Easy2Say_43 (E), Elite2014_41 (E), Eradicator_71 (F1), FireRed_41 (E), Gage_43 (E), Gemini_44 (E), GoldenSpark_43 (E), Goldilocks_42 (E), Gonephishing_72 (J), GooberAzure_43 (E), Greep_42 (E), Harley_84 (F1), Hoonter_43 (E), HufflyPuff_40 (E), Icee_40 (E), KashFlow_69 (J), Kimchi_43 (E), KingJulian_84 (F1), Lilac_43 (E), Lilpickle_41 (E), Livelaughbron_42 (E), MISSy_40 (E), MPhalcon_40 (E), Magnar_59 (A1), Maxxinista_42 (E), Misfit_41 (E), Moldemort_43 (E), Murica_40 (E), Murphy_42 (E), Nala_41 (E), Nimrod_41 (E), NoSleep_42 (E), Palpatine_41 (E), PatoPoderoso_78 (F1), Petra64142_43 (E), PhatBacter_41 (E), Phaux_40 (E), Policronamos_41 (E), Rakim_42 (E), Rimmer_41 (E), RiverMonster_41 (E), SilverChicken_90 (F2), Sotrice96_41 (E), Sprinklers_15 (C1), Stank_44 (E), Stark_42 (E), StolenFromERC_43 (E), StormChicken_42 (E), SuperGrey_81 (F1), TBrady12_43 (E), Tchotchke_77 (F1), TeamEdward_43 (E), Terminus_41 (E), Thimble_42 (E), Thresher_43 (E), Wilkins_60 (A1), Youngblood_42 (E), xkcd_42 (E),

Start 34:
• Found in 7 of 91 (7.7%) of genes in pham
• Manual Annotations of this start: 6 of 80
• Called 85.7% of time when present
• Phage (with cluster) where this start called: Budski_81 (DN), Getalong_79 (DN1), JonJames_126 (DD), Kamashten_74 (DE1), LitninMcQueen_78 (DN1), Thing3_74 (DE1),

Start 35:
• Found in 2 of 91 (2.2%) of genes in pham
• Manual Annotations of this start: 2 of 80
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cardigan_124 (DD), Yvonnetastic_122 (DD),

Summary by clusters:

There are 11 clusters represented in this pham: DN, F1, F2, E, DE1, DD, J, A1, DN1, F4, C1,

Info for manual annotations of cluster A1:
•Start number 15 was manually annotated 1 time for cluster A1.
•Start number 28 was manually annotated 2 times for cluster A1.

•Start number 33 was manually annotated 2 times for cluster A1.

Info for manual annotations of cluster C1:
•Start number 33 was manually annotated 3 times for cluster C1.

Info for manual annotations of cluster DD:
•Start number 34 was manually annotated 1 time for cluster DD.
•Start number 35 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DE1:
•Start number 13 was manually annotated 1 time for cluster DE1.
•Start number 34 was manually annotated 2 times for cluster DE1.

Info for manual annotations of cluster DN:
•Start number 34 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 34 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster E:
•Start number 28 was manually annotated 1 time for cluster E.
•Start number 33 was manually annotated 54 times for cluster E.

Info for manual annotations of cluster F1:
•Start number 17 was manually annotated 1 time for cluster F1.
•Start number 33 was manually annotated 5 times for cluster F1.

Info for manual annotations of cluster F4:
•Start number 28 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster J:
•Start number 33 was manually annotated 1 time for cluster J.

Gene Information:

Gene: Adnama_44 Start: 35427, Stop: 35173, Start Num: 33
Candidate Starts for Adnama_44:
(6, 35649), (14, 35511), (Start: 33 @35427 has 65 MA's), (36, 35364), (44, 35247), (47, 35217),

Gene: AmericanBeauty_44 Start: 35272, Stop: 35018, Start Num: 33
Candidate Starts for AmericanBeauty_44:
(6, 35494), (14, 35356), (Start: 33 @35272 has 65 MA's), (36, 35209), (44, 35092), (47, 35062),

Gene: Argent26_43 Start: 34910, Stop: 34656, Start Num: 33
Candidate Starts for Argent26_43:
(6, 35132), (14, 34994), (Start: 33 @34910 has 65 MA's), (36, 34847), (44, 34730), (47, 34700),

Gene: Asriel_40 Start: 33764, Stop: 33510, Start Num: 33
Candidate Starts for Asriel_40:
(6, 33986), (14, 33848), (Start: 33 @33764 has 65 MA's), (36, 33701), (44, 33584), (47, 33554),

Gene: BadAgartude_16 Start: 5263, Stop: 5517, Start Num: 33
Candidate Starts for BadAgartude_16:
(27, 5227), (Start: 33 @5263 has 65 MA's), (36, 5326), (44, 5443), (47, 5473),

Gene: Barbarian_40 Start: 33764, Stop: 33510, Start Num: 33
Candidate Starts for Barbarian_40:
(6, 33986), (14, 33848), (Start: 33 @33764 has 65 MA's), (36, 33701), (44, 33584), (47, 33554),

Gene: Bask21_41 Start: 34098, Stop: 33844, Start Num: 33
Candidate Starts for Bask21_41:
(6, 34320), (14, 34182), (Start: 33 @34098 has 65 MA's), (36, 34035), (44, 33918), (47, 33888),

Gene: Becksu_41 Start: 35086, Stop: 34832, Start Num: 33
Candidate Starts for Becksu_41:
(26, 35122), (Start: 33 @35086 has 65 MA's), (36, 35023), (44, 34906), (47, 34876),

Gene: Bogg_43 Start: 34700, Stop: 34446, Start Num: 28
Candidate Starts for Bogg_43:
(Start: 28 @34700 has 4 MA's), (36, 34637), (44, 34520), (47, 34490),

Gene: Buck_41 Start: 34956, Stop: 34702, Start Num: 33
Candidate Starts for Buck_41:
(18, 35016), (Start: 33 @34956 has 65 MA's), (36, 34893), (44, 34776), (47, 34746),

Gene: Budski_81 Start: 45788, Stop: 46042, Start Num: 34
Candidate Starts for Budski_81:
(10, 45617), (11, 45647), (16, 45710), (19, 45719), (21, 45722), (31, 45773), (32, 45779), (Start: 34 @45788 has 6 MA's), (36, 45842), (37, 45866), (41, 45917), (42, 45920), (43, 45956), (44, 45962), (47, 45992),

Gene: BugsBunny_39 Start: 34492, Stop: 34238, Start Num: 33
Candidate Starts for BugsBunny_39:
(6, 34714), (14, 34576), (Start: 33 @34492 has 65 MA's), (36, 34429), (44, 34312), (47, 34282),

Gene: Cactus_42 Start: 34131, Stop: 33877, Start Num: 33
Candidate Starts for Cactus_42:
(6, 34353), (14, 34215), (Start: 33 @34131 has 65 MA's), (36, 34068), (44, 33951), (47, 33921),

Gene: Cali_16 Start: 6239, Stop: 6493, Start Num: 33
Candidate Starts for Cali_16:
(27, 6203), (Start: 33 @6239 has 65 MA's), (36, 6302), (44, 6419), (47, 6449),

Gene: Cardigan_124 Start: 72612, Stop: 72854, Start Num: 35
Candidate Starts for Cardigan_124:
(Start: 35 @72612 has 2 MA's), (37, 72687), (38, 72699), (43, 72777), (44, 72783), (46, 72789), (48, 72837),

Gene: ChosenOne_42 Start: 34225, Stop: 33971, Start Num: 33
Candidate Starts for ChosenOne_42:
(6, 34447), (14, 34309), (Start: 33 @34225 has 65 MA's), (36, 34162), (44, 34045), (47, 34015),

Gene: Cjw1_42 Start: 35902, Stop: 35648, Start Num: 33

Candidate Starts for Cjw1_42:
(14, 35986), (Start: 33 @35902 has 65 MA's), (36, 35839), (44, 35722), (47, 35692),

Gene: Command613_42 Start: 35170, Stop: 34916, Start Num: 33
Candidate Starts for Command613_42:
(6, 35392), (14, 35254), (Start: 33 @35170 has 65 MA's), (36, 35107), (44, 34990), (47, 34960),

Gene: Corium_78 Start: 49985, Stop: 50239, Start Num: 33
Candidate Starts for Corium_78:
(12, 49895), (Start: 33 @49985 has 65 MA's), (36, 50048), (44, 50165), (47, 50195),

Gene: DD5_77 Start: 47867, Stop: 47586, Start Num: 28
Candidate Starts for DD5_77:
(Start: 28 @47867 has 4 MA's), (30, 47855), (36, 47777), (44, 47660), (47, 47630),

Gene: Dumbo_42 Start: 34654, Stop: 34400, Start Num: 33
Candidate Starts for Dumbo_42:
(1, 35056), (2, 35029), (3, 34996), (4, 34984), (5, 34909), (7, 34867), (9, 34846), (14, 34738), (Start: 33 @34654 has 65 MA's), (36, 34591), (44, 34474), (47, 34444),

Gene: Easy2Say_43 Start: 36198, Stop: 35944, Start Num: 33
Candidate Starts for Easy2Say_43:
(1, 36600), (2, 36573), (3, 36540), (4, 36528), (5, 36453), (7, 36411), (9, 36390), (14, 36282), (Start: 33 @36198 has 65 MA's), (36, 36135), (44, 36018), (47, 35988),

Gene: Elite2014_41 Start: 34224, Stop: 33970, Start Num: 33
Candidate Starts for Elite2014_41:
(6, 34446), (14, 34308), (Start: 33 @34224 has 65 MA's), (36, 34161), (44, 34044), (47, 34014),

Gene: Eradicator_71 Start: 46645, Stop: 46899, Start Num: 33
Candidate Starts for Eradicator_71:
(27, 46609), (Start: 33 @46645 has 65 MA's), (36, 46708), (44, 46825), (47, 46855),

Gene: FireRed_41 Start: 34931, Stop: 34677, Start Num: 33
Candidate Starts for FireRed_41:
(6, 35153), (14, 35015), (Start: 33 @34931 has 65 MA's), (36, 34868), (44, 34751), (47, 34721),

Gene: Gage_43 Start: 34910, Stop: 34656, Start Num: 33
Candidate Starts for Gage_43:
(6, 35132), (14, 34994), (Start: 33 @34910 has 65 MA's), (36, 34847), (44, 34730), (47, 34700),

Gene: Gemini_44 Start: 35427, Stop: 35173, Start Num: 33
Candidate Starts for Gemini_44:
(6, 35649), (14, 35511), (Start: 33 @35427 has 65 MA's), (36, 35364), (44, 35247), (47, 35217),

Gene: Getalong_79 Start: 46153, Stop: 46410, Start Num: 34
Candidate Starts for Getalong_79:
(24, 46102), (31, 46138), (32, 46144), (Start: 34 @46153 has 6 MA's), (36, 46207), (37, 46231), (38, 46243), (41, 46282), (42, 46285), (43, 46321), (44, 46327), (47, 46357),

Gene: GoldenSpark_43 Start: 34910, Stop: 34656, Start Num: 33
Candidate Starts for GoldenSpark_43:
(6, 35132), (14, 34994), (Start: 33 @34910 has 65 MA's), (36, 34847), (44, 34730), (47, 34700),

Gene: Goldilocks_42 Start: 34412, Stop: 34158, Start Num: 33
Candidate Starts for Goldilocks_42:
(6, 34634), (14, 34496), (Start: 33 @34412 has 65 MA's), (36, 34349), (44, 34232), (47, 34202),

Gene: Gonephishing_72 Start: 47507, Stop: 47253, Start Num: 33
Candidate Starts for Gonephishing_72:
(22, 47555), (25, 47549), (Start: 33 @47507 has 65 MA's), (36, 47444), (44, 47327), (47, 47297),

Gene: GooberAzure_43 Start: 34910, Stop: 34656, Start Num: 33
Candidate Starts for GooberAzure_43:
(6, 35132), (14, 34994), (Start: 33 @34910 has 65 MA's), (36, 34847), (44, 34730), (47, 34700),

Gene: Greep_42 Start: 35223, Stop: 34969, Start Num: 33
Candidate Starts for Greep_42:
(6, 35445), (14, 35307), (Start: 33 @35223 has 65 MA's), (36, 35160), (44, 35043), (47, 35013),

Gene: Harley_84 Start: 49403, Stop: 49678, Start Num: 33
Candidate Starts for Harley_84:
(Start: 33 @49403 has 65 MA's), (36, 49487), (44, 49604), (47, 49634),

Gene: Hoonter_43 Start: 34910, Stop: 34656, Start Num: 33
Candidate Starts for Hoonter_43:
(6, 35132), (14, 34994), (Start: 33 @34910 has 65 MA's), (36, 34847), (44, 34730), (47, 34700),

Gene: HufflyPuff_40 Start: 34887, Stop: 34633, Start Num: 33
Candidate Starts for HufflyPuff_40:
(6, 35109), (14, 34971), (Start: 33 @34887 has 65 MA's), (36, 34824), (44, 34707), (47, 34677),

Gene: Icee_40 Start: 34578, Stop: 34324, Start Num: 33
Candidate Starts for Icee_40:
(6, 34800), (14, 34662), (Start: 33 @34578 has 65 MA's), (36, 34515), (44, 34398), (47, 34368),

Gene: JonJames_126 Start: 73547, Stop: 73792, Start Num: 34
Candidate Starts for JonJames_126:
(Start: 34 @73547 has 6 MA's), (37, 73625), (38, 73637), (39, 73646), (40, 73658), (43, 73715), (44, 73721), (46, 73727), (48, 73775),

Gene: Kamashten_74 Start: 54860, Stop: 55111, Start Num: 34
Candidate Starts for Kamashten_74:
(Start: 13 @54755 has 1 MA's), (Start: 34 @54860 has 6 MA's), (45, 55037), (47, 55061),

Gene: KashFlow_69 Start: 46152, Stop: 45898, Start Num: 33
Candidate Starts for KashFlow_69:
(27, 46188), (Start: 33 @46152 has 65 MA's), (36, 46089), (44, 45972), (47, 45942),

Gene: Kimchi_43 Start: 34913, Stop: 34659, Start Num: 33
Candidate Starts for Kimchi_43:
(6, 35135), (14, 34997), (Start: 33 @34913 has 65 MA's), (36, 34850), (44, 34733), (47, 34703),

Gene: KingJulian_84 Start: 49985, Stop: 50239, Start Num: 33
Candidate Starts for KingJulian_84:
(12, 49895), (Start: 33 @49985 has 65 MA's), (36, 50048), (44, 50165), (47, 50195),

Gene: Lilac_43 Start: 34400, Stop: 34146, Start Num: 33
Candidate Starts for Lilac_43:
(6, 34622), (14, 34484), (Start: 33 @34400 has 65 MA's), (36, 34337), (44, 34220), (47, 34190),

Gene: Lilpickle_41 Start: 34224, Stop: 33970, Start Num: 33
Candidate Starts for Lilpickle_41:
(6, 34446), (14, 34308), (Start: 33 @34224 has 65 MA's), (36, 34161), (44, 34044), (47, 34014),

Gene: LitninMcQueen_78 Start: 44663, Stop: 44917, Start Num: 34
Candidate Starts for LitninMcQueen_78:
(16, 44591), (31, 44648), (32, 44654), (Start: 34 @44663 has 6 MA's), (36, 44717), (37, 44741), (41, 44792), (42, 44795), (43, 44831), (44, 44837), (47, 44867),

Gene: Livelaughbron_42 Start: 35017, Stop: 34763, Start Num: 33
Candidate Starts for Livelaughbron_42:
(6, 35239), (14, 35101), (Start: 33 @35017 has 65 MA's), (36, 34954), (44, 34837), (47, 34807),

Gene: Lockley_78 Start: 47464, Stop: 47183, Start Num: 28
Candidate Starts for Lockley_78:
(Start: 28 @47464 has 4 MA's), (30, 47452), (36, 47374), (44, 47257), (47, 47227),

Gene: MISSy_40 Start: 34416, Stop: 34162, Start Num: 33
Candidate Starts for MISSy_40:
(26, 34452), (Start: 33 @34416 has 65 MA's), (36, 34353), (44, 34236), (47, 34206),

Gene: MPhalcon_40 Start: 34409, Stop: 34155, Start Num: 33
Candidate Starts for MPhalcon_40:
(26, 34445), (Start: 33 @34409 has 65 MA's), (36, 34346), (44, 34229), (47, 34199),

Gene: MadamMonkfish_43 Start: 34798, Stop: 34544, Start Num: 28
Candidate Starts for MadamMonkfish_43:
(Start: 28 @34798 has 4 MA's), (36, 34735), (44, 34618), (47, 34588),

Gene: Magnar_59 Start: 40777, Stop: 40502, Start Num: 33
Candidate Starts for Magnar_59:
(8, 40978), (18, 40834), (20, 40831), (Start: 33 @40777 has 65 MA's), (36, 40693), (44, 40576), (47, 40546),

Gene: Maxxinista_42 Start: 34370, Stop: 34116, Start Num: 33
Candidate Starts for Maxxinista_42:
(6, 34592), (14, 34454), (Start: 33 @34370 has 65 MA's), (36, 34307), (44, 34190), (47, 34160),

Gene: Misfit_41 Start: 34990, Stop: 34736, Start Num: 33
Candidate Starts for Misfit_41:
(14, 35074), (Start: 33 @34990 has 65 MA's), (36, 34927), (44, 34810), (47, 34780),

Gene: Moldemort_43 Start: 35027, Stop: 34773, Start Num: 33
Candidate Starts for Moldemort_43:
(6, 35249), (14, 35111), (Start: 33 @35027 has 65 MA's), (36, 34964), (44, 34847), (47, 34817),

Gene: Murica_40 Start: 34887, Stop: 34633, Start Num: 33
Candidate Starts for Murica_40:

(6, 35109), (14, 34971), (Start: 33 @34887 has 65 MA's), (36, 34824), (44, 34707), (47, 34677),

Gene: Murphy_42 Start: 34882, Stop: 34628, Start Num: 33
Candidate Starts for Murphy_42:
(6, 35104), (14, 34966), (Start: 33 @34882 has 65 MA's), (36, 34819), (44, 34702), (47, 34672),

Gene: Nala_41 Start: 34921, Stop: 34667, Start Num: 33
Candidate Starts for Nala_41:
(26, 34957), (Start: 33 @34921 has 65 MA's), (36, 34858), (44, 34741), (47, 34711),

Gene: Nimrod_41 Start: 35145, Stop: 34891, Start Num: 33
Candidate Starts for Nimrod_41:
(6, 35367), (14, 35229), (Start: 33 @35145 has 65 MA's), (36, 35082), (44, 34965), (47, 34935),

Gene: Nitzel_77 Start: 46511, Stop: 46834, Start Num: 17
Candidate Starts for Nitzel_77:
(Start: 17 @46511 has 1 MA's), (Start: 33 @46580 has 65 MA's), (36, 46643), (44, 46760), (47, 46790),

Gene: NoSleep_42 Start: 34642, Stop: 34388, Start Num: 33
Candidate Starts for NoSleep_42:
(6, 34864), (14, 34726), (Start: 33 @34642 has 65 MA's), (36, 34579), (44, 34462), (47, 34432),

Gene: Palpatine_41 Start: 34917, Stop: 34663, Start Num: 33
Candidate Starts for Palpatine_41:
(6, 35139), (14, 35001), (Start: 33 @34917 has 65 MA's), (36, 34854), (44, 34737), (47, 34707),

Gene: Paries_77 Start: 55773, Stop: 56129, Start Num: 13
Candidate Starts for Paries_77:
(Start: 13 @55773 has 1 MA's), (Start: 34 @55878 has 6 MA's), (45, 56055), (47, 56079),

Gene: PatoPoderoso_78 Start: 49985, Stop: 50239, Start Num: 33
Candidate Starts for PatoPoderoso_78:
(12, 49895), (Start: 33 @49985 has 65 MA's), (36, 50048), (44, 50165), (47, 50195),

Gene: Peterson_64 Start: 42900, Stop: 42574, Start Num: 15
Candidate Starts for Peterson_64:
(Start: 15 @42900 has 1 MA's), (27, 42864), (Start: 33 @42828 has 65 MA's), (36, 42765), (44, 42648), (47, 42618),

Gene: Petra64142_43 Start: 35381, Stop: 35127, Start Num: 33
Candidate Starts for Petra64142_43:
(6, 35603), (14, 35465), (Start: 33 @35381 has 65 MA's), (36, 35318), (44, 35201), (47, 35171),

Gene: PhatBacter_41 Start: 34931, Stop: 34677, Start Num: 33
Candidate Starts for PhatBacter_41:
(6, 35153), (14, 35015), (Start: 33 @34931 has 65 MA's), (36, 34868), (44, 34751), (47, 34721),

Gene: Phaux_40 Start: 34929, Stop: 34675, Start Num: 33
Candidate Starts for Phaux_40:
(6, 35151), (14, 35013), (Start: 33 @34929 has 65 MA's), (36, 34866), (44, 34749), (47, 34719),

Gene: Policronamos_41 Start: 34929, Stop: 34675, Start Num: 33
Candidate Starts for Policronamos_41:

(6, 35151), (14, 35013), (Start: 33 @34929 has 65 MA's), (36, 34866), (44, 34749), (47, 34719),

Gene: Rakim_42 Start: 35026, Stop: 34772, Start Num: 33
Candidate Starts for Rakim_42:
(6, 35248), (14, 35110), (Start: 33 @35026 has 65 MA's), (36, 34963), (44, 34846), (47, 34816),

Gene: Renaud18_91 Start: 50192, Stop: 50446, Start Num: 28
Candidate Starts for Renaud18_91:
(Start: 28 @50192 has 4 MA's), (36, 50255), (44, 50372), (47, 50402),

Gene: Rimmer_41 Start: 34566, Stop: 34312, Start Num: 33
Candidate Starts for Rimmer_41:
(18, 34626), (Start: 33 @34566 has 65 MA's), (36, 34503), (44, 34386), (47, 34356),

Gene: RiverMonster_41 Start: 34658, Stop: 34404, Start Num: 33
Candidate Starts for RiverMonster_41:
(6, 34880), (14, 34742), (Start: 33 @34658 has 65 MA's), (36, 34595), (44, 34478), (47, 34448),

Gene: SilverChicken_90 Start: 49456, Stop: 49710, Start Num: 33
Candidate Starts for SilverChicken_90:
(23, 49417), (Start: 33 @49456 has 65 MA's), (36, 49519), (44, 49636), (47, 49666),

Gene: Sotrice96_41 Start: 34874, Stop: 34620, Start Num: 33
Candidate Starts for Sotrice96_41:
(6, 35096), (14, 34958), (Start: 33 @34874 has 65 MA's), (36, 34811), (44, 34694), (47, 34664),

Gene: Sprinklers_15 Start: 4665, Stop: 4919, Start Num: 33
Candidate Starts for Sprinklers_15:
(27, 4629), (Start: 33 @4665 has 65 MA's), (36, 4728), (44, 4845), (47, 4875),

Gene: Stank_44 Start: 35426, Stop: 35172, Start Num: 33
Candidate Starts for Stank_44:
(6, 35648), (14, 35510), (Start: 33 @35426 has 65 MA's), (36, 35363), (44, 35246), (47, 35216),

Gene: Stark_42 Start: 34661, Stop: 34407, Start Num: 33
Candidate Starts for Stark_42:
(6, 34883), (14, 34745), (Start: 33 @34661 has 65 MA's), (36, 34598), (44, 34481), (47, 34451),

Gene: StolenFromERC_43 Start: 34910, Stop: 34656, Start Num: 33
Candidate Starts for StolenFromERC_43:
(6, 35132), (14, 34994), (Start: 33 @34910 has 65 MA's), (36, 34847), (44, 34730), (47, 34700),

Gene: StormChicken_42 Start: 35174, Stop: 34920, Start Num: 33
Candidate Starts for StormChicken_42:
(18, 35234), (Start: 33 @35174 has 65 MA's), (36, 35111), (44, 34994), (47, 34964),

Gene: SuperGrey_81 Start: 50776, Stop: 51030, Start Num: 33
Candidate Starts for SuperGrey_81:
(27, 50740), (Start: 33 @50776 has 65 MA's), (36, 50839), (44, 50956), (47, 50986),

Gene: TBrady12_43 Start: 34910, Stop: 34656, Start Num: 33
Candidate Starts for TBrady12_43:
(6, 35132), (14, 34994), (Start: 33 @34910 has 65 MA's), (36, 34847), (44, 34730), (47, 34700),

Gene: Tchotchke_77 Start: 47461, Stop: 47715, Start Num: 33
Candidate Starts for Tchotchke_77:
(27, 47425), (Start: 33 @47461 has 65 MA's), (36, 47524), (44, 47641), (47, 47671),

Gene: TeamEdward_43 Start: 35171, Stop: 34917, Start Num: 33
Candidate Starts for TeamEdward_43:
(18, 35231), (Start: 33 @35171 has 65 MA's), (36, 35108), (44, 34991), (47, 34961),

Gene: Terminus_41 Start: 34990, Stop: 34736, Start Num: 33
Candidate Starts for Terminus_41:
(14, 35074), (Start: 33 @34990 has 65 MA's), (36, 34927), (44, 34810), (47, 34780),

Gene: Thimble_42 Start: 34092, Stop: 33838, Start Num: 33
Candidate Starts for Thimble_42:
(6, 34314), (14, 34176), (Start: 33 @34092 has 65 MA's), (36, 34029), (44, 33912), (47, 33882),

Gene: Thing3_74 Start: 54860, Stop: 55111, Start Num: 34
Candidate Starts for Thing3_74:
(Start: 13 @54755 has 1 MA's), (Start: 34 @54860 has 6 MA's), (45, 55037), (47, 55061),

Gene: Thresher_43 Start: 35896, Stop: 35642, Start Num: 33
Candidate Starts for Thresher_43:
(6, 36118), (14, 35980), (Start: 33 @35896 has 65 MA's), (36, 35833), (44, 35716), (47, 35686),

Gene: Wilkins_60 Start: 39962, Stop: 39708, Start Num: 33
Candidate Starts for Wilkins_60:
(8, 40163), (18, 40019), (20, 40016), (Start: 33 @39962 has 65 MA's), (36, 39899), (44, 39782), (47, 39752),

Gene: Youngblood_42 Start: 35177, Stop: 34923, Start Num: 33
Candidate Starts for Youngblood_42:
(18, 35237), (Start: 33 @35177 has 65 MA's), (36, 35114), (44, 34997), (47, 34967),

Gene: Yvonnetastic_122 Start: 69842, Stop: 70084, Start Num: 35
Candidate Starts for Yvonnetastic_122:
(29, 69818), (Start: 33 @69836 has 65 MA's), (Start: 35 @69842 has 2 MA's), (37, 69917), (38, 69929), (43, 70007), (44, 70013), (46, 70019), (48, 70067),

Gene: xkcd_42 Start: 35072, Stop: 34818, Start Num: 33
Candidate Starts for xkcd_42:
(6, 35294), (14, 35156), (Start: 33 @35072 has 65 MA's), (36, 35009), (44, 34892), (47, 34862),