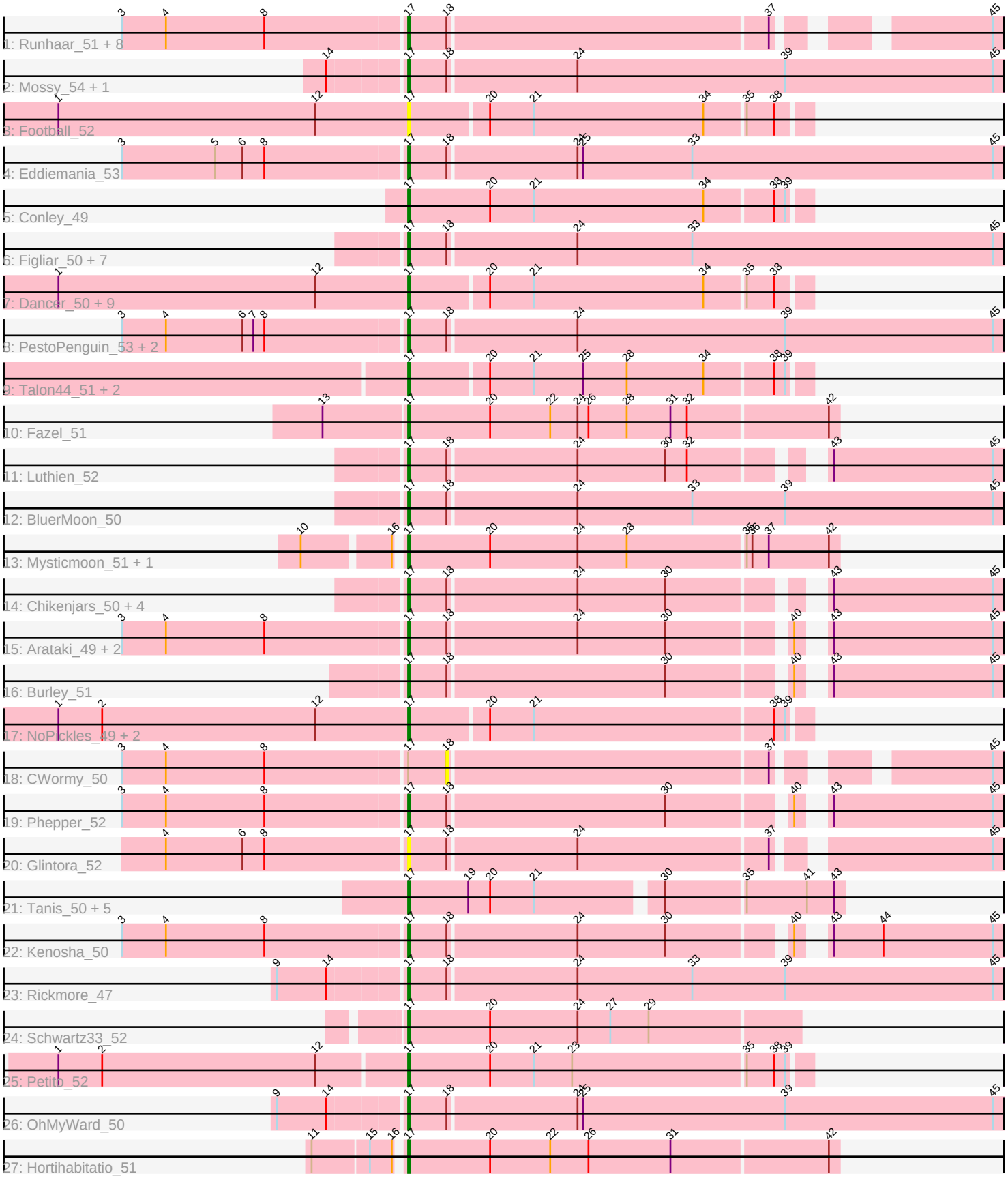
# Pham 342121


1: Runhaar_51 + 8
2: Mossy_54 + 1
3: Football_52
4: Eddiemania_53
5: Conley_49
6: Figliar_50 + 7
7: Dancer_50 + 9
8: PestoPenguin_53 + 2
9: Talon44_51 + 2
10: Fazel_51
11: Luthien_52
12: BluerMoon_50
13: Mysticmoon_51 + 1
14: Chikenjars_50 + 4
15: Arataki_49 + 2
16: Burley_51
17: NoPickles_49 + 2
18: CWormy_50
19: Phepper_52
20: Glintora_52
21: Tanis_50 + 5
22: Kenosha_50
23: Rickmore_47
24: Schwartz33_52
25: Petito_52
26: OhMyWard_50
27: Hortihabitatio_51

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 342121 Report

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

Pham number 342121 has 70 members, 10 are drafts.

Phages represented in each track:
• Track 1 : Runhaar_51, ArtetaBall_51, Zeph_53, Madvan_51, Hydrus_53, Crocheter_51, Untouchable_52, Nadmeg_52, Vardy_50
• Track 2 : Mossy_54, Blanky_50
• Track 3 : Football_52
• Track 4 : Eddiemania_53
• Track 5 : Conley_49
• Track 6 : Figliar_50, Tonaltzin_50, Jodelie19_50, TenaciousP_51, OlgasClover_52, Aflac_50, Duffington_49, MajinBuu_50
• Track 7 : Dancer_50, Trufflozitus_51, JulesRay_50, Bugg_51, Captrips_49, Avazak_51, ChickyNuggy_52, Artorias_50, Tairn4Wing_52, FortCran_50
• Track 8 : PestoPenguin_53, Aloe25_52, Gusicorn_52
• Track 9 : Talon44_51, SweetCrkHerbs_51, Perkunas_51
• Track 10 : Fazel_51
• Track 11 : Luthien_52
• Track 12 : BluerMoon_50
• Track 13 : Mysticmoon_51, Pherobrine_52
• Track 14 : Chikenjars_50, AlainaMarie_50, Nithya_51, EndAve_52, Citrus_50
• Track 15 : Arataki_49, Demure_49, Dialga_51
• Track 16 : Burley_51
• Track 17 : NoPickles_49, Roney_50, Odesza_49
• Track 18 : CWormy_50
• Track 19 : Phepper_52
• Track 20 : Glintora_52
• Track 21 : Tanis_50, Capybara_50, Gill_50, Gravy_49, Magel_51, Kerry_49
• Track 22 : Kenosha_50
• Track 23 : Rickmore_47
• Track 24 : Schwartz33_52
• Track 25 : Petito_52
• Track 26 : OhMyWard_50
• Track 27 : Hortihabitatio_51

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

The start number called the most often in the published annotations is 17, it was called in 60 of the 60 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aflac_50, AlainaMarie_50, Aloe25_52, Arataki_49, ArtetaBall_51, Artorias_50, Avazak_51, Blanky_50, BluerMoon_50, Bugg_51, Burley_51, Captrips_49, Capybara_50, ChickyNuggy_52, Chikenjars_50, Citrus_50, Conley_49, Crocheter_51, Dancer_50, Demure_49, Dialga_51, Duffington_49, Eddiemania_53, EndAve_52, Fazel_51, Figliar_50, Football_52, FortCran_50, Gill_50, Glintora_52, Gravy_49, Gusicorn_52, Hortihabitatio_51, Hydrus_53, Jodelie19_50, JulesRay_50, Kenosha_50, Kerry_49, Luthien_52, Madvan_51, Magel_51, MajinBuu_50, Mossy_54, Mysticmoon_51, Nadmeg_52, Nithya_51, NoPickles_49, Odesza_49, OhMyWard_50, OlgasClover_52, Perkunas_51, PestoPenguin_53, Petito_52, Phepper_52, Pherobrine_52, Rickmore_47, Roney_50, Runhaar_51, Schwartz33_52, SweetCrkHerbs_51, Tairn4Wing_52, Talon44_51, Tanis_50, TenaciousP_51, Tonaltzin_50, Trufflozitus_51, Untouchable_52, Vardy_50, Zeph_53,

Genes that have the "Most Annotated" start but do not call it:
• CWormy_50,

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

**Summary by start number:**

Start 17:
• Found in 70 of 70 ( 100.0% ) of genes in pham
• Manual Annotations of this start: 60 of 60
• Called 98.6% of time when present
• Phage (with cluster) where this start called: Aflac_50 (DJ), AlainaMarie_50 (DJ), Aloe25_52 (DJ), Arataki_49 (DJ), ArtetaBall_51 (DJ), Artorias_50 (DJ), Avazak_51 (DJ), Blanky_50 (DJ), BluerMoon_50 (DJ), Bugg_51 (DJ), Burley_51 (DJ), Captrips_49 (DJ), Capybara_50 (DJ), ChickyNuggy_52 (DJ), Chikenjars_50 (DJ), Citrus_50 (DJ), Conley_49 (DJ), Crocheter_51 (DJ), Dancer_50 (DJ), Demure_49 (DJ), Dialga_51 (DJ), Duffington_49 (DJ), Eddiemania_53 (DJ), EndAve_52 (DJ), Fazel_51 (DJ), Figliar_50 (DJ), Football_52 (DJ), FortCran_50 (DJ), Gill_50 (DJ), Glintora_52 (DJ), Gravy_49 (DJ), Gusicorn_52 (DJ), Hortihabitatio_51 (DJ), Hydrus_53 (DJ), Jodelie19_50 (DJ), JulesRay_50 (DJ), Kenosha_50 (DJ), Kerry_49 (DJ), Luthien_52 (DJ), Madvan_51 (DJ), Magel_51 (DJ), MajinBuu_50 (DJ), Mossy_54 (DJ), Mysticmoon_51 (DJ), Nadmeg_52 (DJ), Nithya_51 (DJ), NoPickles_49 (DJ), Odesza_49 (DJ), OhMyWard_50 (DJ), OlgasClover_52 (DJ), Perkunas_51 (DJ), PestoPenguin_53 (DJ), Petito_52 (DJ), Phepper_52 (DJ), Pherobrine_52 (DJ), Rickmore_47 (DJ), Roney_50 (DJ), Runhaar_51 (DJ), Schwartz33_52 (DJ), SweetCrkHerbs_51 (DJ), Tairn4Wing_52 (DJ), Talon44_51 (DJ), Tanis_50 (DJ), TenaciousP_51 (DJ), Tonaltzin_50 (DJ), Trufflozitus_51 (DJ), Untouchable_52 (DJ), Vardy_50 (DJ), Zeph_53 (DJ),

Start 18:
• Found in 40 of 70 ( 57.1% ) of genes in pham
• No Manual Annotations of this start.
• Called 2.5% of time when present
• Phage (with cluster) where this start called: CWormy_50 (DJ),

**Summary by clusters:**

There is one cluster represented in this pham: DJ

Info for manual annotations of cluster DJ:
•Start number 17 was manually annotated 60 times for cluster DJ.

***Gene Information:***

Gene: Aflac_50 Start: 36071, Stop: 36394, Start Num: 17
Candidate Starts for Aflac_50:
(Start: 17 @36071 has 60 MA's), (18, 36092), (24, 36161), (33, 36224), (45, 36389),

Gene: AlainaMarie_50 Start: 36068, Stop: 36367, Start Num: 17
Candidate Starts for AlainaMarie_50:
(Start: 17 @36068 has 60 MA's), (18, 36089), (24, 36158), (30, 36206), (43, 36275), (45, 36362),

Gene: Aloe25_52 Start: 36126, Stop: 36449, Start Num: 17
Candidate Starts for Aloe25_52:
(3, 35973), (4, 35997), (6, 36039), (7, 36045), (8, 36051), (Start: 17 @36126 has 60 MA's), (18, 36147), (24, 36216), (39, 36330), (45, 36444),

Gene: Arataki_49 Start: 35174, Stop: 35473, Start Num: 17
Candidate Starts for Arataki_49:
(3, 35021), (4, 35045), (8, 35099), (Start: 17 @35174 has 60 MA's), (18, 35195), (24, 35264), (30, 35312), (40, 35372), (43, 35381), (45, 35468),

Gene: ArtetaBall_51 Start: 36374, Stop: 36664, Start Num: 17
Candidate Starts for ArtetaBall_51:
(3, 36221), (4, 36245), (8, 36299), (Start: 17 @36374 has 60 MA's), (18, 36395), (37, 36566), (45, 36659),

Gene: Artorias_50 Start: 35488, Stop: 35700, Start Num: 17
Candidate Starts for Artorias_50:
(1, 35296), (12, 35437), (Start: 17 @35488 has 60 MA's), (20, 35530), (21, 35554), (34, 35647), (35, 35668), (38, 35683),

Gene: Avazak_51 Start: 35833, Stop: 36045, Start Num: 17
Candidate Starts for Avazak_51:
(1, 35641), (12, 35782), (Start: 17 @35833 has 60 MA's), (20, 35875), (21, 35899), (34, 35992), (35, 36013), (38, 36028),

Gene: Blanky_50 Start: 37776, Stop: 38099, Start Num: 17
Candidate Starts for Blanky_50:
(14, 37737), (Start: 17 @37776 has 60 MA's), (18, 37797), (24, 37866), (39, 37980), (45, 38094),

Gene: BluerMoon_50 Start: 36068, Stop: 36391, Start Num: 17
Candidate Starts for BluerMoon_50:
(Start: 17 @36068 has 60 MA's), (18, 36089), (24, 36158), (33, 36221), (39, 36272), (45, 36386),

Gene: Bugg_51 Start: 35533, Stop: 35745, Start Num: 17

Candidate Starts for Bugg_51:
(1, 35341), (12, 35482), (Start: 17 @35533 has 60 MA's), (20, 35575), (21, 35599), (34, 35692), (35, 35713), (38, 35728),

Gene: Burley_51 Start: 35832, Stop: 36131, Start Num: 17
Candidate Starts for Burley_51:
(Start: 17 @35832 has 60 MA's), (18, 35853), (30, 35970), (40, 36030), (43, 36039), (45, 36126),

Gene: CWormy_50 Start: 35808, Stop: 36077, Start Num: 18
Candidate Starts for CWormy_50:
(3, 35634), (4, 35658), (8, 35712), (Start: 17 @35787 has 60 MA's), (18, 35808), (37, 35979), (45, 36072),

Gene: Captrips_49 Start: 34967, Stop: 35179, Start Num: 17
Candidate Starts for Captrips_49:
(1, 34775), (12, 34916), (Start: 17 @34967 has 60 MA's), (20, 35009), (21, 35033), (34, 35126), (35, 35147), (38, 35162),

Gene: Capybara_50 Start: 35368, Stop: 35595, Start Num: 17
Candidate Starts for Capybara_50:
(Start: 17 @35368 has 60 MA's), (19, 35401), (20, 35413), (21, 35437), (30, 35500), (35, 35542), (41, 35575), (43, 35590),

Gene: ChickyNuggy_52 Start: 35592, Stop: 35804, Start Num: 17
Candidate Starts for ChickyNuggy_52:
(1, 35400), (12, 35541), (Start: 17 @35592 has 60 MA's), (20, 35634), (21, 35658), (34, 35751), (35, 35772), (38, 35787),

Gene: Chikenjars_50 Start: 36079, Stop: 36378, Start Num: 17
Candidate Starts for Chikenjars_50:
(Start: 17 @36079 has 60 MA's), (18, 36100), (24, 36169), (30, 36217), (43, 36286), (45, 36373),

Gene: Citrus_50 Start: 36358, Stop: 36657, Start Num: 17
Candidate Starts for Citrus_50:
(Start: 17 @36358 has 60 MA's), (18, 36379), (24, 36448), (30, 36496), (43, 36565), (45, 36652),

Gene: Conley_49 Start: 36116, Stop: 36331, Start Num: 17
Candidate Starts for Conley_49:
(Start: 17 @36116 has 60 MA's), (20, 36161), (21, 36185), (34, 36278), (38, 36314), (39, 36320),

Gene: Crocheter_51 Start: 36232, Stop: 36522, Start Num: 17
Candidate Starts for Crocheter_51:
(3, 36079), (4, 36103), (8, 36157), (Start: 17 @36232 has 60 MA's), (18, 36253), (37, 36424), (45, 36517),

Gene: Dancer_50 Start: 35223, Stop: 35435, Start Num: 17
Candidate Starts for Dancer_50:
(1, 35031), (12, 35172), (Start: 17 @35223 has 60 MA's), (20, 35265), (21, 35289), (34, 35382), (35, 35403), (38, 35418),

Gene: Demure_49 Start: 35174, Stop: 35473, Start Num: 17
Candidate Starts for Demure_49:

(3, 35021), (4, 35045), (8, 35099), (Start: 17 @35174 has 60 MA's), (18, 35195), (24, 35264), (30, 35312), (40, 35372), (43, 35381), (45, 35468),

Gene: Dialga_51 Start: 36393, Stop: 36692, Start Num: 17
Candidate Starts for Dialga_51:
(3, 36240), (4, 36264), (8, 36318), (Start: 17 @36393 has 60 MA's), (18, 36414), (24, 36483), (30, 36531), (40, 36591), (43, 36600), (45, 36687),

Gene: Duffington_49 Start: 35729, Stop: 36052, Start Num: 17
Candidate Starts for Duffington_49:
(Start: 17 @35729 has 60 MA's), (18, 35750), (24, 35819), (33, 35882), (45, 36047),

Gene: Eddiemania_53 Start: 36963, Stop: 37286, Start Num: 17
Candidate Starts for Eddiemania_53:
(3, 36810), (5, 36861), (6, 36876), (8, 36888), (Start: 17 @36963 has 60 MA's), (18, 36984), (24, 37053), (25, 37056), (33, 37116), (45, 37281),

Gene: EndAve_52 Start: 36248, Stop: 36547, Start Num: 17
Candidate Starts for EndAve_52:
(Start: 17 @36248 has 60 MA's), (18, 36269), (24, 36338), (30, 36386), (43, 36455), (45, 36542),

Gene: Fazel_51 Start: 35770, Stop: 36003, Start Num: 17
Candidate Starts for Fazel_51:
(13, 35725), (Start: 17 @35770 has 60 MA's), (20, 35815), (22, 35848), (24, 35863), (26, 35869), (28, 35890), (31, 35914), (32, 35923), (42, 35998),

Gene: Figliar_50 Start: 36131, Stop: 36454, Start Num: 17
Candidate Starts for Figliar_50:
(Start: 17 @36131 has 60 MA's), (18, 36152), (24, 36221), (33, 36284), (45, 36449),

Gene: Football_52 Start: 35388, Stop: 35600, Start Num: 17
Candidate Starts for Football_52:
(1, 35196), (12, 35337), (Start: 17 @35388 has 60 MA's), (20, 35430), (21, 35454), (34, 35547), (35, 35568), (38, 35583),

Gene: FortCran_50 Start: 35488, Stop: 35700, Start Num: 17
Candidate Starts for FortCran_50:
(1, 35296), (12, 35437), (Start: 17 @35488 has 60 MA's), (20, 35530), (21, 35554), (34, 35647), (35, 35668), (38, 35683),

Gene: Gill_50 Start: 35385, Stop: 35612, Start Num: 17
Candidate Starts for Gill_50:
(Start: 17 @35385 has 60 MA's), (19, 35418), (20, 35430), (21, 35454), (30, 35517), (35, 35559), (41, 35592), (43, 35607),

Gene: Glintora_52 Start: 36709, Stop: 37011, Start Num: 17
Candidate Starts for Glintora_52:
(4, 36580), (6, 36622), (8, 36634), (Start: 17 @36709 has 60 MA's), (18, 36730), (24, 36799), (37, 36901), (45, 37006),

Gene: Gravy_49 Start: 35058, Stop: 35285, Start Num: 17
Candidate Starts for Gravy_49:

(Start: 17 @35058 has 60 MA's), (19, 35091), (20, 35103), (21, 35127), (30, 35190), (35, 35232), (41, 35265), (43, 35280),

Gene: Gusicorn_52 Start: 36126, Stop: 36449, Start Num: 17
Candidate Starts for Gusicorn_52:
(3, 35973), (4, 35997), (6, 36039), (7, 36045), (8, 36051), (Start: 17 @36126 has 60 MA's), (18, 36147), (24, 36216), (39, 36330), (45, 36444),

Gene: Hortihabitatio_51 Start: 35975, Stop: 36208, Start Num: 17
Candidate Starts for Hortihabitatio_51:
(11, 35930), (15, 35960), (16, 35972), (Start: 17 @35975 has 60 MA's), (20, 36020), (22, 36053), (26, 36074), (31, 36119), (42, 36203),

Gene: Hydrus_53 Start: 37004, Stop: 37294, Start Num: 17
Candidate Starts for Hydrus_53:
(3, 36851), (4, 36875), (8, 36929), (Start: 17 @37004 has 60 MA's), (18, 37025), (37, 37196), (45, 37289),

Gene: Jodelie19_50 Start: 37535, Stop: 37858, Start Num: 17
Candidate Starts for Jodelie19_50:
(Start: 17 @37535 has 60 MA's), (18, 37556), (24, 37625), (33, 37688), (45, 37853),

Gene: JulesRay_50 Start: 35517, Stop: 35729, Start Num: 17
Candidate Starts for JulesRay_50:
(1, 35325), (12, 35466), (Start: 17 @35517 has 60 MA's), (20, 35559), (21, 35583), (34, 35676), (35, 35697), (38, 35712),

Gene: Kenosha_50 Start: 36640, Stop: 36939, Start Num: 17
Candidate Starts for Kenosha_50:
(3, 36487), (4, 36511), (8, 36565), (Start: 17 @36640 has 60 MA's), (18, 36661), (24, 36730), (30, 36778), (40, 36838), (43, 36847), (44, 36874), (45, 36934),

Gene: Kerry_49 Start: 35058, Stop: 35285, Start Num: 17
Candidate Starts for Kerry_49:
(Start: 17 @35058 has 60 MA's), (19, 35091), (20, 35103), (21, 35127), (30, 35190), (35, 35232), (41, 35265), (43, 35280),

Gene: Luthien_52 Start: 36246, Stop: 36545, Start Num: 17
Candidate Starts for Luthien_52:
(Start: 17 @36246 has 60 MA's), (18, 36267), (24, 36336), (30, 36384), (32, 36396), (43, 36453), (45, 36540),

Gene: Madvan_51 Start: 35873, Stop: 36163, Start Num: 17
Candidate Starts for Madvan_51:
(3, 35720), (4, 35744), (8, 35798), (Start: 17 @35873 has 60 MA's), (18, 35894), (37, 36065), (45, 36158),

Gene: Magel_51 Start: 35289, Stop: 35516, Start Num: 17
Candidate Starts for Magel_51:
(Start: 17 @35289 has 60 MA's), (19, 35322), (20, 35334), (21, 35358), (30, 35421), (35, 35463), (41, 35496), (43, 35511),

Gene: MajinBuu_50 Start: 36158, Stop: 36481, Start Num: 17

Candidate Starts for MajinBuu_50:
(Start: 17 @36158 has 60 MA's), (18, 36179), (24, 36248), (33, 36311), (45, 36476),

Gene: Mossy_54 Start: 37991, Stop: 38314, Start Num: 17
Candidate Starts for Mossy_54:
(14, 37952), (Start: 17 @37991 has 60 MA's), (18, 38012), (24, 38081), (39, 38195), (45, 38309),

Gene: Mysticmoon_51 Start: 36751, Stop: 36984, Start Num: 17
Candidate Starts for Mysticmoon_51:
(10, 36703), (16, 36748), (Start: 17 @36751 has 60 MA's), (20, 36796), (24, 36844), (28, 36871), (35, 36934), (36, 36937), (37, 36946), (42, 36979),

Gene: Nadmeg_52 Start: 37305, Stop: 37595, Start Num: 17
Candidate Starts for Nadmeg_52:
(3, 37152), (4, 37176), (8, 37230), (Start: 17 @37305 has 60 MA's), (18, 37326), (37, 37497), (45, 37590),

Gene: Nithya_51 Start: 36069, Stop: 36368, Start Num: 17
Candidate Starts for Nithya_51:
(Start: 17 @36069 has 60 MA's), (18, 36090), (24, 36159), (30, 36207), (43, 36276), (45, 36363),

Gene: NoPickles_49 Start: 34688, Stop: 34900, Start Num: 17
Candidate Starts for NoPickles_49:
(1, 34496), (2, 34520), (12, 34637), (Start: 17 @34688 has 60 MA's), (20, 34730), (21, 34754), (38, 34883), (39, 34889),

Gene: Odesza_49 Start: 35078, Stop: 35290, Start Num: 17
Candidate Starts for Odesza_49:
(1, 34886), (2, 34910), (12, 35027), (Start: 17 @35078 has 60 MA's), (20, 35120), (21, 35144), (38, 35273), (39, 35279),

Gene: OhMyWard_50 Start: 37086, Stop: 37409, Start Num: 17
Candidate Starts for OhMyWard_50:
(9, 37020), (14, 37047), (Start: 17 @37086 has 60 MA's), (18, 37107), (24, 37176), (25, 37179), (39, 37290), (45, 37404),

Gene: OlgasClover_52 Start: 37116, Stop: 37439, Start Num: 17
Candidate Starts for OlgasClover_52:
(Start: 17 @37116 has 60 MA's), (18, 37137), (24, 37206), (33, 37269), (45, 37434),

Gene: Perkunas_51 Start: 35366, Stop: 35578, Start Num: 17
Candidate Starts for Perkunas_51:
(Start: 17 @35366 has 60 MA's), (20, 35408), (21, 35432), (25, 35459), (28, 35483), (34, 35525), (38, 35561), (39, 35567),

Gene: PestoPenguin_53 Start: 36126, Stop: 36449, Start Num: 17
Candidate Starts for PestoPenguin_53:
(3, 35973), (4, 35997), (6, 36039), (7, 36045), (8, 36051), (Start: 17 @36126 has 60 MA's), (18, 36147), (24, 36216), (39, 36330), (45, 36444),

Gene: Petito_52 Start: 37176, Stop: 37391, Start Num: 17
Candidate Starts for Petito_52:

(1, 36987), (2, 37011), (12, 37128), (Start: 17 @37176 has 60 MA's), (20, 37221), (21, 37245), (23, 37266), (35, 37359), (38, 37374), (39, 37380),

Gene: Phepper_52 Start: 36126, Stop: 36425, Start Num: 17
Candidate Starts for Phepper_52:
(3, 35973), (4, 35997), (8, 36051), (Start: 17 @36126 has 60 MA's), (18, 36147), (30, 36264), (40, 36324), (43, 36333), (45, 36420),

Gene: Pherobrine_52 Start: 37041, Stop: 37274, Start Num: 17
Candidate Starts for Pherobrine_52:
(10, 36993), (16, 37038), (Start: 17 @37041 has 60 MA's), (20, 37086), (24, 37134), (28, 37161), (35, 37224), (36, 37227), (37, 37236), (42, 37269),

Gene: Rickmore_47 Start: 33930, Stop: 34253, Start Num: 17
Candidate Starts for Rickmore_47:
(9, 33864), (14, 33891), (Start: 17 @33930 has 60 MA's), (18, 33951), (24, 34020), (33, 34083), (39, 34134), (45, 34248),

Gene: Roney_50 Start: 35378, Stop: 35590, Start Num: 17
Candidate Starts for Roney_50:
(1, 35186), (2, 35210), (12, 35327), (Start: 17 @35378 has 60 MA's), (20, 35420), (21, 35444), (38, 35573), (39, 35579),

Gene: Runhaar_51 Start: 36121, Stop: 36411, Start Num: 17
Candidate Starts for Runhaar_51:
(3, 35968), (4, 35992), (8, 36046), (Start: 17 @36121 has 60 MA's), (18, 36142), (37, 36313), (45, 36406),

Gene: Schwartz33_52 Start: 36364, Stop: 36576, Start Num: 17
Candidate Starts for Schwartz33_52:
(Start: 17 @36364 has 60 MA's), (20, 36409), (24, 36457), (27, 36475), (29, 36496),

Gene: SweetCrkHerbs_51 Start: 35039, Stop: 35251, Start Num: 17
Candidate Starts for SweetCrkHerbs_51:
(Start: 17 @35039 has 60 MA's), (20, 35081), (21, 35105), (25, 35132), (28, 35156), (34, 35198), (38, 35234), (39, 35240),

Gene: Tairn4Wing_52 Start: 35335, Stop: 35547, Start Num: 17
Candidate Starts for Tairn4Wing_52:
(1, 35143), (12, 35284), (Start: 17 @35335 has 60 MA's), (20, 35377), (21, 35401), (34, 35494), (35, 35515), (38, 35530),

Gene: Talon44_51 Start: 35381, Stop: 35593, Start Num: 17
Candidate Starts for Talon44_51:
(Start: 17 @35381 has 60 MA's), (20, 35423), (21, 35447), (25, 35474), (28, 35498), (34, 35540), (38, 35576), (39, 35582),

Gene: Tanis_50 Start: 35231, Stop: 35458, Start Num: 17
Candidate Starts for Tanis_50:
(Start: 17 @35231 has 60 MA's), (19, 35264), (20, 35276), (21, 35300), (30, 35363), (35, 35405), (41, 35438), (43, 35453),

Gene: TenaciousP_51 Start: 37497, Stop: 37820, Start Num: 17

Candidate Starts for TenaciousP_51:
(Start: 17 @37497 has 60 MA's), (18, 37518), (24, 37587), (33, 37650), (45, 37815),

Gene: Tonaltzin_50 Start: 36067, Stop: 36390, Start Num: 17
Candidate Starts for Tonaltzin_50:
(Start: 17 @36067 has 60 MA's), (18, 36088), (24, 36157), (33, 36220), (45, 36385),

Gene: Trufflozitus_51 Start: 35858, Stop: 36070, Start Num: 17
Candidate Starts for Trufflozitus_51:
(1, 35666), (12, 35807), (Start: 17 @35858 has 60 MA's), (20, 35900), (21, 35924), (34, 36017), (35, 36038), (38, 36053),

Gene: Untouchable_52 Start: 36486, Stop: 36776, Start Num: 17
Candidate Starts for Untouchable_52:
(3, 36333), (4, 36357), (8, 36411), (Start: 17 @36486 has 60 MA's), (18, 36507), (37, 36678), (45, 36771),

Gene: Vardy_50 Start: 35830, Stop: 36120, Start Num: 17
Candidate Starts for Vardy_50:
(3, 35677), (4, 35701), (8, 35755), (Start: 17 @35830 has 60 MA's), (18, 35851), (37, 36022), (45, 36115),

Gene: Zeph_53 Start: 36984, Stop: 37274, Start Num: 17
Candidate Starts for Zeph_53:
(3, 36831), (4, 36855), (8, 36909), (Start: 17 @36984 has 60 MA's), (18, 37005), (37, 37176), (45, 37269),