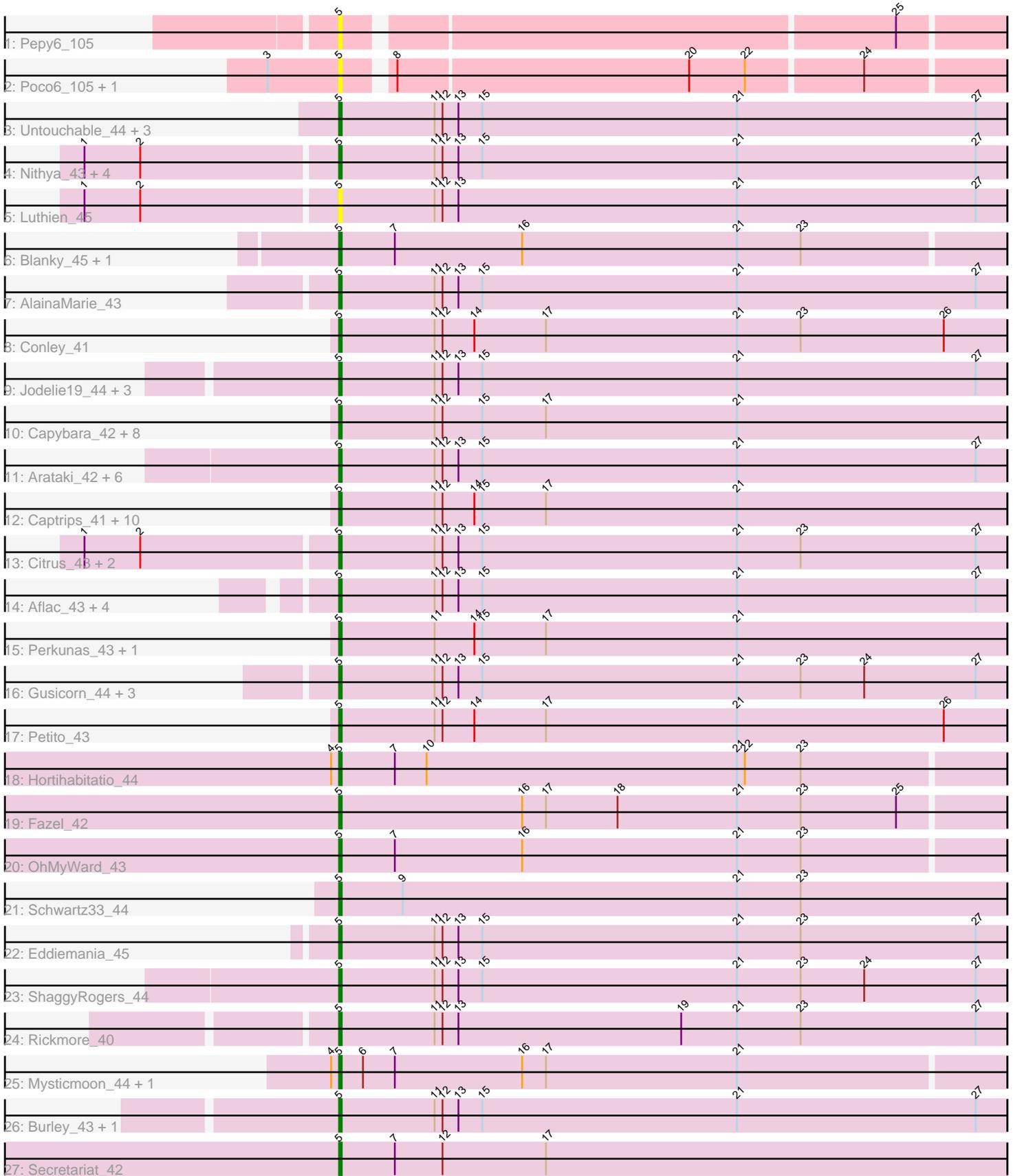# Pham 283746

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 283746 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283746 has 75 members, 19 are drafts.

Phages represented in each track:
• Track 1 : Pepy6_105
• Track 2 : Poco6_105, PerroGrande22_57
• Track 3 : Untouchable_44, Phepper_44, Zeph_45, Hydrus_45
• Track 4 : Nithya_43, CWormy_43, Duffington_42, Chikenjars_43, EndAve_44
• Track 5 : Luthien_45
• Track 6 : Blanky_45, Mossy_46
• Track 7 : AlainaMarie_43
• Track 8 : Conley_41
• Track 9 : Jodelie19_44, MajinBuu_43, Kenosha_43, Figliar_43
• Track 10 : Capybara_42, Gravy_41, Gill_42, NoPickles_41, Magel_43, Odesza_41, Roney_42, Tanis_42, Kerry_41
• Track 11 : Arataki_42, Nadmeg_44, Dialga_44, Demure_41, ArtetaBall_44, Madvan_43, Crocheter_43
• Track 12 : Captrips_41, Avazak_42, Artorias_41, Football_43, Tairn4Wing_44, FortCran_41, Dancer_41, Trufflozitus_45, JulesRay_41, ChickyNuggy_43, Bugg_42
• Track 13 : Citrus_43, Runhaar_44, Glintora_45
• Track 14 : Aflac_43, BluerMoon_43, Tonaltzin_45, OlgasClover_44, TenaciousP_44
• Track 15 : Perkunas_43, Talon44_43
• Track 16 : Gusicorn_44, PestoPenguin_48, Aloe25_47, BetterYeti_44
• Track 17 : Petito_43
• Track 18 : Hortihabitatio_44
• Track 19 : Fazel_42
• Track 20 : OhMyWard_43
• Track 21 : Schwartz33_44
• Track 22 : Eddiemania_45
• Track 23 : ShaggyRogers_44
• Track 24 : Rickmore_40
• Track 25 : Mysticmoon_44, Pherobrine_44
• Track 26 : Burley_43, Vardy_43
• Track 27 : Secretariat_42

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

The start number called the most often in the published annotations is 5, it was called in 56 of the 56 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aflac_43, AlainaMarie_43, Aloe25_47, Arataki_42, ArtetaBall_44, Artorias_41, Avazak_42, BetterYeti_44, Blanky_45, BluerMoon_43, Bugg_42, Burley_43, CWormy_43, Captrips_41, Capybara_42, ChickyNuggy_43, Chikenjars_43, Citrus_43, Conley_41, Crocheter_43, Dancer_41, Demure_41, Dialga_44, Duffington_42, Eddiemania_45, EndAve_44, Fazel_42, Figliar_43, Football_43, FortCran_41, Gill_42, Glintora_45, Gravy_41, Gusicorn_44, Hortihabitatio_44, Hydrus_45, Jodelie19_44, JulesRay_41, Kenosha_43, Kerry_41, Luthien_45, Madvan_43, Magel_43, MajinBuu_43, Mossy_46, Mysticmoon_44, Nadmeg_44, Nithya_43, NoPickles_41, Odesza_41, OhMyWard_43, OlgasClover_44, Pepy6_105, Perkunas_43, PerroGrande22_57, PestoPenguin_48, Petito_43, Phepper_44, Pherobrine_44, Poco6_105, Rickmore_40, Roney_42, Runhaar_44, Schwartz33_44, Secretariat_42, ShaggyRogers_44, Tairn4Wing_44, Talon44_43, Tanis_42, TenaciousP_44, Tonaltzin_45, Trufflozitus_45, Untouchable_44, Vardy_43, Zeph_45,

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

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

Summary by start number:

Start 5:
• Found in 75 of 75 (100.0%) of genes in pham
• Manual Annotations of this start: 56 of 56
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aflac_43 (DJ), AlainaMarie_43 (DJ), Aloe25_47 (DJ), Arataki_42 (DJ), ArtetaBall_44 (DJ), Artorias_41 (DJ), Avazak_42 (DJ), BetterYeti_44 (DJ), Blanky_45 (DJ), BluerMoon_43 (DJ), Bugg_42 (DJ), Burley_43 (DJ), CWormy_43 (DJ), Captrips_41 (DJ), Capybara_42 (DJ), ChickyNuggy_43 (DJ), Chikenjars_43 (DJ), Citrus_43 (DJ), Conley_41 (DJ), Crocheter_43 (DJ), Dancer_41 (DJ), Demure_41 (DJ), Dialga_44 (DJ), Duffington_42 (DJ), Eddiemania_45 (DJ), EndAve_44 (DJ), Fazel_42 (DJ), Figliar_43 (DJ), Football_43 (DJ), FortCran_41 (DJ), Gill_42 (DJ), Glintora_45 (DJ), Gravy_41 (DJ), Gusicorn_44 (DJ), Hortihabitatio_44 (DJ), Hydrus_45 (DJ), Jodelie19_44 (DJ), JulesRay_41 (DJ), Kenosha_43 (DJ), Kerry_41 (DJ), Luthien_45 (DJ), Madvan_43 (DJ), Magel_43 (DJ), MajinBuu_43 (DJ), Mossy_46 (DJ), Mysticmoon_44 (DJ), Nadmeg_44 (DJ), Nithya_43 (DJ), NoPickles_41 (DJ), Odesza_41 (DJ), OhMyWard_43 (DJ), OlgasClover_44 (DJ), Pepy6_105 (CC), Perkunas_43 (DJ), PerroGrande22_57 (CC), PestoPenguin_48 (DJ), Petito_43 (DJ), Phepper_44 (DJ), Pherobrine_44 (DJ), Poco6_105 (CC), Rickmore_40 (DJ), Roney_42 (DJ), Runhaar_44 (DJ), Schwartz33_44 (DJ), Secretariat_42 (DJ), ShaggyRogers_44 (DJ), Tairn4Wing_44 (DJ), Talon44_43 (DJ), Tanis_42 (DJ), TenaciousP_44 (DJ), Tonaltzin_45 (DJ), Trufflozitus_45 (DJ), Untouchable_44 (DJ), Vardy_43 (DJ), Zeph_45 (DJ),

Summary by clusters:

There are 2 clusters represented in this pham: CC, DJ,

Info for manual annotations of cluster DJ:
•Start number 5 was manually annotated 56 times for cluster DJ.

Gene Information:

Gene: Aflac_43 Start: 33707, Stop: 33958, Start Num: 5
Candidate Starts for Aflac_43:
(Start: 5 @33707 has 56 MA's), (11, 33743), (12, 33746), (13, 33752), (15, 33761), (21, 33857), (27, 33947),

Gene: AlainaMarie_43 Start: 33692, Stop: 33943, Start Num: 5
Candidate Starts for AlainaMarie_43:
(Start: 5 @33692 has 56 MA's), (11, 33728), (12, 33731), (13, 33737), (15, 33746), (21, 33842), (27, 33932),

Gene: Aloe25_47 Start: 33761, Stop: 34012, Start Num: 5
Candidate Starts for Aloe25_47:
(Start: 5 @33761 has 56 MA's), (11, 33797), (12, 33800), (13, 33806), (15, 33815), (21, 33911), (23, 33935), (24, 33959), (27, 34001),

Gene: Arataki_42 Start: 32810, Stop: 33061, Start Num: 5
Candidate Starts for Arataki_42:
(Start: 5 @32810 has 56 MA's), (11, 32846), (12, 32849), (13, 32855), (15, 32864), (21, 32960), (27, 33050),

Gene: ArtetaBall_44 Start: 34010, Stop: 34261, Start Num: 5
Candidate Starts for ArtetaBall_44:
(Start: 5 @34010 has 56 MA's), (11, 34046), (12, 34049), (13, 34055), (15, 34064), (21, 34160), (27, 34250),

Gene: Artorias_41 Start: 31178, Stop: 31429, Start Num: 5
Candidate Starts for Artorias_41:
(Start: 5 @31178 has 56 MA's), (11, 31214), (12, 31217), (14, 31229), (15, 31232), (17, 31256), (21, 31328),

Gene: Avazak_42 Start: 31543, Stop: 31794, Start Num: 5
Candidate Starts for Avazak_42:
(Start: 5 @31543 has 56 MA's), (11, 31579), (12, 31582), (14, 31594), (15, 31597), (17, 31621), (21, 31693),

Gene: BetterYeti_44 Start: 33760, Stop: 34011, Start Num: 5
Candidate Starts for BetterYeti_44:
(Start: 5 @33760 has 56 MA's), (11, 33796), (12, 33799), (13, 33805), (15, 33814), (21, 33910), (23, 33934), (24, 33958), (27, 34000),

Gene: Blanky_45 Start: 35410, Stop: 35658, Start Num: 5
Candidate Starts for Blanky_45:
(Start: 5 @35410 has 56 MA's), (7, 35431), (16, 35479), (21, 35560), (23, 35584),

Gene: BluerMoon_43 Start: 33703, Stop: 33954, Start Num: 5
Candidate Starts for BluerMoon_43:
(Start: 5 @33703 has 56 MA's), (11, 33739), (12, 33742), (13, 33748), (15, 33757), (21, 33853), (27, 33943),

Gene: Bugg_42 Start: 31223, Stop: 31474, Start Num: 5
Candidate Starts for Bugg_42:
(Start: 5 @31223 has 56 MA's), (11, 31259), (12, 31262), (14, 31274), (15, 31277), (17, 31301), (21, 31373),

Gene: Burley_43 Start: 33465, Stop: 33716, Start Num: 5
Candidate Starts for Burley_43:
(Start: 5 @33465 has 56 MA's), (11, 33501), (12, 33504), (13, 33510), (15, 33519), (21, 33615), (27, 33705),

Gene: CWormy_43 Start: 33423, Stop: 33674, Start Num: 5
Candidate Starts for CWormy_43:
(1, 33330), (2, 33351), (Start: 5 @33423 has 56 MA's), (11, 33459), (12, 33462), (13, 33468), (15, 33477), (21, 33573), (27, 33663),

Gene: Captrips_41 Start: 31216, Stop: 31467, Start Num: 5
Candidate Starts for Captrips_41:
(Start: 5 @31216 has 56 MA's), (11, 31252), (12, 31255), (14, 31267), (15, 31270), (17, 31294), (21, 31366),

Gene: Capybara_42 Start: 31605, Stop: 31856, Start Num: 5
Candidate Starts for Capybara_42:
(Start: 5 @31605 has 56 MA's), (11, 31641), (12, 31644), (15, 31659), (17, 31683), (21, 31755),

Gene: ChickyNuggy_43 Start: 31285, Stop: 31536, Start Num: 5
Candidate Starts for ChickyNuggy_43:
(Start: 5 @31285 has 56 MA's), (11, 31321), (12, 31324), (14, 31336), (15, 31339), (17, 31363), (21, 31435),

Gene: Chikenjars_43 Start: 33703, Stop: 33954, Start Num: 5
Candidate Starts for Chikenjars_43:
(1, 33610), (2, 33631), (Start: 5 @33703 has 56 MA's), (11, 33739), (12, 33742), (13, 33748), (15, 33757), (21, 33853), (27, 33943),

Gene: Citrus_43 Start: 33982, Stop: 34233, Start Num: 5
Candidate Starts for Citrus_43:
(1, 33889), (2, 33910), (Start: 5 @33982 has 56 MA's), (11, 34018), (12, 34021), (13, 34027), (15, 34036), (21, 34132), (23, 34156), (27, 34222),

Gene: Conley_41 Start: 32155, Stop: 32406, Start Num: 5
Candidate Starts for Conley_41:
(Start: 5 @32155 has 56 MA's), (11, 32191), (12, 32194), (14, 32206), (17, 32233), (21, 32305), (23, 32329), (26, 32383),

Gene: Crocheter_43 Start: 33868, Stop: 34119, Start Num: 5
Candidate Starts for Crocheter_43:
(Start: 5 @33868 has 56 MA's), (11, 33904), (12, 33907), (13, 33913), (15, 33922), (21, 34018), (27, 34108),

Gene: Dancer_41 Start: 30916, Stop: 31167, Start Num: 5
Candidate Starts for Dancer_41:
(Start: 5 @30916 has 56 MA's), (11, 30952), (12, 30955), (14, 30967), (15, 30970), (17, 30994), (21, 31066),

Gene: Demure_41 Start: 32810, Stop: 33061, Start Num: 5
Candidate Starts for Demure_41:
(Start: 5 @32810 has 56 MA's), (11, 32846), (12, 32849), (13, 32855), (15, 32864), (21, 32960), (27, 33050),

Gene: Dialga_44 Start: 34029, Stop: 34280, Start Num: 5
Candidate Starts for Dialga_44:
(Start: 5 @34029 has 56 MA's), (11, 34065), (12, 34068), (13, 34074), (15, 34083), (21, 34179), (27, 34269),

Gene: Duffington_42 Start: 33365, Stop: 33616, Start Num: 5
Candidate Starts for Duffington_42:
(1, 33272), (2, 33293), (Start: 5 @33365 has 56 MA's), (11, 33401), (12, 33404), (13, 33410), (15, 33419), (21, 33515), (27, 33605),

Gene: Eddiemania_45 Start: 34627, Stop: 34878, Start Num: 5
Candidate Starts for Eddiemania_45:
(Start: 5 @34627 has 56 MA's), (11, 34663), (12, 34666), (13, 34672), (15, 34681), (21, 34777), (23, 34801), (27, 34867),

Gene: EndAve_44 Start: 33872, Stop: 34123, Start Num: 5
Candidate Starts for EndAve_44:
(1, 33779), (2, 33800), (Start: 5 @33872 has 56 MA's), (11, 33908), (12, 33911), (13, 33917), (15, 33926), (21, 34022), (27, 34112),

Gene: Fazel_42 Start: 33160, Stop: 33408, Start Num: 5
Candidate Starts for Fazel_42:
(Start: 5 @33160 has 56 MA's), (16, 33229), (17, 33238), (18, 33265), (21, 33310), (23, 33334), (25, 33370),

Gene: Figliar_43 Start: 33767, Stop: 34018, Start Num: 5
Candidate Starts for Figliar_43:
(Start: 5 @33767 has 56 MA's), (11, 33803), (12, 33806), (13, 33812), (15, 33821), (21, 33917), (27, 34007),

Gene: Football_43 Start: 30922, Stop: 31173, Start Num: 5
Candidate Starts for Football_43:
(Start: 5 @30922 has 56 MA's), (11, 30958), (12, 30961), (14, 30973), (15, 30976), (17, 31000), (21, 31072),

Gene: FortCran_41 Start: 31178, Stop: 31429, Start Num: 5
Candidate Starts for FortCran_41:
(Start: 5 @31178 has 56 MA's), (11, 31214), (12, 31217), (14, 31229), (15, 31232), (17, 31256), (21, 31328),

Gene: Gill_42 Start: 31622, Stop: 31873, Start Num: 5
Candidate Starts for Gill_42:

(Start: 5 @31622 has 56 MA's), (11, 31658), (12, 31661), (15, 31676), (17, 31700), (21, 31772),

Gene: Glintora_45 Start: 34337, Stop: 34588, Start Num: 5
Candidate Starts for Glintora_45:
(1, 34244), (2, 34265), (Start: 5 @34337 has 56 MA's), (11, 34373), (12, 34376), (13, 34382), (15, 34391), (21, 34487), (23, 34511), (27, 34577),

Gene: Gravy_41 Start: 31295, Stop: 31546, Start Num: 5
Candidate Starts for Gravy_41:
(Start: 5 @31295 has 56 MA's), (11, 31331), (12, 31334), (15, 31349), (17, 31373), (21, 31445),

Gene: Gusicorn_44 Start: 33761, Stop: 34012, Start Num: 5
Candidate Starts for Gusicorn_44:
(Start: 5 @33761 has 56 MA's), (11, 33797), (12, 33800), (13, 33806), (15, 33815), (21, 33911), (23, 33935), (24, 33959), (27, 34001),

Gene: Hortihabitatio_44 Start: 33607, Stop: 33855, Start Num: 5
Candidate Starts for Hortihabitatio_44:
(4, 33604), (Start: 5 @33607 has 56 MA's), (7, 33628), (10, 33640), (21, 33757), (22, 33760), (23, 33781),

Gene: Hydrus_45 Start: 34640, Stop: 34891, Start Num: 5
Candidate Starts for Hydrus_45:
(Start: 5 @34640 has 56 MA's), (11, 34676), (12, 34679), (13, 34685), (15, 34694), (21, 34790), (27, 34880),

Gene: Jodelie19_44 Start: 35222, Stop: 35473, Start Num: 5
Candidate Starts for Jodelie19_44:
(Start: 5 @35222 has 56 MA's), (11, 35258), (12, 35261), (13, 35267), (15, 35276), (21, 35372), (27, 35462),

Gene: JulesRay_41 Start: 31210, Stop: 31461, Start Num: 5
Candidate Starts for JulesRay_41:
(Start: 5 @31210 has 56 MA's), (11, 31246), (12, 31249), (14, 31261), (15, 31264), (17, 31288), (21, 31360),

Gene: Kenosha_43 Start: 34275, Stop: 34526, Start Num: 5
Candidate Starts for Kenosha_43:
(Start: 5 @34275 has 56 MA's), (11, 34311), (12, 34314), (13, 34320), (15, 34329), (21, 34425), (27, 34515),

Gene: Kerry_41 Start: 31295, Stop: 31546, Start Num: 5
Candidate Starts for Kerry_41:
(Start: 5 @31295 has 56 MA's), (11, 31331), (12, 31334), (15, 31349), (17, 31373), (21, 31445),

Gene: Luthien_45 Start: 33870, Stop: 34121, Start Num: 5
Candidate Starts for Luthien_45:
(1, 33777), (2, 33798), (Start: 5 @33870 has 56 MA's), (11, 33906), (12, 33909), (13, 33915), (21, 34020), (27, 34110),

Gene: Madvan_43 Start: 33509, Stop: 33760, Start Num: 5
Candidate Starts for Madvan_43:

(Start: 5 @33509 has 56 MA's), (11, 33545), (12, 33548), (13, 33554), (15, 33563), (21, 33659), (27, 33749),

Gene: Magel_43 Start: 31526, Stop: 31777, Start Num: 5
Candidate Starts for Magel_43:
(Start: 5 @31526 has 56 MA's), (11, 31562), (12, 31565), (15, 31580), (17, 31604), (21, 31676),

Gene: MajinBuu_43 Start: 33794, Stop: 34045, Start Num: 5
Candidate Starts for MajinBuu_43:
(Start: 5 @33794 has 56 MA's), (11, 33830), (12, 33833), (13, 33839), (15, 33848), (21, 33944), (27, 34034),

Gene: Mossy_46 Start: 35625, Stop: 35873, Start Num: 5
Candidate Starts for Mossy_46:
(Start: 5 @35625 has 56 MA's), (7, 35646), (16, 35694), (21, 35775), (23, 35799),

Gene: Mysticmoon_44 Start: 33900, Stop: 34148, Start Num: 5
Candidate Starts for Mysticmoon_44:
(4, 33897), (Start: 5 @33900 has 56 MA's), (6, 33909), (7, 33921), (16, 33969), (17, 33978), (21, 34050),

Gene: Nadmeg_44 Start: 34941, Stop: 35192, Start Num: 5
Candidate Starts for Nadmeg_44:
(Start: 5 @34941 has 56 MA's), (11, 34977), (12, 34980), (13, 34986), (15, 34995), (21, 35091), (27, 35181),

Gene: Nithya_43 Start: 33693, Stop: 33944, Start Num: 5
Candidate Starts for Nithya_43:
(1, 33600), (2, 33621), (Start: 5 @33693 has 56 MA's), (11, 33729), (12, 33732), (13, 33738), (15, 33747), (21, 33843), (27, 33933),

Gene: NoPickles_41 Start: 30927, Stop: 31178, Start Num: 5
Candidate Starts for NoPickles_41:
(Start: 5 @30927 has 56 MA's), (11, 30963), (12, 30966), (15, 30981), (17, 31005), (21, 31077),

Gene: Odesza_41 Start: 31296, Stop: 31547, Start Num: 5
Candidate Starts for Odesza_41:
(Start: 5 @31296 has 56 MA's), (11, 31332), (12, 31335), (15, 31350), (17, 31374), (21, 31446),

Gene: OhMyWard_43 Start: 34719, Stop: 34967, Start Num: 5
Candidate Starts for OhMyWard_43:
(Start: 5 @34719 has 56 MA's), (7, 34740), (16, 34788), (21, 34869), (23, 34893),

Gene: OlgasClover_44 Start: 34751, Stop: 35002, Start Num: 5
Candidate Starts for OlgasClover_44:
(Start: 5 @34751 has 56 MA's), (11, 34787), (12, 34790), (13, 34796), (15, 34805), (21, 34901), (27, 34991),

Gene: Pepy6_105 Start: 42303, Stop: 42539, Start Num: 5
Candidate Starts for Pepy6_105:
(Start: 5 @42303 has 56 MA's), (25, 42501),

Gene: Perkunas_43 Start: 31586, Stop: 31837, Start Num: 5

Candidate Starts for Perkunas_43:
(Start: 5 @31586 has 56 MA's), (11, 31622), (14, 31637), (15, 31640), (17, 31664), (21, 31736),

Gene: PerroGrande22_57 Start: 44633, Stop: 44869, Start Num: 5
Candidate Starts for PerroGrande22_57:
(3, 44606), (Start: 5 @44633 has 56 MA's), (8, 44648), (20, 44756), (22, 44777), (24, 44819),

Gene: PestoPenguin_48 Start: 33761, Stop: 34012, Start Num: 5
Candidate Starts for PestoPenguin_48:
(Start: 5 @33761 has 56 MA's), (11, 33797), (12, 33800), (13, 33806), (15, 33815), (21, 33911), (23, 33935), (24, 33959), (27, 34001),

Gene: Petito_43 Start: 32690, Stop: 32941, Start Num: 5
Candidate Starts for Petito_43:
(Start: 5 @32690 has 56 MA's), (11, 32726), (12, 32729), (14, 32741), (17, 32768), (21, 32840), (26, 32918),

Gene: Phepper_44 Start: 33762, Stop: 34013, Start Num: 5
Candidate Starts for Phepper_44:
(Start: 5 @33762 has 56 MA's), (11, 33798), (12, 33801), (13, 33807), (15, 33816), (21, 33912), (27, 34002),

Gene: Pherobrine_44 Start: 34201, Stop: 34449, Start Num: 5
Candidate Starts for Pherobrine_44:
(4, 34198), (Start: 5 @34201 has 56 MA's), (6, 34210), (7, 34222), (16, 34270), (17, 34279), (21, 34351),

Gene: Poco6_105 Start: 44097, Stop: 44333, Start Num: 5
Candidate Starts for Poco6_105:
(3, 44070), (Start: 5 @44097 has 56 MA's), (8, 44112), (20, 44220), (22, 44241), (24, 44283),

Gene: Rickmore_40 Start: 31557, Stop: 31808, Start Num: 5
Candidate Starts for Rickmore_40:
(Start: 5 @31557 has 56 MA's), (11, 31593), (12, 31596), (13, 31602), (19, 31686), (21, 31707), (23, 31731), (27, 31797),

Gene: Roney_42 Start: 31617, Stop: 31868, Start Num: 5
Candidate Starts for Roney_42:
(Start: 5 @31617 has 56 MA's), (11, 31653), (12, 31656), (15, 31671), (17, 31695), (21, 31767),

Gene: Runhaar_44 Start: 33756, Stop: 34007, Start Num: 5
Candidate Starts for Runhaar_44:
(1, 33663), (2, 33684), (Start: 5 @33756 has 56 MA's), (11, 33792), (12, 33795), (13, 33801), (15, 33810), (21, 33906), (23, 33930), (27, 33996),

Gene: Schwartz33_44 Start: 34023, Stop: 34274, Start Num: 5
Candidate Starts for Schwartz33_44:
(Start: 5 @34023 has 56 MA's), (9, 34047), (21, 34173), (23, 34197),

Gene: Secretariat_42 Start: 32934, Stop: 33185, Start Num: 5
Candidate Starts for Secretariat_42:
(Start: 5 @32934 has 56 MA's), (7, 32955), (12, 32973), (17, 33012),

Gene: ShaggyRogers_44 Start: 33511, Stop: 33762, Start Num: 5
Candidate Starts for ShaggyRogers_44:
(Start: 5 @33511 has 56 MA's), (11, 33547), (12, 33550), (13, 33556), (15, 33565), (21, 33661), (23, 33685), (24, 33709), (27, 33751),

Gene: Tairn4Wing_44 Start: 31566, Stop: 31817, Start Num: 5
Candidate Starts for Tairn4Wing_44:
(Start: 5 @31566 has 56 MA's), (11, 31602), (12, 31605), (14, 31617), (15, 31620), (17, 31644), (21, 31716),

Gene: Talon44_43 Start: 31601, Stop: 31852, Start Num: 5
Candidate Starts for Talon44_43:
(Start: 5 @31601 has 56 MA's), (11, 31637), (14, 31652), (15, 31655), (17, 31679), (21, 31751),

Gene: Tanis_42 Start: 31468, Stop: 31719, Start Num: 5
Candidate Starts for Tanis_42:
(Start: 5 @31468 has 56 MA's), (11, 31504), (12, 31507), (15, 31522), (17, 31546), (21, 31618),

Gene: TenaciousP_44 Start: 35132, Stop: 35383, Start Num: 5
Candidate Starts for TenaciousP_44:
(Start: 5 @35132 has 56 MA's), (11, 35168), (12, 35171), (13, 35177), (15, 35186), (21, 35282), (27, 35372),

Gene: Tonaltzin_45 Start: 33702, Stop: 33953, Start Num: 5
Candidate Starts for Tonaltzin_45:
(Start: 5 @33702 has 56 MA's), (11, 33738), (12, 33741), (13, 33747), (15, 33756), (21, 33852), (27, 33942),

Gene: Trufflozitus_45 Start: 31567, Stop: 31818, Start Num: 5
Candidate Starts for Trufflozitus_45:
(Start: 5 @31567 has 56 MA's), (11, 31603), (12, 31606), (14, 31618), (15, 31621), (17, 31645), (21, 31717),

Gene: Untouchable_44 Start: 34122, Stop: 34373, Start Num: 5
Candidate Starts for Untouchable_44:
(Start: 5 @34122 has 56 MA's), (11, 34158), (12, 34161), (13, 34167), (15, 34176), (21, 34272), (27, 34362),

Gene: Vardy_43 Start: 33466, Stop: 33717, Start Num: 5
Candidate Starts for Vardy_43:
(Start: 5 @33466 has 56 MA's), (11, 33502), (12, 33505), (13, 33511), (15, 33520), (21, 33616), (27, 33706),

Gene: Zeph_45 Start: 34620, Stop: 34871, Start Num: 5
Candidate Starts for Zeph_45:
(Start: 5 @34620 has 56 MA's), (11, 34656), (12, 34659), (13, 34665), (15, 34674), (21, 34770), (27, 34860),