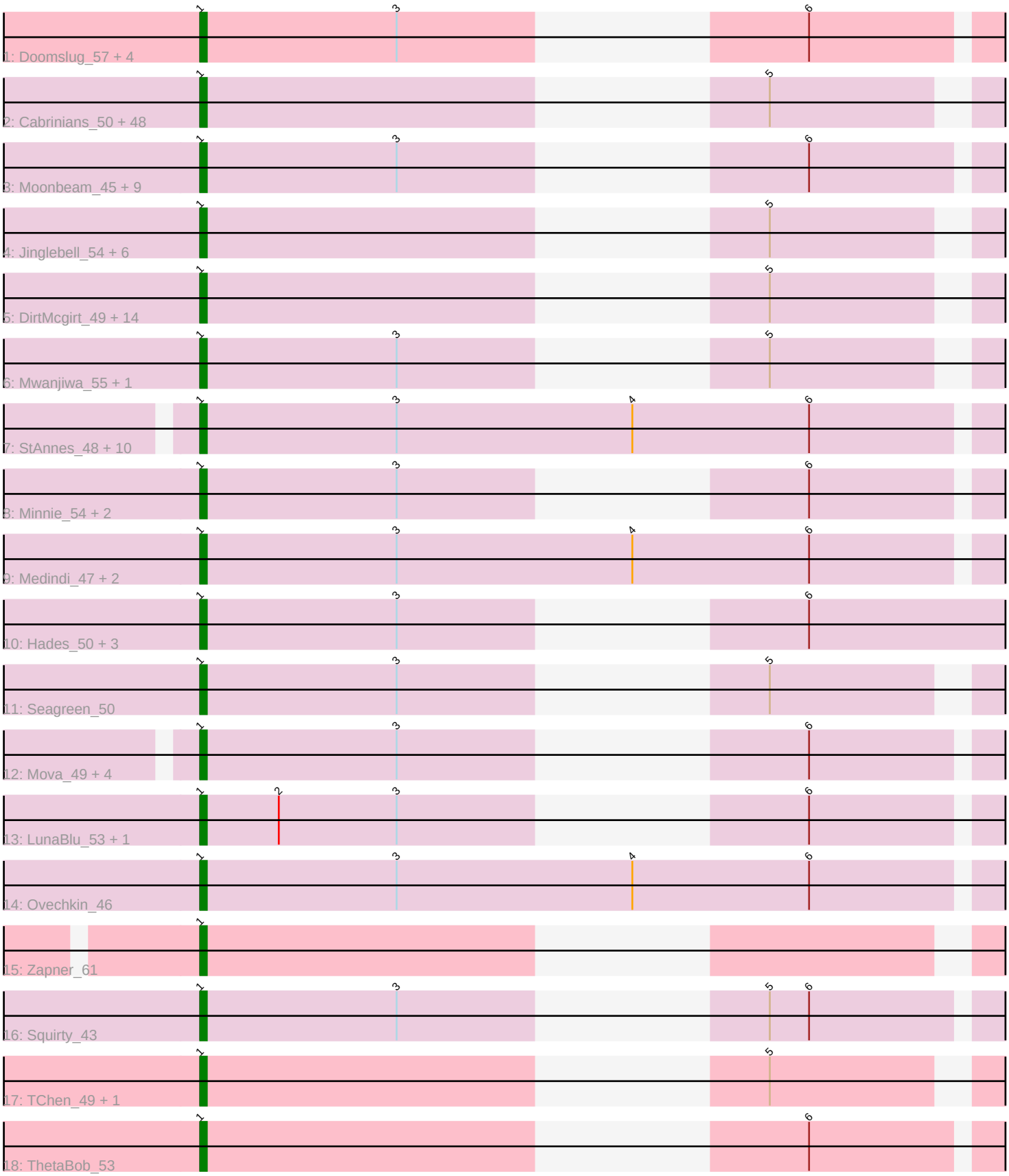
Pham 347397


1: Doomslug_57 + 4
2: Cabrinians_50 + 48
3: Moonbeam_45 + 9
4: Jinglebell_54 + 6
5: DirtMcgirt_49 + 14
6: Mwanjiwa_55 + 1
7: StAnnes_48 + 10
8: Minnie_54 + 2
9: Medindi_47 + 2
10: Hades_50 + 3
11: Seagreen_50
12: Mova_49 + 4
13: LunaBlu_53 + 1
14: Ovechkin_46
15: Zapner_61
16: Squirty_43
17: TChen_49 + 1
18: ThetaBob_53

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 347397 Report

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

Pham number 347397 has 123 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Doomslug_57, Juniper1_47, Rita_51, Guppsters_49, DoRead_50
• Track 2 : Cabrinians_50, Fancypants_50, Grimmer_57, Dorothy_46, Gandalph_50, Martik_49, RedBird_46, Cornie_42, MulchExplorer_52, Demsculpinboyz_58, Jarcob_49, Topiatin_54, Lizziana_55, Kimberlium_52, Karhdo_48, Blexus_47, QuickMath_51, Emmaloid_50, Latretium_52, Koella_43, OwlsT2W_48, ShowerHandel_51, Chevrolet_55, Nitzel_44, Renaud18_54, Maravista_51, Stap_48, Rockne_47, Phasih_47, Totinger_49, Zerg_48, ArcusAngelus_52, Madiba_45, Priscilla_49, FreddyB_49, Radiance_49, GigiOuiOui_46, Krakatau_47, Slim_50, LittleShirley_49, BodEinwohner17_49, DaddyRickover_49, Crumble_44, Doug_51, Hamulus_50, Che8_114, BuzzLyseyear_54, Peridot_49, Plumbus_51
• Track 3 : Moonbeam_45, Sarma624_47, SeaLumen_55, Enzomatic_57, Kingsley_46, KingJulian_48, Emma_49, NewHope4_52, Coco12_48, Whatsapiecost_48
• Track 4 : Jinglebell_54, AlpineSix_54, Llama_54, Modragons_53, Seabastian_54, Ochi17_52, OfUltron_54
• Track 5 : DirtMcgirt_49, Starcevich_49, LilMoolah_48, Leozinho_50, MisterCuddles_49, Royals2015_51, Sabbb_55, Mahavrat_47, TDanisky_53, Aubs_48, Lucia_49, Tootsieroll_52, Sparkdehlily_53, Phatniss_48, Nichirin_53
• Track 6 : Mwanjiwa_55, Kersh_52
• Track 7 : StAnnes_48, XFactor_47, Melissauren88_47, Mandlovu_46, CaptainTrips_46, Beakin_51, Hegedechwinu_49, MinionDave_48, Ms6_42, Hlubikazi_46, Bobi_51
• Track 8 : Minnie_54, ShroomBoi_49, Filuzino_47
• Track 9 : Medindi_47, Phalconet_48, PhesterPhotato_51
• Track 10 : Hades_50, Phanphagia_44, Bipolar_46, Byougenkin_47
• Track 11 : Seagreen_50
• Track 12 : Mova_49, VRedHorse_49, Cheesepuff_55, Enby_50, Lorde_50
• Track 13 : LunaBlu_53, Galactic_50
• Track 14 : Ovechkin_46
• Track 15 : Zapner_61
• Track 16 : Squirty_43
• Track 17 : TChen_49, LunaStella_47
• Track 18 : ThetaBob_53

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

The start number called the most often in the published annotations is 1, it was called in 116 of the 116 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AlpineSix_54, ArcusAngelus_52, Aubs_48, Beakin_51, Bipolar_46, Blexus_47, Bobi_51, BodEinwohner17_49, BuzzLyseyear_54, Byougenkin_47, Cabrinians_50, CaptainTrips_46, Che8_114, Cheesepuff_55, Chevrolet_55, Coco12_48, Cornie_42, Crumble_44, DaddyRickover_49, Demsculpinboyz_58, DirtMcgirt_49, DoRead_50, Doomslug_57, Dorothy_46, Doug_51, Emma_49, Emmaloid_50, Enby_50, Enzomatic_57, Fancypants_50, Filuzino_47, FreddyB_49, Galactic_50, Gandalph_50, GigiOuiOui_46, Grimmer_57, Guppsters_49, Hades_50, Hamulus_50, Hegedechwinu_49, Hlubikazi_46, Jarcob_49, Jinglebell_54, Juniper1_47, Karhdo_48, Kersh_52, Kimberlium_52, KingJulian_48, Kingsley_46, Koella_43, Krakatau_47, Latretium_52, Leozinho_50, LilMoolah_48, LittleShirley_49, Lizziana_55, Llama_54, Lorde_50, Lucia_49, LunaBlu_53, LunaStella_47, Madiba_45, Mahavrat_47, Mandlovu_46, Maravista_51, Martik_49, Medindi_47, Melissauren88_47, MinionDave_48, Minnie_54, MisterCuddles_49, Modragons_53, Moonbeam_45, Mova_49, Ms6_42, MulchExplorer_52, Mwanjiwa_55, NewHope4_52, Nichirin_53, Nitzel_44, Ochi17_52, OfUltron_54, Ovechkin_46, OwlsT2W_48, Peridot_49, Phalconet_48, Phanphagia_44, Phasih_47, Phatniss_48, PhesterPhotato_51, Plumbus_51, Priscilla_49, QuickMath_51, Radiance_49, RedBird_46, Renaud18_54, Rita_51, Rockne_47, Royals2015_51, Sabbb_55, Sarma624_47, SeaLumen_55, Seabastian_54, Seagreen_50, ShowerHandel_51, ShroomBoi_49, Slim_50, Sparkdehlily_53, Squirty_43, StAnnes_48, Stap_48, Starcevich_49, TChen_49, TDanisky_53, ThetaBob_53, Tootsieroll_52, Topiatin_54, Totinger_49, VRedHorse_49, Whatsapiecost_48, XFactor_47, Zapner_61, Zerg_48,

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 1:
• Found in 123 of 123 (100.0%) of genes in pham
• Manual Annotations of this start: 116 of 116
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AlpineSix_54 (F1), ArcusAngelus_52 (F1), Aubs_48 (F1), Beakin_51 (F1), Bipolar_46 (F1), Blexus_47 (F1), Bobi_51 (F1), BodEinwohner17_49 (F1), BuzzLyseyear_54 (F1), Byougenkin_47 (F1), Cabrinians_50 (F1), CaptainTrips_46 (F1), Che8_114 (F1), Cheesepuff_55 (F1), Chevrolet_55 (F1), Coco12_48 (F1), Cornie_42 (F5), Crumble_44 (F1), DaddyRickover_49 (F1), Demsculpinboyz_58 (F2), DirtMcgirt_49 (F1), DoRead_50 (F1), Doomslug_57 (F), Dorothy_46 (F1), Doug_51 (F1), Emma_49 (F1), Emmaloid_50 (F1), Enby_50 (F1), Enzomatic_57 (F1), Fancypants_50 (F1), Filuzino_47 (F1), FreddyB_49 (F1), Galactic_50 (F1), Gandalph_50 (F1), GigiOuiOui_46 (F1), Grimmer_57 (F1), Guppsters_49 (F1), Hades_50 (F1), Hamulus_50 (F1), Hegedechwinu_49 (F1), Hlubikazi_46 (F1), Jarcob_49 (F1), Jinglebell_54 (F1), Juniper1_47 (F1), Karhdo_48 (F1), Kersh_52 (F1), Kimberlium_52 (F1), KingJulian_48 (F1), Kingsley_46 (F1), Koella_43 (F1), Krakatau_47 (F1),

Latretium_52 (F1), Leozinho_50 (F1), LilMoolah_48 (F1), LittleShirley_49 (F1), Lizziana_55 (F1), Llama_54 (F1), Lorde_50 (F1), Lucia_49 (F1), LunaBlu_53 (F1), LunaStella_47 (F4), Madiba_45 (F1), Mahavrat_47 (F1), Mandlovu_46 (F1), Maravista_51 (F1), Martik_49 (F1), Medindi_47 (F1), Melissauren88_47 (F1), MinionDave_48 (F1), Minnie_54 (F1), MisterCuddles_49 (F1), Modragons_53 (F1), Moonbeam_45 (F1), Mova_49 (F1), Ms6_42 (F1), MulchExplorer_52 (F1), Mwanjiwa_55 (F1), NewHope4_52 (F1), Nichirin_53 (F1), Nitzel_44 (F1), Ochi17_52 (F1), OfUltron_54 (F1), Ovechkin_46 (F1), OwlsT2W_48 (F1), Peridot_49 (F1), Phalconet_48 (F1), Phanphagia_44 (F1), Phasih_47 (F1), Phatniss_48 (F1), PhesterPhotato_51 (F1), Plumbus_51 (F1), Priscilla_49 (F1), QuickMath_51 (F1), Radiance_49 (F1), RedBird_46 (F1), Renaud18_54 (F4), Rita_51 (F1), Rockne_47 (F1), Royals2015_51 (F1), Sabbb_55 (F1), Sarma624_47 (F1), SeaLumen_55 (F1), Seabastian_54 (F1), Seagreen_50 (F1), ShowerHandel_51 (F1), ShroomBoi_49 (F1), Slim_50 (F1), Sparkdehlily_53 (F1), Squirty_43 (F3), StAnnes_48 (F1), Stap_48 (F1), Starcevich_49 (F1), TChen_49 (F4), TDanisky_53 (F1), ThetaBob_53 (F4), Tootsieroll_52 (F1), Topiatin_54 (F1), Totinger_49 (F1), VRedHorse_49 (F1), Whatsapiecost_48 (F1), XFactor_47 (F1), Zapner_61 (F2), Zerg_48 (F1),

Summary by clusters:

There are 6 clusters represented in this pham: F1, F2, F3, F4, F5, F,

Info for manual annotations of cluster F1:
•Start number 1 was manually annotated 108 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 1 was manually annotated 2 times for cluster F2.

Info for manual annotations of cluster F3:
•Start number 1 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:
•Start number 1 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster F5:
•Start number 1 was manually annotated 1 time for cluster F5.

Gene Information:

Gene: AlpineSix_54 Start: 38574, Stop: 38666, Start Num: 1
Candidate Starts for AlpineSix_54:
(Start: 1 @38574 has 116 MA's), (5, 38634),

Gene: ArcusAngelus_52 Start: 37690, Stop: 37782, Start Num: 1
Candidate Starts for ArcusAngelus_52:
(Start: 1 @37690 has 116 MA's), (5, 37750),

Gene: Aubs_48 Start: 36257, Stop: 36349, Start Num: 1
Candidate Starts for Aubs_48:
(Start: 1 @36257 has 116 MA's), (5, 36317),

Gene: Beakin_51 Start: 36341, Stop: 36463, Start Num: 1
Candidate Starts for Beakin_51:
(Start: 1 @36341 has 116 MA's), (3, 36371), (4, 36407), (6, 36434),

Gene: Bipolar_46 Start: 36279, Stop: 36377, Start Num: 1
Candidate Starts for Bipolar_46:
(Start: 1 @36279 has 116 MA's), (3, 36309), (6, 36345),

Gene: Blexus_47 Start: 36344, Stop: 36436, Start Num: 1
Candidate Starts for Blexus_47:
(Start: 1 @36344 has 116 MA's), (5, 36404),

Gene: Bobi_51 Start: 37108, Stop: 37230, Start Num: 1
Candidate Starts for Bobi_51:
(Start: 1 @37108 has 116 MA's), (3, 37138), (4, 37174), (6, 37201),

Gene: BodEinwohner17_49 Start: 36286, Stop: 36378, Start Num: 1
Candidate Starts for BodEinwohner17_49:
(Start: 1 @36286 has 116 MA's), (5, 36346),

Gene: BuzzLyseyear_54 Start: 37896, Stop: 37988, Start Num: 1
Candidate Starts for BuzzLyseyear_54:
(Start: 1 @37896 has 116 MA's), (5, 37956),

Gene: Byougenkin_47 Start: 36363, Stop: 36461, Start Num: 1
Candidate Starts for Byougenkin_47:
(Start: 1 @36363 has 116 MA's), (3, 36393), (6, 36429),

Gene: Cabrinians_50 Start: 36706, Stop: 36798, Start Num: 1
Candidate Starts for Cabrinians_50:
(Start: 1 @36706 has 116 MA's), (5, 36766),

Gene: CaptainTrips_46 Start: 35541, Stop: 35663, Start Num: 1
Candidate Starts for CaptainTrips_46:
(Start: 1 @35541 has 116 MA's), (3, 35571), (4, 35607), (6, 35634),

Gene: Che8_114 Start: 37515, Stop: 37607, Start Num: 1
Candidate Starts for Che8_114:
(Start: 1 @37515 has 116 MA's), (5, 37575),

Gene: Cheesepuff_55 Start: 38504, Stop: 38599, Start Num: 1
Candidate Starts for Cheesepuff_55:
(Start: 1 @38504 has 116 MA's), (3, 38534), (6, 38570),

Gene: Chevrolet_55 Start: 37691, Stop: 37783, Start Num: 1
Candidate Starts for Chevrolet_55:
(Start: 1 @37691 has 116 MA's), (5, 37751),

Gene: Coco12_48 Start: 36903, Stop: 36998, Start Num: 1
Candidate Starts for Coco12_48:
(Start: 1 @36903 has 116 MA's), (3, 36933), (6, 36969),

Gene: Cornie_42 Start: 34406, Stop: 34498, Start Num: 1
Candidate Starts for Cornie_42:
(Start: 1 @34406 has 116 MA's), (5, 34466),

Gene: Crumble_44 Start: 32642, Stop: 32734, Start Num: 1
Candidate Starts for Crumble_44:
(Start: 1 @32642 has 116 MA's), (5, 32702),

Gene: DaddyRickover_49 Start: 37201, Stop: 37281, Start Num: 1
Candidate Starts for DaddyRickover_49:
(Start: 1 @37201 has 116 MA's), (5, 37261),

Gene: Demsculpinboyz_58 Start: 35990, Stop: 36082, Start Num: 1
Candidate Starts for Demsculpinboyz_58:
(Start: 1 @35990 has 116 MA's), (5, 36050),

Gene: DirtMcgirt_49 Start: 35747, Stop: 35839, Start Num: 1
Candidate Starts for DirtMcgirt_49:
(Start: 1 @35747 has 116 MA's), (5, 35807),

Gene: DoRead_50 Start: 35379, Stop: 35477, Start Num: 1
Candidate Starts for DoRead_50:
(Start: 1 @35379 has 116 MA's), (3, 35409), (6, 35445),

Gene: Doomslug_57 Start: 36261, Stop: 36356, Start Num: 1
Candidate Starts for Doomslug_57:
(Start: 1 @36261 has 116 MA's), (3, 36291), (6, 36327),

Gene: Dorothy_46 Start: 36083, Stop: 36175, Start Num: 1
Candidate Starts for Dorothy_46:
(Start: 1 @36083 has 116 MA's), (5, 36143),

Gene: Doug_51 Start: 37402, Stop: 37494, Start Num: 1
Candidate Starts for Doug_51:
(Start: 1 @37402 has 116 MA's), (5, 37462),

Gene: Emma_49 Start: 35880, Stop: 35975, Start Num: 1
Candidate Starts for Emma_49:
(Start: 1 @35880 has 116 MA's), (3, 35910), (6, 35946),

Gene: Emmaloid_50 Start: 37474, Stop: 37566, Start Num: 1
Candidate Starts for Emmaloid_50:
(Start: 1 @37474 has 116 MA's), (5, 37534),

Gene: Enby_50 Start: 35054, Stop: 35149, Start Num: 1
Candidate Starts for Enby_50:
(Start: 1 @35054 has 116 MA's), (3, 35084), (6, 35120),

Gene: Enzomatic_57 Start: 36963, Stop: 37058, Start Num: 1
Candidate Starts for Enzomatic_57:
(Start: 1 @36963 has 116 MA's), (3, 36993), (6, 37029),

Gene: Fancypants_50 Start: 37239, Stop: 37331, Start Num: 1

Candidate Starts for Fancypants_50:
(Start: 1 @37239 has 116 MA's), (5, 37299),

Gene: Filuzino_47 Start: 35460, Stop: 35555, Start Num: 1
Candidate Starts for Filuzino_47:
(Start: 1 @35460 has 116 MA's), (3, 35490), (6, 35526),

Gene: FreddyB_49 Start: 35554, Stop: 35646, Start Num: 1
Candidate Starts for FreddyB_49:
(Start: 1 @35554 has 116 MA's), (5, 35614),

Gene: Galactic_50 Start: 37079, Stop: 37174, Start Num: 1
Candidate Starts for Galactic_50:
(Start: 1 @37079 has 116 MA's), (2, 37091), (3, 37109), (6, 37145),

Gene: Gandalph_50 Start: 36216, Stop: 36308, Start Num: 1
Candidate Starts for Gandalph_50:
(Start: 1 @36216 has 116 MA's), (5, 36276),

Gene: GigiOuiOui_46 Start: 35886, Stop: 35978, Start Num: 1
Candidate Starts for GigiOuiOui_46:
(Start: 1 @35886 has 116 MA's), (5, 35946),

Gene: Grimmer_57 Start: 38460, Stop: 38552, Start Num: 1
Candidate Starts for Grimmer_57:
(Start: 1 @38460 has 116 MA's), (5, 38520),

Gene: Guppsters_49 Start: 35939, Stop: 36034, Start Num: 1
Candidate Starts for Guppsters_49:
(Start: 1 @35939 has 116 MA's), (3, 35969), (6, 36005),

Gene: Hades_50 Start: 36830, Stop: 36928, Start Num: 1
Candidate Starts for Hades_50:
(Start: 1 @36830 has 116 MA's), (3, 36860), (6, 36896),

Gene: Hamulus_50 Start: 37328, Stop: 37420, Start Num: 1
Candidate Starts for Hamulus_50:
(Start: 1 @37328 has 116 MA's), (5, 37388),

Gene: Hegedechwinu_49 Start: 35233, Stop: 35355, Start Num: 1
Candidate Starts for Hegedechwinu_49:
(Start: 1 @35233 has 116 MA's), (3, 35263), (4, 35299), (6, 35326),

Gene: Hlubikazi_46 Start: 34993, Stop: 35115, Start Num: 1
Candidate Starts for Hlubikazi_46:
(Start: 1 @34993 has 116 MA's), (3, 35023), (4, 35059), (6, 35086),

Gene: Jarcob_49 Start: 36674, Stop: 36766, Start Num: 1
Candidate Starts for Jarcob_49:
(Start: 1 @36674 has 116 MA's), (5, 36734),

Gene: Jinglebell_54 Start: 38573, Stop: 38665, Start Num: 1
Candidate Starts for Jinglebell_54:

(Start: 1 @38573 has 116 MA's), (5, 38633),

Gene: Juniper1_47 Start: 36051, Stop: 36149, Start Num: 1
Candidate Starts for Juniper1_47:
(Start: 1 @36051 has 116 MA's), (3, 36081), (6, 36117),

Gene: Karhdo_48 Start: 36768, Stop: 36860, Start Num: 1
Candidate Starts for Karhdo_48:
(Start: 1 @36768 has 116 MA's), (5, 36828),

Gene: Kersh_52 Start: 38718, Stop: 38810, Start Num: 1
Candidate Starts for Kersh_52:
(Start: 1 @38718 has 116 MA's), (3, 38748), (5, 38778),

Gene: Kimberlium_52 Start: 38580, Stop: 38672, Start Num: 1
Candidate Starts for Kimberlium_52:
(Start: 1 @38580 has 116 MA's), (5, 38640),

Gene: KingJulian_48 Start: 35653, Stop: 35748, Start Num: 1
Candidate Starts for KingJulian_48:
(Start: 1 @35653 has 116 MA's), (3, 35683), (6, 35719),

Gene: Kingsley_46 Start: 35636, Stop: 35731, Start Num: 1
Candidate Starts for Kingsley_46:
(Start: 1 @35636 has 116 MA's), (3, 35666), (6, 35702),

Gene: Koella_43 Start: 32604, Stop: 32696, Start Num: 1
Candidate Starts for Koella_43:
(Start: 1 @32604 has 116 MA's), (5, 32664),

Gene: Krakatau_47 Start: 36439, Stop: 36507, Start Num: 1
Candidate Starts for Krakatau_47:
(Start: 1 @36439 has 116 MA's), (5, 36475),

Gene: Latretium_52 Start: 37557, Stop: 37649, Start Num: 1
Candidate Starts for Latretium_52:
(Start: 1 @37557 has 116 MA's), (5, 37617),

Gene: Leozinho_50 Start: 36518, Stop: 36610, Start Num: 1
Candidate Starts for Leozinho_50:
(Start: 1 @36518 has 116 MA's), (5, 36578),

Gene: LilMoolah_48 Start: 36335, Stop: 36427, Start Num: 1
Candidate Starts for LilMoolah_48:
(Start: 1 @36335 has 116 MA's), (5, 36395),

Gene: LittleShirley_49 Start: 37366, Stop: 37458, Start Num: 1
Candidate Starts for LittleShirley_49:
(Start: 1 @37366 has 116 MA's), (5, 37426),

Gene: Lizziana_55 Start: 37677, Stop: 37769, Start Num: 1
Candidate Starts for Lizziana_55:
(Start: 1 @37677 has 116 MA's), (5, 37737),

Gene: Llama_54 Start: 38571, Stop: 38663, Start Num: 1
Candidate Starts for Llama_54:
(Start: 1 @38571 has 116 MA's), (5, 38631),

Gene: Lorde_50 Start: 35029, Stop: 35124, Start Num: 1
Candidate Starts for Lorde_50:
(Start: 1 @35029 has 116 MA's), (3, 35059), (6, 35095),

Gene: Lucia_49 Start: 36048, Stop: 36140, Start Num: 1
Candidate Starts for Lucia_49:
(Start: 1 @36048 has 116 MA's), (5, 36108),

Gene: LunaBlu_53 Start: 37738, Stop: 37833, Start Num: 1
Candidate Starts for LunaBlu_53:
(Start: 1 @37738 has 116 MA's), (2, 37750), (3, 37768), (6, 37804),

Gene: LunaStella_47 Start: 35193, Stop: 35285, Start Num: 1
Candidate Starts for LunaStella_47:
(Start: 1 @35193 has 116 MA's), (5, 35253),

Gene: Madiba_45 Start: 34677, Stop: 34769, Start Num: 1
Candidate Starts for Madiba_45:
(Start: 1 @34677 has 116 MA's), (5, 34737),

Gene: Mahavrat_47 Start: 35865, Stop: 35957, Start Num: 1
Candidate Starts for Mahavrat_47:
(Start: 1 @35865 has 116 MA's), (5, 35925),

Gene: Mandlovu_46 Start: 34935, Stop: 35057, Start Num: 1
Candidate Starts for Mandlovu_46:
(Start: 1 @34935 has 116 MA's), (3, 34965), (4, 35001), (6, 35028),

Gene: Maravista_51 Start: 38339, Stop: 38431, Start Num: 1
Candidate Starts for Maravista_51:
(Start: 1 @38339 has 116 MA's), (5, 38399),

Gene: Martik_49 Start: 36630, Stop: 36722, Start Num: 1
Candidate Starts for Martik_49:
(Start: 1 @36630 has 116 MA's), (5, 36690),

Gene: Medindi_47 Start: 34714, Stop: 34836, Start Num: 1
Candidate Starts for Medindi_47:
(Start: 1 @34714 has 116 MA's), (3, 34744), (4, 34780), (6, 34807),

Gene: Melissauren88_47 Start: 35779, Stop: 35901, Start Num: 1
Candidate Starts for Melissauren88_47:
(Start: 1 @35779 has 116 MA's), (3, 35809), (4, 35845), (6, 35872),

Gene: MinionDave_48 Start: 36316, Stop: 36438, Start Num: 1
Candidate Starts for MinionDave_48:
(Start: 1 @36316 has 116 MA's), (3, 36346), (4, 36382), (6, 36409),

Gene: Minnie_54 Start: 38682, Stop: 38777, Start Num: 1
Candidate Starts for Minnie_54:
(Start: 1 @38682 has 116 MA's), (3, 38712), (6, 38748),

Gene: MisterCuddles_49 Start: 36945, Stop: 37037, Start Num: 1
Candidate Starts for MisterCuddles_49:
(Start: 1 @36945 has 116 MA's), (5, 37005),

Gene: Modragons_53 Start: 38417, Stop: 38509, Start Num: 1
Candidate Starts for Modragons_53:
(Start: 1 @38417 has 116 MA's), (5, 38477),

Gene: Moonbeam_45 Start: 35836, Stop: 35931, Start Num: 1
Candidate Starts for Moonbeam_45:
(Start: 1 @35836 has 116 MA's), (3, 35866), (6, 35902),

Gene: Mova_49 Start: 35599, Stop: 35694, Start Num: 1
Candidate Starts for Mova_49:
(Start: 1 @35599 has 116 MA's), (3, 35629), (6, 35665),

Gene: Ms6_42 Start: 30845, Stop: 30967, Start Num: 1
Candidate Starts for Ms6_42:
(Start: 1 @30845 has 116 MA's), (3, 30875), (4, 30911), (6, 30938),

Gene: MulchExplorer_52 Start: 38579, Stop: 38671, Start Num: 1
Candidate Starts for MulchExplorer_52:
(Start: 1 @38579 has 116 MA's), (5, 38639),

Gene: Mwanjiwa_55 Start: 37320, Stop: 37412, Start Num: 1
Candidate Starts for Mwanjiwa_55:
(Start: 1 @37320 has 116 MA's), (3, 37350), (5, 37380),

Gene: NewHope4_52 Start: 37109, Stop: 37204, Start Num: 1
Candidate Starts for NewHope4_52:
(Start: 1 @37109 has 116 MA's), (3, 37139), (6, 37175),

Gene: Nichirin_53 Start: 38209, Stop: 38301, Start Num: 1
Candidate Starts for Nichirin_53:
(Start: 1 @38209 has 116 MA's), (5, 38269),

Gene: Nitzel_44 Start: 35104, Stop: 35196, Start Num: 1
Candidate Starts for Nitzel_44:
(Start: 1 @35104 has 116 MA's), (5, 35164),

Gene: Ochi17_52 Start: 38024, Stop: 38116, Start Num: 1
Candidate Starts for Ochi17_52:
(Start: 1 @38024 has 116 MA's), (5, 38084),

Gene: OfUltron_54 Start: 38573, Stop: 38665, Start Num: 1
Candidate Starts for OfUltron_54:
(Start: 1 @38573 has 116 MA's), (5, 38633),

Gene: Ovechkin_46 Start: 36166, Stop: 36288, Start Num: 1

Candidate Starts for Ovechkin_46:
(Start: 1 @36166 has 116 MA's), (3, 36196), (4, 36232), (6, 36259),

Gene: OwlsT2W_48 Start: 36546, Stop: 36638, Start Num: 1
Candidate Starts for OwlsT2W_48:
(Start: 1 @36546 has 116 MA's), (5, 36606),

Gene: Peridot_49 Start: 36662, Stop: 36754, Start Num: 1
Candidate Starts for Peridot_49:
(Start: 1 @36662 has 116 MA's), (5, 36722),

Gene: Phalconet_48 Start: 36086, Stop: 36208, Start Num: 1
Candidate Starts for Phalconet_48:
(Start: 1 @36086 has 116 MA's), (3, 36116), (4, 36152), (6, 36179),

Gene: Phanphagia_44 Start: 35938, Stop: 36036, Start Num: 1
Candidate Starts for Phanphagia_44:
(Start: 1 @35938 has 116 MA's), (3, 35968), (6, 36004),

Gene: Phasih_47 Start: 36301, Stop: 36393, Start Num: 1
Candidate Starts for Phasih_47:
(Start: 1 @36301 has 116 MA's), (5, 36361),

Gene: Phatniss_48 Start: 36999, Stop: 37091, Start Num: 1
Candidate Starts for Phatniss_48:
(Start: 1 @36999 has 116 MA's), (5, 37059),

Gene: PhesterPhotato_51 Start: 37041, Stop: 37163, Start Num: 1
Candidate Starts for PhesterPhotato_51:
(Start: 1 @37041 has 116 MA's), (3, 37071), (4, 37107), (6, 37134),

Gene: Plumbus_51 Start: 36746, Stop: 36838, Start Num: 1
Candidate Starts for Plumbus_51:
(Start: 1 @36746 has 116 MA's), (5, 36806),

Gene: Priscilla_49 Start: 36716, Stop: 36808, Start Num: 1
Candidate Starts for Priscilla_49:
(Start: 1 @36716 has 116 MA's), (5, 36776),

Gene: QuickMath_51 Start: 38803, Stop: 38895, Start Num: 1
Candidate Starts for QuickMath_51:
(Start: 1 @38803 has 116 MA's), (5, 38863),

Gene: Radiance_49 Start: 36871, Stop: 36963, Start Num: 1
Candidate Starts for Radiance_49:
(Start: 1 @36871 has 116 MA's), (5, 36931),

Gene: RedBird_46 Start: 36095, Stop: 36187, Start Num: 1
Candidate Starts for RedBird_46:
(Start: 1 @36095 has 116 MA's), (5, 36155),

Gene: Renaud18_54 Start: 37134, Stop: 37226, Start Num: 1
Candidate Starts for Renaud18_54:

(Start: 1 @37134 has 116 MA's), (5, 37194),

Gene: Rita_51 Start: 35944, Stop: 36042, Start Num: 1
Candidate Starts for Rita_51:
(Start: 1 @35944 has 116 MA's), (3, 35974), (6, 36010),

Gene: Rockne_47 Start: 35755, Stop: 35847, Start Num: 1
Candidate Starts for Rockne_47:
(Start: 1 @35755 has 116 MA's), (5, 35815),

Gene: Royals2015_51 Start: 36564, Stop: 36656, Start Num: 1
Candidate Starts for Royals2015_51:
(Start: 1 @36564 has 116 MA's), (5, 36624),

Gene: Sabbb_55 Start: 37994, Stop: 38086, Start Num: 1
Candidate Starts for Sabbb_55:
(Start: 1 @37994 has 116 MA's), (5, 38054),

Gene: Sarma624_47 Start: 32828, Stop: 32923, Start Num: 1
Candidate Starts for Sarma624_47:
(Start: 1 @32828 has 116 MA's), (3, 32858), (6, 32894),

Gene: SeaLumen_55 Start: 36963, Stop: 37058, Start Num: 1
Candidate Starts for SeaLumen_55:
(Start: 1 @36963 has 116 MA's), (3, 36993), (6, 37029),

Gene: Seabastian_54 Start: 38574, Stop: 38666, Start Num: 1
Candidate Starts for Seabastian_54:
(Start: 1 @38574 has 116 MA's), (5, 38634),

Gene: Seagreen_50 Start: 36498, Stop: 36590, Start Num: 1
Candidate Starts for Seagreen_50:
(Start: 1 @36498 has 116 MA's), (3, 36528), (5, 36558),

Gene: ShowerHandel_51 Start: 36630, Stop: 36722, Start Num: 1
Candidate Starts for ShowerHandel_51:
(Start: 1 @36630 has 116 MA's), (5, 36690),

Gene: ShroomBoi_49 Start: 36421, Stop: 36516, Start Num: 1
Candidate Starts for ShroomBoi_49:
(Start: 1 @36421 has 116 MA's), (3, 36451), (6, 36487),

Gene: Slim_50 Start: 37465, Stop: 37557, Start Num: 1
Candidate Starts for Slim_50:
(Start: 1 @37465 has 116 MA's), (5, 37525),

Gene: Sparkdehlily_53 Start: 37316, Stop: 37408, Start Num: 1
Candidate Starts for Sparkdehlily_53:
(Start: 1 @37316 has 116 MA's), (5, 37376),

Gene: Squirty_43 Start: 33707, Stop: 33799, Start Num: 1
Candidate Starts for Squirty_43:
(Start: 1 @33707 has 116 MA's), (3, 33737), (5, 33767), (6, 33773),

Gene: StAnnes_48 Start: 36758, Stop: 36880, Start Num: 1
Candidate Starts for StAnnes_48:
(Start: 1 @36758 has 116 MA's), (3, 36788), (4, 36824), (6, 36851),

Gene: Stap_48 Start: 36057, Stop: 36149, Start Num: 1
Candidate Starts for Stap_48:
(Start: 1 @36057 has 116 MA's), (5, 36117),

Gene: Starcevich_49 Start: 36950, Stop: 37042, Start Num: 1
Candidate Starts for Starcevich_49:
(Start: 1 @36950 has 116 MA's), (5, 37010),

Gene: TChen_49 Start: 37144, Stop: 37236, Start Num: 1
Candidate Starts for TChen_49:
(Start: 1 @37144 has 116 MA's), (5, 37204),

Gene: TDanisky_53 Start: 37316, Stop: 37408, Start Num: 1
Candidate Starts for TDanisky_53:
(Start: 1 @37316 has 116 MA's), (5, 37376),

Gene: ThetaBob_53 Start: 36797, Stop: 36889, Start Num: 1
Candidate Starts for ThetaBob_53:
(Start: 1 @36797 has 116 MA's), (6, 36863),

Gene: Tootsieroll_52 Start: 36507, Stop: 36599, Start Num: 1
Candidate Starts for Tootsieroll_52:
(Start: 1 @36507 has 116 MA's), (5, 36567),

Gene: Topiatin_54 Start: 37825, Stop: 37917, Start Num: 1
Candidate Starts for Topiatin_54:
(Start: 1 @37825 has 116 MA's), (5, 37885),

Gene: Totinger_49 Start: 36092, Stop: 36184, Start Num: 1
Candidate Starts for Totinger_49:
(Start: 1 @36092 has 116 MA's), (5, 36152),

Gene: VRedHorse_49 Start: 36027, Stop: 36122, Start Num: 1
Candidate Starts for VRedHorse_49:
(Start: 1 @36027 has 116 MA's), (3, 36057), (6, 36093),

Gene: Whatsapiecost_48 Start: 35696, Stop: 35791, Start Num: 1
Candidate Starts for Whatsapiecost_48:
(Start: 1 @35696 has 116 MA's), (3, 35726), (6, 35762),

Gene: XFactor_47 Start: 35487, Stop: 35609, Start Num: 1
Candidate Starts for XFactor_47:
(Start: 1 @35487 has 116 MA's), (3, 35517), (4, 35553), (6, 35580),

Gene: Zapner_61 Start: 37500, Stop: 37592, Start Num: 1
Candidate Starts for Zapner_61:
(Start: 1 @37500 has 116 MA's),

Gene: Zerg_48 Start: 36268, Stop: 36360, Start Num: 1
Candidate Starts for Zerg_48:
(Start: 1 @36268 has 116 MA's), (5, 36328),