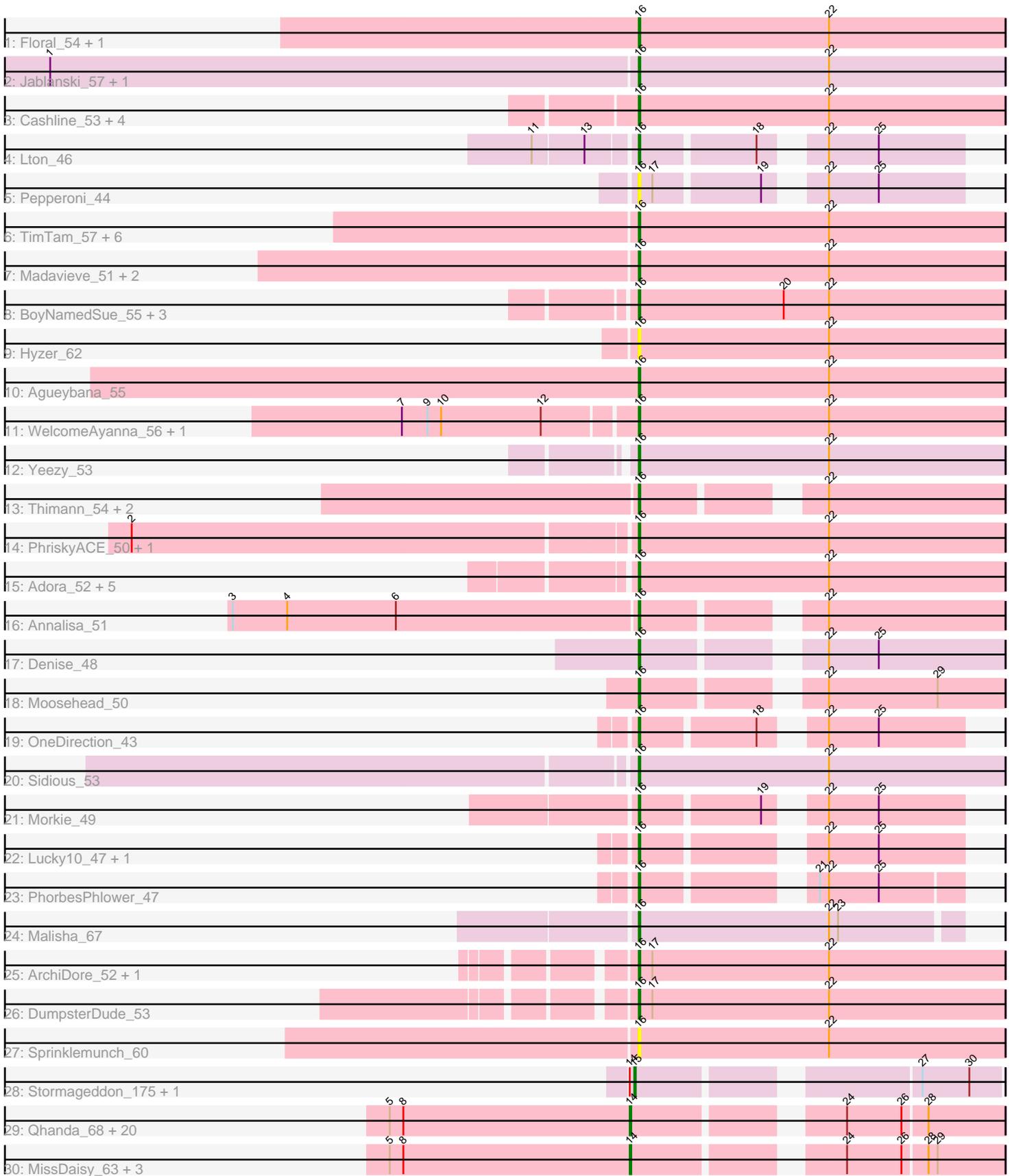# Pham 283726

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 283726 Report

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

Pham number 283726 has 82 members, 9 are drafts.

Phages represented in each track:
• Track 1 : Floral_54, Pollux_56
• Track 2 : Jablanski_57, Pytheas_57
• Track 3 : Cashline_53, Ohgeesy_54, BaxterFox_57, Ebert_54, Madeline_54
• Track 4 : Lton_46
• Track 5 : Pepperoni_44
• Track 6 : TimTam_57, Herod_55, Eviarto_57, BatStarr_56, PantheRoc_57, Hugley_53, Nymphadora_57
• Track 7 : Madavieve_51, Maridalia_57, Bunnybear_49
• Track 8 : BoyNamedSue_55, Marteena_52, EMsquaredA_53, AlumE_55
• Track 9 : Hyzer_62
• Track 10 : Agueybana_55
• Track 11 : WelcomeAyanna_56, ThankyouJordi_56
• Track 12 : Yeezy_53
• Track 13 : Thimann_54, Oregano_54, Easley_49
• Track 14 : PhriskyACE_50, Powerball_51
• Track 15 : Adora_52, Hortense_55, Mcklovin_51, Shlim410_53, Howe_55, Twinkle_54
• Track 16 : Annalisa_51
• Track 17 : Denise_48
• Track 18 : Moosehead_50
• Track 19 : OneDirection_43
• Track 20 : Sidious_53
• Track 21 : Morkie_49
• Track 22 : Lucky10_47, Faith5x5_42
• Track 23 : PhorbesPhlower_47
• Track 24 : Malisha_67
• Track 25 : ArchiDore_52, Ruthy_52
• Track 26 : DumpsterDude_53
• Track 27 : Sprinklemunch_60
• Track 28 : Stormageddon_175, RedWattleHog_174
• Track 29 : Qhanda_68, Y2_64, Eponine_68, Kraw_66, SamScheppers_64, Cheetobro_66, Chancellor_66, Slarp_66, OmniCritical_65, DanSyl44_69, Malthus_67, Taquito_65, Ruthiejr_67, Lebo14_65, Juliette_68, Fionnbharth_66, JF1_66, Mitti_66, Y10_64, Wintermute_66, YasnayaPolyana_65
• Track 30 : MissDaisy_63, Reptar3000_63, Bobquesha_67, Patt_62

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

The start number called the most often in the published annotations is 16, it was called in 49 of the 73 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adora_52, Agueybana_55, AlumE_55, Annalisa_51, ArchiDore_52, BatStarr_56, BaxterFox_57, BoyNamedSue_55, Bunnybear_49, Cashline_53, Denise_48, DumpsterDude_53, EMsquaredA_53, Easley_49, Ebert_54, Eviarto_57, Faith5x5_42, Floral_54, Herod_55, Hortense_55, Howe_55, Hugley_53, Hyzer_62, Jablanski_57, Lton_46, Lucky10_47, Madavieve_51, Madeline_54, Malisha_67, Maridalia_57, Marteena_52, Mcklovin_51, Moosehead_50, Morkie_49, Nymphadora_57, Ohgeesy_54, OneDirection_43, Oregano_54, PantheRoc_57, Pepperoni_44, PhorbesPhlower_47, PhriskyACE_50, Pollux_56, Powerball_51, Pytheas_57, Ruthy_52, Shlim410_53, Sidious_53, Sprinklemunch_60, ThankyouJordi_56, Thimann_54, TimTam_57, Twinkle_54, WelcomeAyanna_56, Yeezy_53,

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

Genes that do not have the "Most Annotated" start:
• Bobquesha_67, Chancellor_66, Cheetobro_66, DanSyl44_69, Eponine_68, Fionnbharth_66, JF1_66, Juliette_68, Kraw_66, Lebo14_65, Malthus_67, MissDaisy_63, Mitti_66, OmniCritical_65, Patt_62, Qhanda_68, RedWattleHog_174, Reptar3000_63, Ruthiejr_67, SamScheppers_64, Slarp_66, Stormageddon_175, Taquito_65, Wintermute_66, Y10_64, Y2_64, YasnayaPolyana_65,

Summary by start number:

Start 14:
• Found in 27 of 82 (32.9%) of genes in pham
• Manual Annotations of this start: 22 of 73
• Called 92.6% of time when present
• Phage (with cluster) where this start called: Bobquesha_67 (K4), Chancellor_66 (K4), Cheetobro_66 (K4), DanSyl44_69 (K4), Eponine_68 (K4), Fionnbharth_66 (K4), JF1_66 (K4), Juliette_68 (K4), Kraw_66 (K4), Lebo14_65 (K4), Malthus_67 (K4), MissDaisy_63 (K4), Mitti_66 (K4), OmniCritical_65 (K4), Patt_62 (K4), Qhanda_68 (K4), Reptar3000_63 (K4), Ruthiejr_67 (K4), SamScheppers_64 (K4), Slarp_66 (K4), Taquito_65 (K4), Wintermute_66 (K4), Y10_64 (K4), Y2_64 (K4), YasnayaPolyana_65 (K4),

Start 15:
• Found in 2 of 82 (2.4%) of genes in pham
• Manual Annotations of this start: 2 of 73
• Called 100.0% of time when present
• Phage (with cluster) where this start called: RedWattleHog_174 (DX), Stormageddon_175 (DX),

Start 16:
• Found in 55 of 82 (67.1%) of genes in pham
• Manual Annotations of this start: 49 of 73
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Adora_52 (CZ4), Agueybana_55 (CZ1), AlumE_55 (CZ1), Annalisa_51 (CZ4), ArchiDore_52 (DW), BatStarr_56 (CZ1), BaxterFox_57 (CZ3), BoyNamedSue_55 (CZ1), Bunnybear_49 (CZ), Cashline_53 (CY6), Denise_48 (CZ5), DumpsterDude_53 (DW), EMsquaredA_53 (CY1), Easley_49 (CZ4), Ebert_54 (CZ2), Eviarto_57 (CZ1), Faith5x5_42 (CZ6), Floral_54 (CY1), Herod_55 (CZ1), Hortense_55 (CZ4), Howe_55 (CZ4), Hugley_53 (CZ1), Hyzer_62 (CZ1), Jablanski_57 (CY3), Lton_46 (CZ), Lucky10_47 (DH), Madavieve_51 (CZ1), Madeline_54 (CZ1), Malisha_67 (DN), Maridalia_57 (CZ1), Marteena_52 (CY1), Mcklovin_51 (CZ4), Moosehead_50 (CZ6), Morkie_49 (DH), Nymphadora_57 (CZ1), Ohgeesy_54 (CZ), OneDirection_43 (CZ6), Oregano_54 (CZ4), PantheRoc_57 (CZ3), Pepperoni_44 (CZ), PhorbesPhlower_47 (DH), PhriskyACE_50 (CZ4), Pollux_56 (CY1), Powerball_51 (CZ4), Pytheas_57 (CY3), Ruthy_52 (DW), Shlim410_53 (CZ4), Sidious_53 (CZ7), Sprinklemunch_60 (DW), ThankyouJordi_56 (CZ1), Thimann_54 (CZ4), TimTam_57 (CZ1), Twinkle_54 (CZ4), WelcomeAyanna_56 (CZ1), Yeezy_53 (CZ3),

Summary by clusters:

There are 16 clusters represented in this pham: DN, CY3, CY1, CY6, DH, CZ2, CZ3, CZ1, CZ6, CZ7, CZ4, CZ5, CZ, DX, K4, DW,

Info for manual annotations of cluster CY1:
•Start number 16 was manually annotated 4 times for cluster CY1.

Info for manual annotations of cluster CY3:
•Start number 16 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY6:
•Start number 16 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CZ:
•Start number 16 was manually annotated 3 times for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 16 was manually annotated 12 times for cluster CZ1.

Info for manual annotations of cluster CZ2:
•Start number 16 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ3:
•Start number 16 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:
•Start number 16 was manually annotated 11 times for cluster CZ4.

Info for manual annotations of cluster CZ5:
•Start number 16 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:
•Start number 16 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster CZ7:
•Start number 16 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DH:
•Start number 16 was manually annotated 3 times for cluster DH.

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

Info for manual annotations of cluster DW:
•Start number 16 was manually annotated 3 times for cluster DW.

Info for manual annotations of cluster DX:
•Start number 15 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster K4:
•Start number 14 was manually annotated 22 times for cluster K4.

Gene Information:

Gene: Adora_52 Start: 38735, Stop: 38977, Start Num: 16
Candidate Starts for Adora_52:
(Start: 16 @38735 has 49 MA's), (22, 38861),

Gene: Agueybana_55 Start: 39414, Stop: 39656, Start Num: 16
Candidate Starts for Agueybana_55:
(Start: 16 @39414 has 49 MA's), (22, 39540),

Gene: AlumE_55 Start: 39196, Stop: 39438, Start Num: 16
Candidate Starts for AlumE_55:
(Start: 16 @39196 has 49 MA's), (20, 39292), (22, 39322),

Gene: Annalisa_51 Start: 35580, Stop: 35795, Start Num: 16
Candidate Starts for Annalisa_51:
(3, 35316), (4, 35352), (6, 35424), (Start: 16 @35580 has 49 MA's), (22, 35679),

Gene: ArchiDore_52 Start: 39524, Stop: 39766, Start Num: 16
Candidate Starts for ArchiDore_52:
(Start: 16 @39524 has 49 MA's), (17, 39533), (22, 39650),

Gene: BatStarr_56 Start: 40720, Stop: 40962, Start Num: 16
Candidate Starts for BatStarr_56:
(Start: 16 @40720 has 49 MA's), (22, 40846),

Gene: BaxterFox_57 Start: 40474, Stop: 40716, Start Num: 16
Candidate Starts for BaxterFox_57:
(Start: 16 @40474 has 49 MA's), (22, 40600),

Gene: Bobquesha_67 Start: 40811, Stop: 41029, Start Num: 14
Candidate Starts for Bobquesha_67:
(5, 40652), (8, 40661), (Start: 14 @40811 has 22 MA's), (24, 40928), (26, 40964), (28, 40979), (29, 40985),

Gene: BoyNamedSue_55 Start: 39196, Stop: 39438, Start Num: 16
Candidate Starts for BoyNamedSue_55:
(Start: 16 @39196 has 49 MA's), (20, 39292), (22, 39322),

Gene: Bunnybear_49 Start: 37204, Stop: 37446, Start Num: 16
Candidate Starts for Bunnybear_49:
(Start: 16 @37204 has 49 MA's), (22, 37330),

Gene: Cashline_53 Start: 39714, Stop: 39956, Start Num: 16
Candidate Starts for Cashline_53:
(Start: 16 @39714 has 49 MA's), (22, 39840),

Gene: Chancellor_66 Start: 41921, Stop: 42139, Start Num: 14
Candidate Starts for Chancellor_66:
(5, 41762), (8, 41771), (Start: 14 @41921 has 22 MA's), (24, 42038), (26, 42074), (28, 42089),

Gene: Cheetobro_66 Start: 41918, Stop: 42136, Start Num: 14
Candidate Starts for Cheetobro_66:
(5, 41759), (8, 41768), (Start: 14 @41918 has 22 MA's), (24, 42035), (26, 42071), (28, 42086),

Gene: DanSyl44_69 Start: 43112, Stop: 43330, Start Num: 14
Candidate Starts for DanSyl44_69:
(5, 42953), (8, 42962), (Start: 14 @43112 has 22 MA's), (24, 43229), (26, 43265), (28, 43280),

Gene: Denise_48 Start: 33091, Stop: 33306, Start Num: 16
Candidate Starts for Denise_48:
(Start: 16 @33091 has 49 MA's), (22, 33190), (25, 33223),

Gene: DumpsterDude_53 Start: 41558, Stop: 41800, Start Num: 16
Candidate Starts for DumpsterDude_53:
(Start: 16 @41558 has 49 MA's), (17, 41567), (22, 41684),

Gene: EMsquaredA_53 Start: 38371, Stop: 38613, Start Num: 16
Candidate Starts for EMsquaredA_53:
(Start: 16 @38371 has 49 MA's), (20, 38467), (22, 38497),

Gene: Easley_49 Start: 35528, Stop: 35743, Start Num: 16
Candidate Starts for Easley_49:
(Start: 16 @35528 has 49 MA's), (22, 35627),

Gene: Ebert_54 Start: 34571, Stop: 34813, Start Num: 16
Candidate Starts for Ebert_54:
(Start: 16 @34571 has 49 MA's), (22, 34697),

Gene: Eponine_68 Start: 42764, Stop: 42982, Start Num: 14
Candidate Starts for Eponine_68:
(5, 42605), (8, 42614), (Start: 14 @42764 has 22 MA's), (24, 42881), (26, 42917), (28, 42932),

Gene: Eviarto_57 Start: 40695, Stop: 40937, Start Num: 16
Candidate Starts for Eviarto_57:
(Start: 16 @40695 has 49 MA's), (22, 40821),

Gene: Faith5x5_42 Start: 30278, Stop: 30463, Start Num: 16

Candidate Starts for Faith5x5_42:
(Start: 16 @30278 has 49 MA's), (22, 30377), (25, 30410),

Gene: Fionnbharth_66 Start: 42162, Stop: 42380, Start Num: 14
Candidate Starts for Fionnbharth_66:
(5, 42003), (8, 42012), (Start: 14 @42162 has 22 MA's), (24, 42279), (26, 42315), (28, 42330),

Gene: Floral_54 Start: 40277, Stop: 40519, Start Num: 16
Candidate Starts for Floral_54:
(Start: 16 @40277 has 49 MA's), (22, 40403),

Gene: Herod_55 Start: 40739, Stop: 40981, Start Num: 16
Candidate Starts for Herod_55:
(Start: 16 @40739 has 49 MA's), (22, 40865),

Gene: Hortense_55 Start: 40090, Stop: 40332, Start Num: 16
Candidate Starts for Hortense_55:
(Start: 16 @40090 has 49 MA's), (22, 40216),

Gene: Howe_55 Start: 40090, Stop: 40332, Start Num: 16
Candidate Starts for Howe_55:
(Start: 16 @40090 has 49 MA's), (22, 40216),

Gene: Hugley_53 Start: 40719, Stop: 40961, Start Num: 16
Candidate Starts for Hugley_53:
(Start: 16 @40719 has 49 MA's), (22, 40845),

Gene: Hyzer_62 Start: 42111, Stop: 42353, Start Num: 16
Candidate Starts for Hyzer_62:
(Start: 16 @42111 has 49 MA's), (22, 42237),

Gene: JF1_66 Start: 42079, Stop: 42297, Start Num: 14
Candidate Starts for JF1_66:
(5, 41920), (8, 41929), (Start: 14 @42079 has 22 MA's), (24, 42196), (26, 42232), (28, 42247),

Gene: Jablanski_57 Start: 41777, Stop: 42019, Start Num: 16
Candidate Starts for Jablanski_57:
(1, 41396), (Start: 16 @41777 has 49 MA's), (22, 41903),

Gene: Juliette_68 Start: 42226, Stop: 42444, Start Num: 14
Candidate Starts for Juliette_68:
(5, 42067), (8, 42076), (Start: 14 @42226 has 22 MA's), (24, 42343), (26, 42379), (28, 42394),

Gene: Kraw_66 Start: 41914, Stop: 42132, Start Num: 14
Candidate Starts for Kraw_66:
(5, 41755), (8, 41764), (Start: 14 @41914 has 22 MA's), (24, 42031), (26, 42067), (28, 42082),

Gene: Lebo14_65 Start: 42247, Stop: 42465, Start Num: 14
Candidate Starts for Lebo14_65:
(5, 42088), (8, 42097), (Start: 14 @42247 has 22 MA's), (24, 42364), (26, 42400), (28, 42415),

Gene: Lton_46 Start: 30324, Stop: 30512, Start Num: 16
Candidate Starts for Lton_46:

(11, 30261), (13, 30294), (Start: 16 @30324 has 49 MA's), (18, 30396), (22, 30423), (25, 30456),

Gene: Lucky10_47 Start: 33042, Stop: 33230, Start Num: 16
Candidate Starts for Lucky10_47:
(Start: 16 @33042 has 49 MA's), (22, 33141), (25, 33174),

Gene: Madavieve_51 Start: 38160, Stop: 38402, Start Num: 16
Candidate Starts for Madavieve_51:
(Start: 16 @38160 has 49 MA's), (22, 38286),

Gene: Madeline_54 Start: 39604, Stop: 39846, Start Num: 16
Candidate Starts for Madeline_54:
(Start: 16 @39604 has 49 MA's), (22, 39730),

Gene: Malisha_67 Start: 41399, Stop: 41608, Start Num: 16
Candidate Starts for Malisha_67:
(Start: 16 @41399 has 49 MA's), (22, 41525), (23, 41531),

Gene: Malthus_67 Start: 41914, Stop: 42132, Start Num: 14
Candidate Starts for Malthus_67:
(5, 41755), (8, 41764), (Start: 14 @41914 has 22 MA's), (24, 42031), (26, 42067), (28, 42082),

Gene: Maridalia_57 Start: 38950, Stop: 39192, Start Num: 16
Candidate Starts for Maridalia_57:
(Start: 16 @38950 has 49 MA's), (22, 39076),

Gene: Marteena_52 Start: 38371, Stop: 38613, Start Num: 16
Candidate Starts for Marteena_52:
(Start: 16 @38371 has 49 MA's), (20, 38467), (22, 38497),

Gene: Mcklovin_51 Start: 41557, Stop: 41799, Start Num: 16
Candidate Starts for Mcklovin_51:
(Start: 16 @41557 has 49 MA's), (22, 41683),

Gene: MissDaisy_63 Start: 40826, Stop: 41044, Start Num: 14
Candidate Starts for MissDaisy_63:
(5, 40667), (8, 40676), (Start: 14 @40826 has 22 MA's), (24, 40943), (26, 40979), (28, 40994), (29, 41000),

Gene: Mitti_66 Start: 42093, Stop: 42311, Start Num: 14
Candidate Starts for Mitti_66:
(5, 41934), (8, 41943), (Start: 14 @42093 has 22 MA's), (24, 42210), (26, 42246), (28, 42261),

Gene: Moosehead_50 Start: 31430, Stop: 31645, Start Num: 16
Candidate Starts for Moosehead_50:
(Start: 16 @31430 has 49 MA's), (22, 31529), (29, 31601),

Gene: Morkie_49 Start: 32379, Stop: 32567, Start Num: 16
Candidate Starts for Morkie_49:
(Start: 16 @32379 has 49 MA's), (19, 32454), (22, 32478), (25, 32511),

Gene: Nymphadora_57 Start: 40719, Stop: 40961, Start Num: 16
Candidate Starts for Nymphadora_57:

(Start: 16 @40719 has 49 MA's), (22, 40845),

Gene: Ohgeesy_54 Start: 38818, Stop: 39060, Start Num: 16
Candidate Starts for Ohgeesy_54:
(Start: 16 @38818 has 49 MA's), (22, 38944),

Gene: OmniCritical_65 Start: 41983, Stop: 42201, Start Num: 14
Candidate Starts for OmniCritical_65:
(5, 41824), (8, 41833), (Start: 14 @41983 has 22 MA's), (24, 42100), (26, 42136), (28, 42151),

Gene: OneDirection_43 Start: 29772, Stop: 29960, Start Num: 16
Candidate Starts for OneDirection_43:
(Start: 16 @29772 has 49 MA's), (18, 29844), (22, 29871), (25, 29904),

Gene: Oregano_54 Start: 36212, Stop: 36427, Start Num: 16
Candidate Starts for Oregano_54:
(Start: 16 @36212 has 49 MA's), (22, 36311),

Gene: PantheRoc_57 Start: 39540, Stop: 39782, Start Num: 16
Candidate Starts for PantheRoc_57:
(Start: 16 @39540 has 49 MA's), (22, 39666),

Gene: Patt_62 Start: 40550, Stop: 40768, Start Num: 14
Candidate Starts for Patt_62:
(5, 40391), (8, 40400), (Start: 14 @40550 has 22 MA's), (24, 40667), (26, 40703), (28, 40718), (29, 40724),

Gene: Pepperoni_44 Start: 31534, Stop: 31722, Start Num: 16
Candidate Starts for Pepperoni_44:
(Start: 16 @31534 has 49 MA's), (17, 31543), (19, 31609), (22, 31633), (25, 31666),

Gene: PhorbesPhlower_47 Start: 31528, Stop: 31713, Start Num: 16
Candidate Starts for PhorbesPhlower_47:
(Start: 16 @31528 has 49 MA's), (21, 31621), (22, 31627), (25, 31660),

Gene: PhriskyACE_50 Start: 36177, Stop: 36419, Start Num: 16
Candidate Starts for PhriskyACE_50:
(2, 35853), (Start: 16 @36177 has 49 MA's), (22, 36303),

Gene: Pollux_56 Start: 40277, Stop: 40519, Start Num: 16
Candidate Starts for Pollux_56:
(Start: 16 @40277 has 49 MA's), (22, 40403),

Gene: Powerball_51 Start: 36303, Stop: 36545, Start Num: 16
Candidate Starts for Powerball_51:
(2, 35979), (Start: 16 @36303 has 49 MA's), (22, 36429),

Gene: Pytheas_57 Start: 41776, Stop: 42018, Start Num: 16
Candidate Starts for Pytheas_57:
(1, 41395), (Start: 16 @41776 has 49 MA's), (22, 41902),

Gene: Qhanda_68 Start: 41930, Stop: 42148, Start Num: 14
Candidate Starts for Qhanda_68:

(5, 41771), (8, 41780), (Start: 14 @41930 has 22 MA's), (24, 42047), (26, 42083), (28, 42098),

Gene: RedWattleHog_174 Start: 111466, Stop: 111675, Start Num: 15
Candidate Starts for RedWattleHog_174:
(Start: 14 @111463 has 22 MA's), (Start: 15 @111466 has 2 MA's), (27, 111625), (30, 111655),

Gene: Reptar3000_63 Start: 40538, Stop: 40756, Start Num: 14
Candidate Starts for Reptar3000_63:
(5, 40379), (8, 40388), (Start: 14 @40538 has 22 MA's), (24, 40655), (26, 40691), (28, 40706), (29, 40712),

Gene: Ruthiejr_67 Start: 41964, Stop: 42182, Start Num: 14
Candidate Starts for Ruthiejr_67:
(5, 41805), (8, 41814), (Start: 14 @41964 has 22 MA's), (24, 42081), (26, 42117), (28, 42132),

Gene: Ruthy_52 Start: 39090, Stop: 39332, Start Num: 16
Candidate Starts for Ruthy_52:
(Start: 16 @39090 has 49 MA's), (17, 39099), (22, 39216),

Gene: SamScheppers_64 Start: 42393, Stop: 42611, Start Num: 14
Candidate Starts for SamScheppers_64:
(5, 42234), (8, 42243), (Start: 14 @42393 has 22 MA's), (24, 42510), (26, 42546), (28, 42561),

Gene: Shlim410_53 Start: 40090, Stop: 40332, Start Num: 16
Candidate Starts for Shlim410_53:
(Start: 16 @40090 has 49 MA's), (22, 40216),

Gene: Sidious_53 Start: 38484, Stop: 38726, Start Num: 16
Candidate Starts for Sidious_53:
(Start: 16 @38484 has 49 MA's), (22, 38610),

Gene: Slarp_66 Start: 41921, Stop: 42139, Start Num: 14
Candidate Starts for Slarp_66:
(5, 41762), (8, 41771), (Start: 14 @41921 has 22 MA's), (24, 42038), (26, 42074), (28, 42089),

Gene: Sprinklemunch_60 Start: 41643, Stop: 41885, Start Num: 16
Candidate Starts for Sprinklemunch_60:
(Start: 16 @41643 has 49 MA's), (22, 41769),

Gene: Stormageddon_175 Start: 112431, Stop: 112640, Start Num: 15
Candidate Starts for Stormageddon_175:
(Start: 14 @112428 has 22 MA's), (Start: 15 @112431 has 2 MA's), (27, 112590), (30, 112620),

Gene: Taquito_65 Start: 42156, Stop: 42374, Start Num: 14
Candidate Starts for Taquito_65:
(5, 41997), (8, 42006), (Start: 14 @42156 has 22 MA's), (24, 42273), (26, 42309), (28, 42324),

Gene: ThankyouJordi_56 Start: 40759, Stop: 41001, Start Num: 16
Candidate Starts for ThankyouJordi_56:
(7, 40612), (9, 40627), (10, 40636), (12, 40702), (Start: 16 @40759 has 49 MA's), (22, 40885),

Gene: Thimann_54 Start: 37092, Stop: 37307, Start Num: 16
Candidate Starts for Thimann_54:

(Start: 16 @37092 has 49 MA's), (22, 37191),

Gene: TimTam_57 Start: 40719, Stop: 40961, Start Num: 16
Candidate Starts for TimTam_57:
(Start: 16 @40719 has 49 MA's), (22, 40845),

Gene: Twinkle_54 Start: 41149, Stop: 41391, Start Num: 16
Candidate Starts for Twinkle_54:
(Start: 16 @41149 has 49 MA's), (22, 41275),

Gene: WelcomeAyanna_56 Start: 40906, Stop: 41148, Start Num: 16
Candidate Starts for WelcomeAyanna_56:
(7, 40759), (9, 40774), (10, 40783), (12, 40849), (Start: 16 @40906 has 49 MA's), (22, 41032),

Gene: Wintermute_66 Start: 42151, Stop: 42369, Start Num: 14
Candidate Starts for Wintermute_66:
(5, 41992), (8, 42001), (Start: 14 @42151 has 22 MA's), (24, 42268), (26, 42304), (28, 42319),

Gene: Y10_64 Start: 42079, Stop: 42297, Start Num: 14
Candidate Starts for Y10_64:
(5, 41920), (8, 41929), (Start: 14 @42079 has 22 MA's), (24, 42196), (26, 42232), (28, 42247),

Gene: Y2_64 Start: 42079, Stop: 42297, Start Num: 14
Candidate Starts for Y2_64:
(5, 41920), (8, 41929), (Start: 14 @42079 has 22 MA's), (24, 42196), (26, 42232), (28, 42247),

Gene: YasnayaPolyana_65 Start: 42004, Stop: 42222, Start Num: 14
Candidate Starts for YasnayaPolyana_65:
(5, 41845), (8, 41854), (Start: 14 @42004 has 22 MA's), (24, 42121), (26, 42157), (28, 42172),

Gene: Yeezy_53 Start: 37368, Stop: 37610, Start Num: 16
Candidate Starts for Yeezy_53:
(Start: 16 @37368 has 49 MA's), (22, 37494),