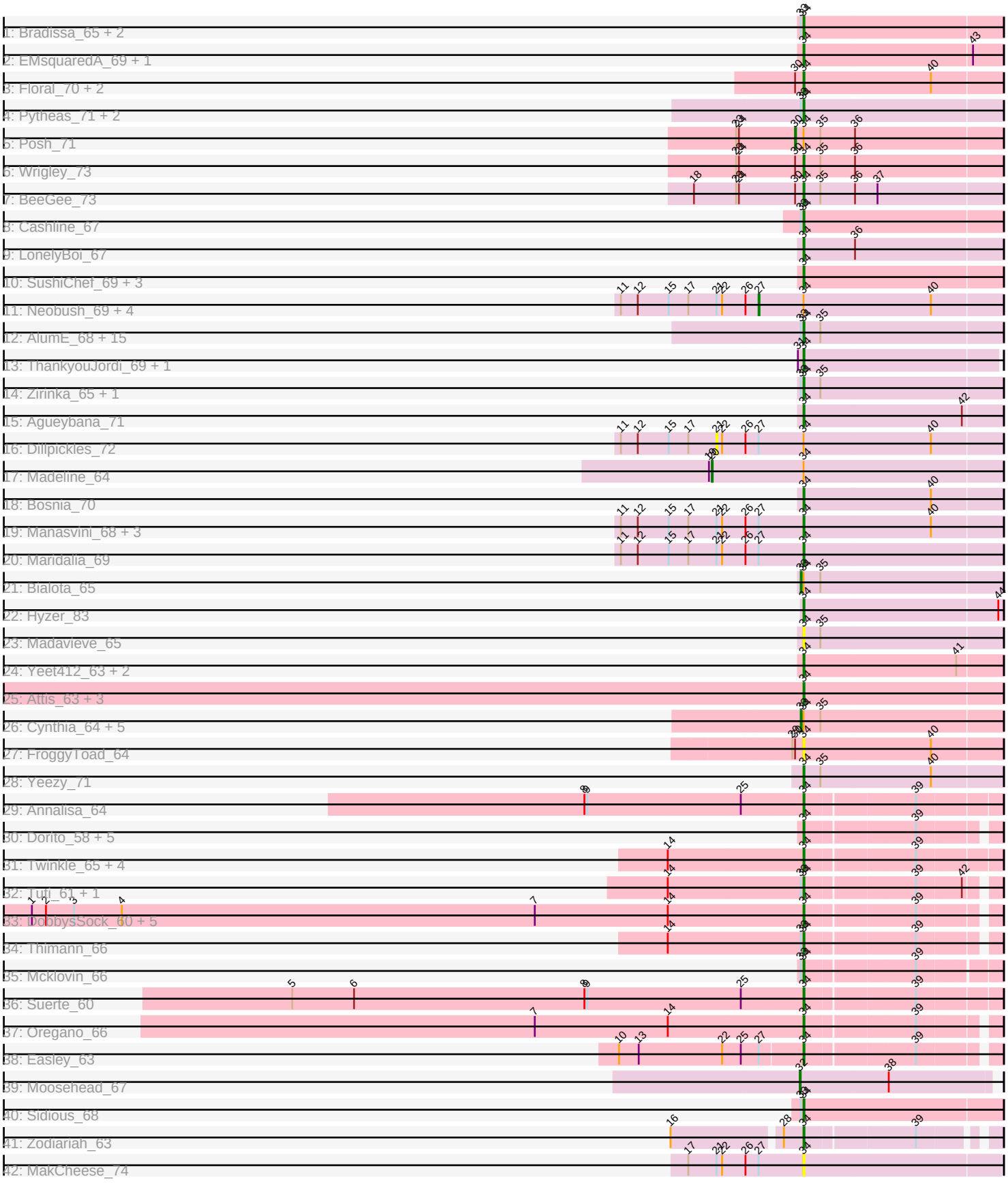
Pham 347454


1: Bradissa_65 + 2
2: EMsquaredA_69 + 1
3: Floral_70 + 2
4: Pytheas_71 + 2
5: Posh_71
6: Wrigley_73
7: BeeGee_73
8: Cashline_67
9: LonelyBoi_67
10: SushiChef_69 + 3
11: Neobush_69 + 4
12: AlumE_68 + 15
13: ThankyouJordi_69 + 1
14: Zirinka_65 + 1
15: Agueybana_71
16: Dillpickles_72
17: Madeline_64
18: Bosnia_70
19: Manasvini_68 + 3
20: Maridalia_69
21: Bialota_65
22: Hyzer_83
23: Madavieve_65
24: Yeet412_63 + 2
25: Attis_63 + 3
26: Cynthia_64 + 5
27: FroggyToad_64
28: Yeezy_71
29: Annalisa_64
30: Dorito_58 + 5
31: Twinkie_65 + 4
32: Tuti_61 + 1
33: DobbysSock_60 + 5
34: Thimann_66
35: Mcklovin_66
36: Suerte_60
37: Oregano_66
38: Easley_63
39: Moosehead_67
40: Sidious_68
41: Zodiariah_63
42: MakCheese_74

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 347454 Report

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

Pham number 347454 has 101 members, 9 are drafts.

Phages represented in each track:
• Track 1 : Bradissa_65, Lilas_65, EnalisNailo_64
• Track 2 : EMsquaredA_69, Marteena_68
• Track 3 : Floral_70, Pollux_72, Nettuno_61
• Track 4 : Pytheas_71, Angelique_64, Jablanski_71
• Track 5 : Posh_71
• Track 6 : Wrigley_73
• Track 7 : BeeGee_73
• Track 8 : Cashline_67
• Track 9 : LonelyBoi_67
• Track 10 : SushiChef_69, BaxterFox_73, Confidence_69, Bunnybear_64
• Track 11 : Neobush_69, Suscepit_67, Tayonia_67, Trumpet_67, Zameen_67
• Track 12 : AlumE_68, Yinzer_64, JCole_60, TuertoX_64, Ebert_68, PantheRoc_72, Whiteclaw_64, Hugley_68, Clap_64, Gizermo_64, Jalleen_67, GemG_64, Sahara_63, BoyNamedSue_68, Lamberg_60, Haley23_64
• Track 13 : ThankyouJordi_69, WelcomeAyanna_69
• Track 14 : Zirinka_65, Matteo_58
• Track 15 : Agueybana_71
• Track 16 : Dillpickles_72
• Track 17 : Madeline_64
• Track 18 : Bosnia_70
• Track 19 : Manasvini_68, Eudoria_67, Kita_68, Polly_64
• Track 20 : Maridalia_69
• Track 21 : Bialota_65
• Track 22 : Hyzer_83
• Track 23 : Madavieve_65
• Track 24 : Yeet412_63, EdnaMode_63, Pickett_62
• Track 25 : Attis_63, Ohgeesy_68, SoilAssassin_63, LordFarquaad_65
• Track 26 : Cynthia_64, Sproutie_64, Bjanes7_61, Herod_70, Mocha12_64, Savage_64
• Track 27 : FroggyToad_64
• Track 28 : Yeezy_71
• Track 29 : Annalisa_64
• Track 30 : Dorito_58, WinkNick_66, PhriskyACE_63, Powerball_65, Dolores_66, Sekhmet_65
• Track 31 : Twinkle_65, Adora_63, Shlim410_64, Howe_66, Hortense_66
• Track 32 : Tuti_61, MichaelScott_67

• Track 33 : DobbysSock_60, Beenie_60, Samman98_66, Invectra_68, Clark_65, Rizz_66
• Track 34 : Thimann_66
• Track 35 : Mcklovin_66
• Track 36 : Suerte_60
• Track 37 : Oregano_66
• Track 38 : Easley_63
• Track 39 : Moosehead_67
• Track 40 : Sidious_68
• Track 41 : Zodiariah_63
• Track 42 : MakCheese_74

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

The start number called the most often in the published annotations is 34, it was called in 77 of the 92 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adora_63, Agueybana_71, AlumE_68, Angelique_64, Annalisa_64, Attis_63, BaxterFox_73, BeeGee_73, Beenie_60, Bosnia_70, BoyNamedSue_68, Bradissa_65, Bunnybear_64, Cashline_67, Clap_64, Clark_65, Confidence_69, DobbysSock_60, Dolores_66, Dorito_58, EMsquaredA_69, Easley_63, Ebert_68, EdnaMode_63, EnalisNailo_64, Eudoria_67, Floral_70, FroggyToad_64, GemG_64, Gizermo_64, Haley23_64, Hortense_66, Howe_66, Hugley_68, Hyzer_83, Invectra_68, JCole_60, Jablanski_71, Jalleen_67, Kita_68, Lamberg_60, Lilas_65, LonelyBoi_67, LordFarquaad_65, Madavieve_65, MakCheese_74, Manasvini_68, Maridalia_69, Marteena_68, Matteo_58, Mcklovin_66, MichaelScott_67, Nettuno_61, Ohgeesy_68, Oregano_66, PantheRoc_72, PhriskyACE_63, Pickett_62, Pollux_72, Polly_64, Powerball_65, Pytheas_71, Rizz_66, Sahara_63, Samman98_66, Sekhmet_65, Shlim410_64, Sidious_68, SoilAssassin_63, Suerte_60, SushiChef_69, ThankyouJordi_69, Thimann_66, TuertoX_64, Tuti_61, Twinkle_65, WelcomeAyanna_69, Whiteclaw_64, WinkNick_66, Wrigley_73, Yeet412_63, Yeezy_71, Yinzer_64, Zirinka_65, Zodiariah_63,

Genes that have the "Most Annotated" start but do not call it:
• Bialota_65, Bjanes7_61, Cynthia_64, Dillpickles_72, Herod_70, Madeline_64, Mocha12_64, Neobush_69, Posh_71, Savage_64, Sproutie_64, Suscepit_67, Tayonia_67, Trumpet_67, Zameen_67,

Genes that do not have the "Most Annotated" start:
• Moosehead_67,

Summary by start number:

Start 20:
• Found in 1 of 101 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 92
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Madeline_64 (CZ1),

Start 21:
• Found in 12 of 101 (11.9%) of genes in pham
• No Manual Annotations of this start.
• Called 8.3% of time when present
• Phage (with cluster) where this start called: Dillpickles_72 (CZ1),

Start 27:
• Found in 13 of 101 (12.9%) of genes in pham
• Manual Annotations of this start: 5 of 92
• Called 38.5% of time when present
• Phage (with cluster) where this start called: Neobush_69 (CZ1), Suscepit_67 (CZ1), Tayonia_67 (CZ1), Trumpet_67 (CZ1), Zameen_67 (CZ1),

Start 30:
• Found in 7 of 101 (6.9%) of genes in pham
• Manual Annotations of this start: 1 of 92
• Called 14.3% of time when present
• Phage (with cluster) where this start called: Posh_71 (CY4),

Start 32:
• Found in 1 of 101 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 92
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Moosehead_67 (CZ6),

Start 33:
• Found in 37 of 101 (36.6%) of genes in pham
• Manual Annotations of this start: 7 of 92
• Called 18.9% of time when present
• Phage (with cluster) where this start called: Bialota_65 (CZ1), Bjanes7_61 (CZ2), Cynthia_64 (CZ2), Herod_70 (CZ1), Mocha12_64 (CZ2), Savage_64 (CZ2), Sproutie_64 (CZ2),

Start 34:
• Found in 100 of 101 (99.0%) of genes in pham
• Manual Annotations of this start: 77 of 92
• Called 85.0% of time when present
• Phage (with cluster) where this start called: Adora_63 (CZ4), Agueybana_71 (CZ1), AlumE_68 (CZ1), Angelique_64 (CY1), Annalisa_64 (CZ4), Attis_63 (CZ2), BaxterFox_73 (CZ3), BeeGee_73 (CY5), Beenie_60 (CZ4), Bosnia_70 (CZ1), BoyNamedSue_68 (CZ1), Bradissa_65 (CY1), Bunnybear_64 (CZ), Cashline_67 (CY6), Clap_64 (CZ2), Clark_65 (CZ4), Confidence_69 (CY1), DobbysSock_60 (CZ4), Dolores_66 (CZ4), Dorito_58 (CZ4), EMsquaredA_69 (CY1), Easley_63 (CZ4), Ebert_68 (CZ2), EdnaMode_63 (CZ2), EnalisNailo_64 (CY1), Eudoria_67 (CZ1), Floral_70 (CY1), FroggyToad_64 (CZ2), GemG_64 (CZ2), Gizermo_64 (CZ2), Haley23_64 (CZ2), Hortense_66 (CZ4), Howe_66 (CZ4), Hugley_68 (CZ1), Hyzer_83 (CZ1), Invectra_68 (CZ4), JCole_60 (CZ2), Jablanski_71 (CY3), Jalleen_67 (CZ2), Kita_68 (CZ1), Lamberg_60 (CZ2), Lilas_65 (CY1), LonelyBoi_67 (CY7), LordFarquaad_65 (CZ2), Madavieve_65 (CZ1), MakCheese_74 (DW), Manasvini_68 (CZ1), Maridalia_69 (CZ1), Marteena_68 (CY1), Matteo_58 (CZ2), Mcklovin_66 (CZ4), MichaelScott_67 (CZ4), Nettuno_61 (CZ2), Ohgeesy_68 (CZ), Oregano_66 (CZ4), PantheRoc_72 (CZ3), PhriskyACE_63 (CZ4), Pickett_62 (CZ2), Pollux_72 (CY1), Polly_64 (CZ1), Powerball_65 (CZ4), Pytheas_71 (CY3), Rizz_66 (CZ4),

Sahara_63 (CZ2), Samman98_66 (CZ4), Sekhmet_65 (CZ4), Shlim410_64 (CZ4), Sidious_68 (CZ7), SoilAssassin_63 (CZ2), Suerte_60 (CZ4), SushiChef_69 (CZ), ThankyouJordi_69 (CZ1), Thimann_66 (CZ4), TuertoX_64 (CZ2), Tuti_61 (CZ4), Twinkle_65 (CZ4), WelcomeAyanna_69 (CZ1), Whiteclaw_64 (CZ2), WinkNick_66 (CZ4), Wrigley_73 (CY4), Yeet412_63 (CZ2), Yeezy_71 (CZ3), Yinzer_64 (CZ2), Zirinka_65 (CZ1), Zodiariah_63 (DW),

Summary by clusters:

There are 14 clusters represented in this pham: CY3, CY1, CY7, CY6, CY5, CY4, CZ2, CZ3, CZ1, CZ6, CZ7, CZ4, CZ, DW,

Info for manual annotations of cluster CY1:
•Start number 34 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY3:
•Start number 34 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:
•Start number 30 was manually annotated 1 time for cluster CY4.
•Start number 34 was manually annotated 1 time for cluster CY4.

Info for manual annotations of cluster CY5:
•Start number 34 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:
•Start number 34 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:
•Start number 34 was manually annotated 1 time for cluster CY7.

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

Info for manual annotations of cluster CZ1:
•Start number 20 was manually annotated 1 time for cluster CZ1.
•Start number 27 was manually annotated 5 times for cluster CZ1.
•Start number 33 was manually annotated 2 times for cluster CZ1.
•Start number 34 was manually annotated 13 times for cluster CZ1.

Info for manual annotations of cluster CZ2:
•Start number 33 was manually annotated 5 times for cluster CZ2.
•Start number 34 was manually annotated 18 times for cluster CZ2.

Info for manual annotations of cluster CZ3:
•Start number 34 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:
•Start number 34 was manually annotated 24 times for cluster CZ4.

Info for manual annotations of cluster CZ6:
•Start number 32 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster CZ7:
•Start number 34 was manually annotated 1 time for cluster CZ7.

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

Gene Information:

Gene: Adora_63 Start: 44095, Stop: 44289, Start Num: 34
Candidate Starts for Adora_63:
(14, 43951), (Start: 34 @44095 has 77 MA's), (39, 44206),

Gene: Agueybana_71 Start: 47176, Stop: 47385, Start Num: 34
Candidate Starts for Agueybana_71:
(Start: 34 @47176 has 77 MA's), (42, 47344),

Gene: AlumE_68 Start: 47032, Stop: 47241, Start Num: 34
Candidate Starts for AlumE_68:
(Start: 33 @47029 has 7 MA's), (Start: 34 @47032 has 77 MA's), (35, 47050),

Gene: Angelique_64 Start: 45493, Stop: 45702, Start Num: 34
Candidate Starts for Angelique_64:
(Start: 33 @45490 has 7 MA's), (Start: 34 @45493 has 77 MA's),

Gene: Annalisa_64 Start: 42302, Stop: 42496, Start Num: 34
Candidate Starts for Annalisa_64:
(8, 42071), (9, 42074), (25, 42236), (Start: 34 @42302 has 77 MA's), (39, 42413),

Gene: Attis_63 Start: 42906, Stop: 43115, Start Num: 34
Candidate Starts for Attis_63:
(Start: 34 @42906 has 77 MA's),

Gene: BaxterFox_73 Start: 48095, Stop: 48304, Start Num: 34
Candidate Starts for BaxterFox_73:
(Start: 34 @48095 has 77 MA's),

Gene: BeeGee_73 Start: 46616, Stop: 46825, Start Num: 34
Candidate Starts for BeeGee_73:
(18, 46499), (23, 46544), (24, 46547), (Start: 30 @46607 has 1 MA's), (Start: 34 @46616 has 77 MA's), (35, 46634), (36, 46670), (37, 46694),

Gene: Beenie_60 Start: 42143, Stop: 42337, Start Num: 34
Candidate Starts for Beenie_60:
(1, 41321), (2, 41336), (3, 41366), (4, 41417), (7, 41858), (14, 41999), (Start: 34 @42143 has 77 MA's), (39, 42254),

Gene: Bialota_65 Start: 46220, Stop: 46432, Start Num: 33
Candidate Starts for Bialota_65:
(Start: 33 @46220 has 7 MA's), (Start: 34 @46223 has 77 MA's), (35, 46241),

Gene: Bjanes7_61 Start: 40957, Stop: 41169, Start Num: 33

Candidate Starts for Bjanes7_61:
(Start: 33 @40957 has 7 MA's), (Start: 34 @40960 has 77 MA's), (35, 40978),

Gene: Bosnia_70 Start: 48876, Stop: 49085, Start Num: 34
Candidate Starts for Bosnia_70:
(Start: 34 @48876 has 77 MA's), (40, 49011),

Gene: BoyNamedSue_68 Start: 47032, Stop: 47241, Start Num: 34
Candidate Starts for BoyNamedSue_68:
(Start: 33 @47029 has 7 MA's), (Start: 34 @47032 has 77 MA's), (35, 47050),

Gene: Bradissa_65 Start: 46590, Stop: 46799, Start Num: 34
Candidate Starts for Bradissa_65:
(Start: 33 @46587 has 7 MA's), (Start: 34 @46590 has 77 MA's),

Gene: Bunnybear_64 Start: 45915, Stop: 46124, Start Num: 34
Candidate Starts for Bunnybear_64:
(Start: 34 @45915 has 77 MA's),

Gene: Cashline_67 Start: 47329, Stop: 47538, Start Num: 34
Candidate Starts for Cashline_67:
(Start: 33 @47326 has 7 MA's), (Start: 34 @47329 has 77 MA's),

Gene: Clap_64 Start: 41139, Stop: 41348, Start Num: 34
Candidate Starts for Clap_64:
(Start: 33 @41136 has 7 MA's), (Start: 34 @41139 has 77 MA's), (35, 41157),

Gene: Clark_65 Start: 41906, Stop: 42100, Start Num: 34
Candidate Starts for Clark_65:
(1, 41084), (2, 41099), (3, 41129), (4, 41180), (7, 41621), (14, 41762), (Start: 34 @41906 has 77 MA's), (39, 42017),

Gene: Confidence_69 Start: 45016, Stop: 45225, Start Num: 34
Candidate Starts for Confidence_69:
(Start: 34 @45016 has 77 MA's),

Gene: Cynthia_64 Start: 41134, Stop: 41346, Start Num: 33
Candidate Starts for Cynthia_64:
(Start: 33 @41134 has 7 MA's), (Start: 34 @41137 has 77 MA's), (35, 41155),

Gene: Dillpickles_72 Start: 44503, Stop: 44802, Start Num: 21
Candidate Starts for Dillpickles_72:
(11, 44401), (12, 44419), (15, 44452), (17, 44473), (21, 44503), (22, 44509), (26, 44533), (Start: 27 @44545 has 5 MA's), (Start: 34 @44593 has 77 MA's), (40, 44728),

Gene: DobbysSock_60 Start: 41554, Stop: 41739, Start Num: 34
Candidate Starts for DobbysSock_60:
(1, 40732), (2, 40747), (3, 40777), (4, 40828), (7, 41269), (14, 41410), (Start: 34 @41554 has 77 MA's), (39, 41665),

Gene: Dolores_66 Start: 41837, Stop: 42031, Start Num: 34
Candidate Starts for Dolores_66:
(Start: 34 @41837 has 77 MA's), (39, 41948),

Gene: Dorito_58 Start: 39421, Stop: 39606, Start Num: 34
Candidate Starts for Dorito_58:
(Start: 34 @39421 has 77 MA's), (39, 39532),

Gene: EMsquaredA_69 Start: 46061, Stop: 46270, Start Num: 34
Candidate Starts for EMsquaredA_69:
(Start: 34 @46061 has 77 MA's), (43, 46238),

Gene: Easley_63 Start: 41309, Stop: 41494, Start Num: 34
Candidate Starts for Easley_63:
(10, 41120), (13, 41141), (22, 41228), (25, 41246), (Start: 27 @41264 has 5 MA's), (Start: 34 @41309 has 77 MA's), (39, 41420),

Gene: Ebert_68 Start: 41571, Stop: 41780, Start Num: 34
Candidate Starts for Ebert_68:
(Start: 33 @41568 has 7 MA's), (Start: 34 @41571 has 77 MA's), (35, 41589),

Gene: EdnaMode_63 Start: 41178, Stop: 41387, Start Num: 34
Candidate Starts for EdnaMode_63:
(Start: 34 @41178 has 77 MA's), (41, 41340),

Gene: EnalisNailo_64 Start: 46124, Stop: 46333, Start Num: 34
Candidate Starts for EnalisNailo_64:
(Start: 33 @46121 has 7 MA's), (Start: 34 @46124 has 77 MA's),

Gene: Eudoria_67 Start: 44549, Stop: 44758, Start Num: 34
Candidate Starts for Eudoria_67:
(11, 44357), (12, 44375), (15, 44408), (17, 44429), (21, 44459), (22, 44465), (26, 44489), (Start: 27 @44501 has 5 MA's), (Start: 34 @44549 has 77 MA's), (40, 44684),

Gene: Floral_70 Start: 47949, Stop: 48158, Start Num: 34
Candidate Starts for Floral_70:
(Start: 30 @47940 has 1 MA's), (Start: 34 @47949 has 77 MA's), (40, 48084),

Gene: FroggyToad_64 Start: 42421, Stop: 42630, Start Num: 34
Candidate Starts for FroggyToad_64:
(29, 42409), (Start: 30 @42412 has 1 MA's), (Start: 34 @42421 has 77 MA's), (40, 42556),

Gene: GemG_64 Start: 41143, Stop: 41352, Start Num: 34
Candidate Starts for GemG_64:
(Start: 33 @41140 has 7 MA's), (Start: 34 @41143 has 77 MA's), (35, 41161),

Gene: Gizermo_64 Start: 41139, Stop: 41348, Start Num: 34
Candidate Starts for Gizermo_64:
(Start: 33 @41136 has 7 MA's), (Start: 34 @41139 has 77 MA's), (35, 41157),

Gene: Haley23_64 Start: 41139, Stop: 41348, Start Num: 34
Candidate Starts for Haley23_64:
(Start: 33 @41136 has 7 MA's), (Start: 34 @41139 has 77 MA's), (35, 41157),

Gene: Herod_70 Start: 47971, Stop: 48183, Start Num: 33
Candidate Starts for Herod_70:

(Start: 33 @47971 has 7 MA's), (Start: 34 @47974 has 77 MA's), (35, 47992),

Gene: Hortense_66 Start: 45450, Stop: 45644, Start Num: 34
Candidate Starts for Hortense_66:
(14, 45306), (Start: 34 @45450 has 77 MA's), (39, 45561),

Gene: Howe_66 Start: 45450, Stop: 45644, Start Num: 34
Candidate Starts for Howe_66:
(14, 45306), (Start: 34 @45450 has 77 MA's), (39, 45561),

Gene: Hugley_68 Start: 47954, Stop: 48163, Start Num: 34
Candidate Starts for Hugley_68:
(Start: 33 @47951 has 7 MA's), (Start: 34 @47954 has 77 MA's), (35, 47972),

Gene: Hyzer_83 Start: 54137, Stop: 54346, Start Num: 34
Candidate Starts for Hyzer_83:
(Start: 34 @54137 has 77 MA's), (44, 54341),

Gene: Invectra_68 Start: 43479, Stop: 43673, Start Num: 34
Candidate Starts for Invectra_68:
(1, 42657), (2, 42672), (3, 42702), (4, 42753), (7, 43194), (14, 43335), (Start: 34 @43479 has 77 MA's), (39, 43590),

Gene: JCole_60 Start: 39078, Stop: 39287, Start Num: 34
Candidate Starts for JCole_60:
(Start: 33 @39075 has 7 MA's), (Start: 34 @39078 has 77 MA's), (35, 39096),

Gene: Jablanski_71 Start: 48075, Stop: 48284, Start Num: 34
Candidate Starts for Jablanski_71:
(Start: 33 @48072 has 7 MA's), (Start: 34 @48075 has 77 MA's),

Gene: Jalleen_67 Start: 41450, Stop: 41659, Start Num: 34
Candidate Starts for Jalleen_67:
(Start: 33 @41447 has 7 MA's), (Start: 34 @41450 has 77 MA's), (35, 41468),

Gene: Kita_68 Start: 44558, Stop: 44767, Start Num: 34
Candidate Starts for Kita_68:
(11, 44366), (12, 44384), (15, 44417), (17, 44438), (21, 44468), (22, 44474), (26, 44498), (Start: 27 @44510 has 5 MA's), (Start: 34 @44558 has 77 MA's), (40, 44693),

Gene: Lamberg_60 Start: 39648, Stop: 39857, Start Num: 34
Candidate Starts for Lamberg_60:
(Start: 33 @39645 has 7 MA's), (Start: 34 @39648 has 77 MA's), (35, 39666),

Gene: Lilas_65 Start: 47662, Stop: 47871, Start Num: 34
Candidate Starts for Lilas_65:
(Start: 33 @47659 has 7 MA's), (Start: 34 @47662 has 77 MA's),

Gene: LonelyBoi_67 Start: 48115, Stop: 48324, Start Num: 34
Candidate Starts for LonelyBoi_67:
(Start: 34 @48115 has 77 MA's), (36, 48169),

Gene: LordFarquaad_65 Start: 42887, Stop: 43096, Start Num: 34

Candidate Starts for LordFarquaad_65:
(Start: 34 @42887 has 77 MA's),

Gene: Madavieve_65 Start: 46047, Stop: 46256, Start Num: 34
Candidate Starts for Madavieve_65:
(Start: 34 @46047 has 77 MA's), (35, 46065),

Gene: Madeline_64 Start: 46590, Stop: 46895, Start Num: 20
Candidate Starts for Madeline_64:
(19, 46587), (Start: 20 @46590 has 1 MA's), (Start: 34 @46686 has 77 MA's),

Gene: MakCheese_74 Start: 47770, Stop: 47976, Start Num: 34
Candidate Starts for MakCheese_74:
(17, 47650), (21, 47680), (22, 47686), (26, 47710), (Start: 27 @47722 has 5 MA's), (Start: 34 @47770 has 77 MA's),

Gene: Manasvini_68 Start: 44573, Stop: 44782, Start Num: 34
Candidate Starts for Manasvini_68:
(11, 44381), (12, 44399), (15, 44432), (17, 44453), (21, 44483), (22, 44489), (26, 44513), (Start: 27 @44525 has 5 MA's), (Start: 34 @44573 has 77 MA's), (40, 44708),

Gene: Maridalia_69 Start: 45927, Stop: 46136, Start Num: 34
Candidate Starts for Maridalia_69:
(11, 45735), (12, 45753), (15, 45786), (17, 45807), (21, 45837), (22, 45843), (26, 45867), (Start: 27 @45879 has 5 MA's), (Start: 34 @45927 has 77 MA's),

Gene: Marteena_68 Start: 46061, Stop: 46270, Start Num: 34
Candidate Starts for Marteena_68:
(Start: 34 @46061 has 77 MA's), (43, 46238),

Gene: Matteo_58 Start: 39264, Stop: 39473, Start Num: 34
Candidate Starts for Matteo_58:
(Start: 33 @39261 has 7 MA's), (Start: 34 @39264 has 77 MA's), (35, 39282),

Gene: Mcklovin_66 Start: 48429, Stop: 48620, Start Num: 34
Candidate Starts for Mcklovin_66:
(Start: 33 @48426 has 7 MA's), (Start: 34 @48429 has 77 MA's), (39, 48540),

Gene: MichaelScott_67 Start: 43167, Stop: 43352, Start Num: 34
Candidate Starts for MichaelScott_67:
(14, 43023), (Start: 33 @43164 has 7 MA's), (Start: 34 @43167 has 77 MA's), (39, 43278), (42, 43323),

Gene: Mocha12_64 Start: 41136, Stop: 41348, Start Num: 33
Candidate Starts for Mocha12_64:
(Start: 33 @41136 has 7 MA's), (Start: 34 @41139 has 77 MA's), (35, 41157),

Gene: Moosehead_67 Start: 38275, Stop: 38475, Start Num: 32
Candidate Starts for Moosehead_67:
(Start: 32 @38275 has 1 MA's), (38, 38368),

Gene: Neobush_69 Start: 45069, Stop: 45326, Start Num: 27
Candidate Starts for Neobush_69:

(11, 44925), (12, 44943), (15, 44976), (17, 44997), (21, 45027), (22, 45033), (26, 45057), (Start: 27 @45069 has 5 MA's), (Start: 34 @45117 has 77 MA's), (40, 45252),

Gene: Nettuno_61 Start: 40024, Stop: 40233, Start Num: 34
Candidate Starts for Nettuno_61:
(Start: 30 @40015 has 1 MA's), (Start: 34 @40024 has 77 MA's), (40, 40159),

Gene: Ohgeesy_68 Start: 46352, Stop: 46561, Start Num: 34
Candidate Starts for Ohgeesy_68:
(Start: 34 @46352 has 77 MA's),

Gene: Oregano_66 Start: 42041, Stop: 42226, Start Num: 34
Candidate Starts for Oregano_66:
(7, 41756), (14, 41897), (Start: 34 @42041 has 77 MA's), (39, 42152),

Gene: PantheRoc_72 Start: 47273, Stop: 47482, Start Num: 34
Candidate Starts for PantheRoc_72:
(Start: 33 @47270 has 7 MA's), (Start: 34 @47273 has 77 MA's), (35, 47291),

Gene: PhriskyACE_63 Start: 42390, Stop: 42584, Start Num: 34
Candidate Starts for PhriskyACE_63:
(Start: 34 @42390 has 77 MA's), (39, 42501),

Gene: Pickett_62 Start: 39783, Stop: 39992, Start Num: 34
Candidate Starts for Pickett_62:
(Start: 34 @39783 has 77 MA's), (41, 39945),

Gene: Pollux_72 Start: 47949, Stop: 48158, Start Num: 34
Candidate Starts for Pollux_72:
(Start: 30 @47940 has 1 MA's), (Start: 34 @47949 has 77 MA's), (40, 48084),

Gene: Polly_64 Start: 43992, Stop: 44201, Start Num: 34
Candidate Starts for Polly_64:
(11, 43800), (12, 43818), (15, 43851), (17, 43872), (21, 43902), (22, 43908), (26, 43932), (Start: 27 @43944 has 5 MA's), (Start: 34 @43992 has 77 MA's), (40, 44127),

Gene: Posh_71 Start: 47814, Stop: 48032, Start Num: 30
Candidate Starts for Posh_71:
(23, 47751), (24, 47754), (Start: 30 @47814 has 1 MA's), (Start: 34 @47823 has 77 MA's), (35, 47841), (36, 47877),

Gene: Powerball_65 Start: 42493, Stop: 42687, Start Num: 34
Candidate Starts for Powerball_65:
(Start: 34 @42493 has 77 MA's), (39, 42604),

Gene: Pytheas_71 Start: 48074, Stop: 48283, Start Num: 34
Candidate Starts for Pytheas_71:
(Start: 33 @48071 has 7 MA's), (Start: 34 @48074 has 77 MA's),

Gene: Rizz_66 Start: 42695, Stop: 42889, Start Num: 34
Candidate Starts for Rizz_66:
(1, 41873), (2, 41888), (3, 41918), (4, 41969), (7, 42410), (14, 42551), (Start: 34 @42695 has 77 MA's), (39, 42806),

Gene: Sahara_63 Start: 40544, Stop: 40753, Start Num: 34
Candidate Starts for Sahara_63:
(Start: 33 @40541 has 7 MA's), (Start: 34 @40544 has 77 MA's), (35, 40562),

Gene: Samman98_66 Start: 42009, Stop: 42203, Start Num: 34
Candidate Starts for Samman98_66:
(1, 41187), (2, 41202), (3, 41232), (4, 41283), (7, 41724), (14, 41865), (Start: 34 @42009 has 77 MA's), (39, 42120),

Gene: Savage_64 Start: 41136, Stop: 41348, Start Num: 33
Candidate Starts for Savage_64:
(Start: 33 @41136 has 7 MA's), (Start: 34 @41139 has 77 MA's), (35, 41157),

Gene: Sekhmet_65 Start: 42236, Stop: 42430, Start Num: 34
Candidate Starts for Sekhmet_65:
(Start: 34 @42236 has 77 MA's), (39, 42347),

Gene: Shlim410_64 Start: 45450, Stop: 45644, Start Num: 34
Candidate Starts for Shlim410_64:
(14, 45306), (Start: 34 @45450 has 77 MA's), (39, 45561),

Gene: Sidious_68 Start: 46860, Stop: 47069, Start Num: 34
Candidate Starts for Sidious_68:
(Start: 33 @46857 has 7 MA's), (Start: 34 @46860 has 77 MA's),

Gene: SoilAssassin_63 Start: 42905, Stop: 43114, Start Num: 34
Candidate Starts for SoilAssassin_63:
(Start: 34 @42905 has 77 MA's),

Gene: Sproutie_64 Start: 41136, Stop: 41348, Start Num: 33
Candidate Starts for Sproutie_64:
(Start: 33 @41136 has 7 MA's), (Start: 34 @41139 has 77 MA's), (35, 41157),

Gene: Suerte_60 Start: 41851, Stop: 42045, Start Num: 34
Candidate Starts for Suerte_60:
(5, 41308), (6, 41374), (8, 41620), (9, 41623), (25, 41785), (Start: 34 @41851 has 77 MA's), (39, 41962),

Gene: Suscepit_67 Start: 44502, Stop: 44759, Start Num: 27
Candidate Starts for Suscepit_67:
(11, 44358), (12, 44376), (15, 44409), (17, 44430), (21, 44460), (22, 44466), (26, 44490), (Start: 27 @44502 has 5 MA's), (Start: 34 @44550 has 77 MA's), (40, 44685),

Gene: SushiChef_69 Start: 47814, Stop: 48023, Start Num: 34
Candidate Starts for SushiChef_69:
(Start: 34 @47814 has 77 MA's),

Gene: Tayonia_67 Start: 44501, Stop: 44758, Start Num: 27
Candidate Starts for Tayonia_67:
(11, 44357), (12, 44375), (15, 44408), (17, 44429), (21, 44459), (22, 44465), (26, 44489), (Start: 27 @44501 has 5 MA's), (Start: 34 @44549 has 77 MA's), (40, 44684),

Gene: ThankyouJordi_69 Start: 48057, Stop: 48260, Start Num: 34
Candidate Starts for ThankyouJordi_69:
(31, 48051), (Start: 34 @48057 has 77 MA's),

Gene: Thimann_66 Start: 42275, Stop: 42460, Start Num: 34
Candidate Starts for Thimann_66:
(14, 42131), (Start: 33 @42272 has 7 MA's), (Start: 34 @42275 has 77 MA's), (39, 42386),

Gene: Trumpet_67 Start: 44502, Stop: 44759, Start Num: 27
Candidate Starts for Trumpet_67:
(11, 44358), (12, 44376), (15, 44409), (17, 44430), (21, 44460), (22, 44466), (26, 44490), (Start: 27 @44502 has 5 MA's), (Start: 34 @44550 has 77 MA's), (40, 44685),

Gene: TuertoX_64 Start: 41139, Stop: 41348, Start Num: 34
Candidate Starts for TuertoX_64:
(Start: 33 @41136 has 7 MA's), (Start: 34 @41139 has 77 MA's), (35, 41157),

Gene: Tuti_61 Start: 43025, Stop: 43210, Start Num: 34
Candidate Starts for Tuti_61:
(14, 42881), (Start: 33 @43022 has 7 MA's), (Start: 34 @43025 has 77 MA's), (39, 43136), (42, 43181),

Gene: Twinkle_65 Start: 46509, Stop: 46703, Start Num: 34
Candidate Starts for Twinkle_65:
(14, 46365), (Start: 34 @46509 has 77 MA's), (39, 46620),

Gene: WelcomeAyanna_69 Start: 48204, Stop: 48407, Start Num: 34
Candidate Starts for WelcomeAyanna_69:
(31, 48198), (Start: 34 @48204 has 77 MA's),

Gene: Whiteclaw_64 Start: 41139, Stop: 41348, Start Num: 34
Candidate Starts for Whiteclaw_64:
(Start: 33 @41136 has 7 MA's), (Start: 34 @41139 has 77 MA's), (35, 41157),

Gene: WinkNick_66 Start: 41760, Stop: 41954, Start Num: 34
Candidate Starts for WinkNick_66:
(Start: 34 @41760 has 77 MA's), (39, 41871),

Gene: Wrigley_73 Start: 47406, Stop: 47615, Start Num: 34
Candidate Starts for Wrigley_73:
(23, 47334), (24, 47337), (Start: 30 @47397 has 1 MA's), (Start: 34 @47406 has 77 MA's), (35, 47424), (36, 47460),

Gene: Yeet412_63 Start: 42069, Stop: 42278, Start Num: 34
Candidate Starts for Yeet412_63:
(Start: 34 @42069 has 77 MA's), (41, 42231),

Gene: Yeezy_71 Start: 45402, Stop: 45611, Start Num: 34
Candidate Starts for Yeezy_71:
(Start: 34 @45402 has 77 MA's), (35, 45420), (40, 45537),

Gene: Yinzer_64 Start: 41139, Stop: 41348, Start Num: 34
Candidate Starts for Yinzer_64:
(Start: 33 @41136 has 7 MA's), (Start: 34 @41139 has 77 MA's), (35, 41157),

Gene: Zameen_67 Start: 44501, Stop: 44758, Start Num: 27
Candidate Starts for Zameen_67:
(11, 44357), (12, 44375), (15, 44408), (17, 44429), (21, 44459), (22, 44465), (26, 44489), (Start: 27 @44501 has 5 MA's), (Start: 34 @44549 has 77 MA's), (40, 44684),

Gene: Zirinka_65 Start: 46211, Stop: 46420, Start Num: 34
Candidate Starts for Zirinka_65:
(Start: 33 @46208 has 7 MA's), (Start: 34 @46211 has 77 MA's), (35, 46229),

Gene: Zodiariah_63 Start: 47246, Stop: 47425, Start Num: 34
Candidate Starts for Zodiariah_63:
(16, 47114), (28, 47225), (Start: 34 @47246 has 77 MA's), (39, 47357),