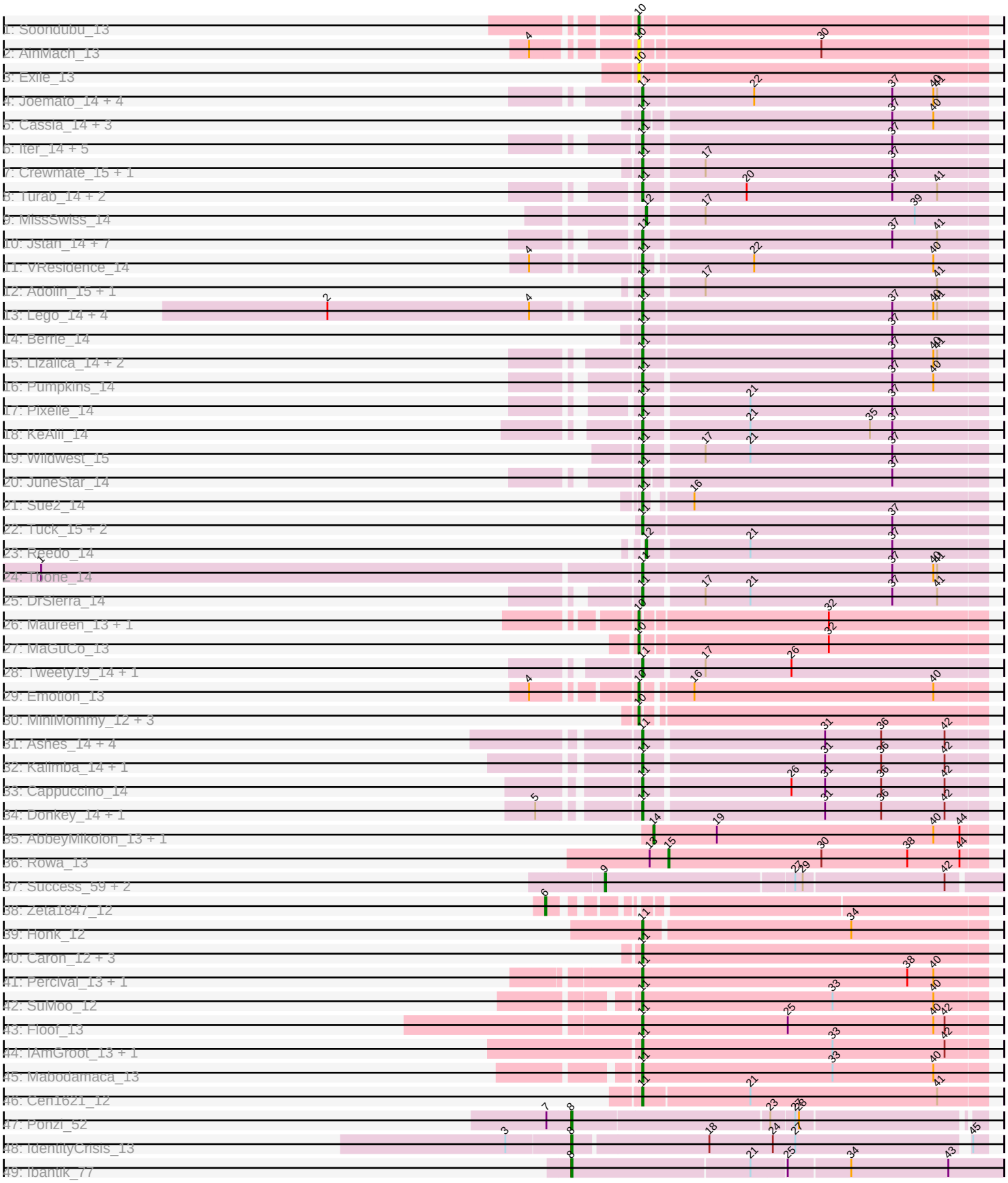
Pham 200104


1: Soondubu_13
2: AhMach_13
3: Exile_13
4: Joemato_14 + 4
5: Cassia_14 + 3
6: Iter_14 + 5
7: Crewmate_15 + 1
8: Turab_14 + 2
9: MissSwiss_14
10: Jstan_14 + 7
11: VResidence_14
12: Adolfin_15 + 1
13: Lego_14 + 4
14: Bernie_14
15: Lizalica_14 + 2
16: Pumpkins_14
17: Pixelle_14
18: KeAlli_14
19: Wildwest_15
20: JuneStar_14
21: Sue2_14
22: Tuck_15 + 2
23: Reedo_14
24: Thone_14
25: DrSierra_14
26: Maureen_13 + 1
27: MaGuCo_13
28: Tweety19_14 + 1
29: Emotion_13
30: MiniMommy_12 + 3
31: Ashes_14 + 4
32: Kalimba_14 + 1
33: Cappuccino_14
34: Donkey_14 + 1
35: AbbeyMikolon_13 + 1
36: Rowa_13
37: Success_59 + 2
38: Zeta1847_12
39: Honk_12
40: Caron_12 + 3
41: Percival_13 + 1
42: SuMoo_12
43: Floof_13
44: IAmGroot_13 + 1
45: Mabodamaca_13
46: Cen1621_12
47: Ponzi_52
48: IdentityCrisis_13
49: Ibantik_77

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 200104 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200104 has 99 members, 16 are drafts.

Phages represented in each track:
- Track 1 : Soondubu_13
- Track 2 : AinMach_13
- Track 3 : Exile_13
- Track 4 : Joemato_14, JohnDoe_14, Simpson_15, Kaylissa_14, Cyan_14
- Track 5 : Cassia_14, TforTroy_14, Shaffner_15, Yang_14
- Track 6 : Iter_14, IttyBittyPiggy_14, Tian_14, Ascela_14, Amyev_14, Phives_15
- Track 7 : Crewmate_15, ObiToo_14
- Track 8 : Turab_14, Adumb2043_14, AEgle_14
- Track 9 : MissSwiss_14
- Track 10 : Jstan_14, Elezi_14, Nitro_14, Eraser_14, London_14, Tallboi_14, Niobe_14, Asa16_14
- Track 11 : VResidence_14
- Track 12 : Adolin_15, DrManhattan_14
- Track 13 : Lego_14, YesChef_14, Tutumahutu_14, Powerpuff_14, AGrandiflora_14
- Track 14 : Berrie_14
- Track 15 : Lizalica_14, Warda_14, Mudpuppy_14
- Track 16 : Pumpkins_14
- Track 17 : Pixelle_14
- Track 18 : KeAlii_14
- Track 19 : Wildwest_15
- Track 20 : JuneStar_14
- Track 21 : Sue2_14
- Track 22 : Tuck_15, Community_15, Janeemi_15
- Track 23 : Reedo_14
- Track 24 : Tbone_14
- Track 25 : DrSierra_14
- Track 26 : Maureen_13, Liebe_13
- Track 27 : MaGuCo_13
- Track 28 : Tweety19_14, Snek_14
- Track 29 : Emotion_13
- Track 30 : MiniMommy_12, VroomVroom_13, JasmineDragon_13, ShakeItOph_13
- Track 31 : Ashes_14, Mysterium_14, SpecialK_14, Halsey_14, Moss_14
- Track 32 : Kalimba_14, Sooty_14
- Track 33 : Cappuccino_14
- Track 34 : Donkey_14, Gambol_14
- Track 35 : AbbeyMikolon_13, Nesbitt_13
- Track 36 : Rowa_13

• Track 37 : Success_59, Spooks_57, Bimmel_55
• Track 38 : Zeta1847_12
• Track 39 : Honk_12
• Track 40 : Caron_12, Barnstormer_12, LadyAstra_13, UtzChips_12
• Track 41 : Percival_13, Gretchen_13
• Track 42 : SuMoo_12
• Track 43 : Floof_13
• Track 44 : IAmGroot_13, GardenState_13
• Track 45 : Mabodamaca_13
• Track 46 : Cen1621_12
• Track 47 : Ponzi_52
• Track 48 : IdentityCrisis_13
• Track 49 : Ibantik_77

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

The start number called the most often in the published annotations is 11, it was called in 66 of the 83 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AEgle_14, AGrandiflora_14, Adolin_15, Adumb2043_14, Amyev_14, Asa16_14, Ascela_14, Ashes_14, Barnstormer_12, Berrie_14, Cappuccino_14, Caron_12, Cassia_14, Cen1621_12, Community_15, Crewmate_15, Cyan_14, Donkey_14, DrManhattan_14, DrSierra_14, Elezi_14, Eraser_14, Floof_13, Gambol_14, GardenState_13, Gretchen_13, Halsey_14, Honk_12, IAmGroot_13, Iter_14, IttyBittyPiggy_14, Janeemi_15, Joemato_14, JohnDoe_14, Jstan_14, JuneStar_14, Kalimba_14, Kaylissa_14, KeAlii_14, LadyAstra_13, Lego_14, Lizalica_14, London_14, Mabodamaca_13, Moss_14, Mudpuppy_14, Mysterium_14, Niobe_14, Nitro_14, ObiToo_14, Percival_13, Phives_15, Pixelle_14, Powerpuff_14, Pumpkins_14, Shaffner_15, Simpson_15, Snek_14, Sooty_14, SpecialK_14, SuMoo_12, Sue2_14, Tallboi_14, Tbone_14, TforTroy_14, Tian_14, Tuck_15, Turab_14, Tutumahutu_14, Tweety19_14, UtzChips_12, VResidence_14, Warda_14, Wildwest_15, Yang_14, YesChef_14,

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

Genes that do not have the "Most Annotated" start:
• AbbeyMikolon_13, AinMach_13, Bimmel_55, Emotion_13, Exile_13, Ibantik_77, IdentityCrisis_13, JasmineDragon_13, Liebe_13, MaGuCo_13, Maureen_13, MiniMommy_12, MissSwiss_14, Nesbitt_13, Ponzi_52, Reedo_14, Rowa_13, ShakeItOph_13, Soondubu_13, Spooks_57, Success_59, VroomVroom_13, Zeta1847_12,

Summary by start number:

Start 6:
• Found in 1 of 99 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 83
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Zeta1847_12 (EH),

Start 8:
• Found in 3 of 99 (3.0%) of genes in pham
• Manual Annotations of this start: 3 of 83
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ibantik_77 (singleton), IdentityCrisis_13 (singleton), Ponzi_52 (singleton),

Start 9:
• Found in 3 of 99 (3.0%) of genes in pham
• Manual Annotations of this start: 1 of 83
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bimmel_55 (BT), Spooks_57 (BT), Success_59 (BT),

Start 10:
• Found in 11 of 99 (11.1%) of genes in pham
• Manual Annotations of this start: 7 of 83
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AinMach_13 (AZ), Emotion_13 (AZ4), Exile_13 (AZ), JasmineDragon_13 (AZ4), Liebe_13 (AZ2), MaGuCo_13 (AZ2), Maureen_13 (AZ2), MiniMommy_12 (AZ4), ShakeItOph_13 (AZ4), Soondubu_13 (AZ), VroomVroom_13 (AZ4),

Start 11:
• Found in 76 of 99 (76.8%) of genes in pham
• Manual Annotations of this start: 66 of 83
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AEgle_14 (AZ1), AGrandiflora_14 (AZ1), Adolin_15 (AZ1), Adumb2043_14 (AZ1), Amyev_14 (AZ1), Asa16_14 (AZ1), Ascela_14 (AZ1), Ashes_14 (AZ5), Barnstormer_12 (EH), Berrie_14 (AZ1), Cappuccino_14 (AZ5), Caron_12 (EH), Cassia_14 (AZ1), Cen1621_12 (EH), Community_15 (AZ1), Crewmate_15 (AZ1), Cyan_14 (AZ1), Donkey_14 (AZ5), DrManhattan_14 (AZ1), DrSierra_14 (AZ1), Elezi_14 (AZ1), Eraser_14 (AZ1), Floof_13 (EH), Gambol_14 (AZ5), GardenState_13 (EH), Gretchen_13 (EH), Halsey_14 (AZ5), Honk_12 (EH), IAmGroot_13 (EH), Iter_14 (AZ1), IttyBittyPiggy_14 (AZ1), Janeemi_15 (AZ1), Joemato_14 (AZ1), JohnDoe_14 (AZ1), Jstan_14 (AZ1), JuneStar_14 (AZ1), Kalimba_14 (AZ5), Kaylissa_14 (AZ1), KeAlii_14 (AZ1), LadyAstra_13 (AZ4), Lego_14 (AZ1), Lizalica_14 (AZ1), London_14 (AZ1), Mabodamaca_13 (EH), Moss_14 (AZ5), Mudpuppy_14 (AZ1), Mysterium_14 (AZ5), Niobe_14 (AZ1), Nitro_14 (AZ1), ObiToo_14 (AZ1), Percival_13 (EH), Phives_15 (AZ1), Pixelle_14 (AZ1), Powerpuff_14 (AZ1), Pumpkins_14 (AZ1), Shaffner_15 (AZ1), Simpson_15 (AZ1), Snek_14 (AZ3), Sooty_14 (AZ5), SpecialK_14 (AZ5), SuMoo_12 (EH), Sue2_14 (AZ1), Tallboi_14 (AZ1), Tbone_14 (AZ1), TforTroy_14 (AZ1), Tian_14 (AZ1), Tuck_15 (AZ1), Turab_14 (AZ1), Tutumahutu_14 (AZ1), Tweety19_14 (AZ3), UtzChips_12 (EH), VResidence_14 (AZ1), Warda_14 (AZ1), Wildwest_15 (AZ1), Yang_14 (AZ1), YesChef_14 (AZ1),

Start 12:
• Found in 2 of 99 (2.0%) of genes in pham
• Manual Annotations of this start: 2 of 83
• Called 100.0% of time when present

• Phage (with cluster) where this start called: MissSwiss_14 (AZ1), Reedo_14 (AZ1),

Start 14:
• Found in 2 of 99 (2.0%) of genes in pham
• Manual Annotations of this start: 2 of 83
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AbbeyMikolon_13 (BL), Nesbitt_13 (BL),

Start 15:
• Found in 1 of 99 (1.0%) of genes in pham
• Manual Annotations of this start: 1 of 83
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rowa_13 (BL),

Summary by clusters:

There are 10 clusters represented in this pham: singleton, AZ, EH, BL, BT, AZ1, AZ2, AZ3, AZ4, AZ5,

Info for manual annotations of cluster AZ:
•Start number 10 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ1:
•Start number 11 was manually annotated 42 times for cluster AZ1.
•Start number 12 was manually annotated 2 times for cluster AZ1.

Info for manual annotations of cluster AZ2:
•Start number 10 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:
•Start number 11 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:
•Start number 10 was manually annotated 3 times for cluster AZ4.

Info for manual annotations of cluster AZ5:
•Start number 11 was manually annotated 10 times for cluster AZ5.

Info for manual annotations of cluster BL:
•Start number 14 was manually annotated 2 times for cluster BL.
•Start number 15 was manually annotated 1 time for cluster BL.

Info for manual annotations of cluster BT:
•Start number 9 was manually annotated 1 time for cluster BT.

Info for manual annotations of cluster EH:
•Start number 6 was manually annotated 1 time for cluster EH.
•Start number 11 was manually annotated 12 times for cluster EH.

Gene Information:

Gene: AEgle_14 Start: 10121, Stop: 10390, Start Num: 11
Candidate Starts for AEgle_14:
(Start: 11 @10121 has 66 MA's), (20, 10199), (37, 10316), (41, 10352),

Gene: AGrandiflora_14 Start: 10110, Stop: 10382, Start Num: 11
Candidate Starts for AGrandiflora_14:
(2, 9879), (4, 10041), (Start: 11 @10110 has 66 MA's), (37, 10308), (40, 10341), (41, 10344),

Gene: AbbeyMikolon_13 Start: 8843, Stop: 9109, Start Num: 14
Candidate Starts for AbbeyMikolon_13:
(Start: 14 @8843 has 2 MA's), (19, 8894), (40, 9068), (44, 9089),

Gene: Adolin_15 Start: 10098, Stop: 10367, Start Num: 11
Candidate Starts for Adolin_15:
(Start: 11 @10098 has 66 MA's), (17, 10143), (41, 10329),

Gene: Adumb2043_14 Start: 10120, Stop: 10389, Start Num: 11
Candidate Starts for Adumb2043_14:
(Start: 11 @10120 has 66 MA's), (20, 10198), (37, 10315), (41, 10351),

Gene: AinMach_13 Start: 9226, Stop: 9495, Start Num: 10
Candidate Starts for AinMach_13:
(4, 9160), (Start: 10 @9226 has 7 MA's), (30, 9364),

Gene: Amyev_14 Start: 10132, Stop: 10401, Start Num: 11
Candidate Starts for Amyev_14:
(Start: 11 @10132 has 66 MA's), (37, 10327),

Gene: Asa16_14 Start: 10090, Stop: 10359, Start Num: 11
Candidate Starts for Asa16_14:
(Start: 11 @10090 has 66 MA's), (37, 10285), (41, 10321),

Gene: Ascela_14 Start: 10125, Stop: 10394, Start Num: 11
Candidate Starts for Ascela_14:
(Start: 11 @10125 has 66 MA's), (37, 10320),

Gene: Ashes_14 Start: 9665, Stop: 9934, Start Num: 11
Candidate Starts for Ashes_14:
(Start: 11 @9665 has 66 MA's), (31, 9806), (36, 9851), (42, 9902),

Gene: Barnstormer_12 Start: 9304, Stop: 9579, Start Num: 11
Candidate Starts for Barnstormer_12:
(Start: 11 @9304 has 66 MA's),

Gene: Berrie_14 Start: 10094, Stop: 10366, Start Num: 11
Candidate Starts for Berrie_14:
(Start: 11 @10094 has 66 MA's), (37, 10292),

Gene: Bimmel_55 Start: 32464, Stop: 32769, Start Num: 9
Candidate Starts for Bimmel_55:
(Start: 9 @32464 has 1 MA's), (27, 32611), (29, 32617), (42, 32728),

Gene: Cappuccino_14 Start: 9570, Stop: 9839, Start Num: 11

Candidate Starts for Cappuccino_14:
(Start: 11 @9570 has 66 MA's), (26, 9684), (31, 9711), (36, 9756), (42, 9807),

Gene: Caron_12 Start: 9346, Stop: 9621, Start Num: 11
Candidate Starts for Caron_12:
(Start: 11 @9346 has 66 MA's),

Gene: Cassia_14 Start: 10208, Stop: 10474, Start Num: 11
Candidate Starts for Cassia_14:
(Start: 11 @10208 has 66 MA's), (37, 10400), (40, 10433),

Gene: Cen1621_12 Start: 8442, Stop: 8714, Start Num: 11
Candidate Starts for Cen1621_12:
(Start: 11 @8442 has 66 MA's), (21, 8526), (41, 8676),

Gene: Community_15 Start: 11176, Stop: 11448, Start Num: 11
Candidate Starts for Community_15:
(Start: 11 @11176 has 66 MA's), (37, 11374),

Gene: Crewmate_15 Start: 10566, Stop: 10835, Start Num: 11
Candidate Starts for Crewmate_15:
(Start: 11 @10566 has 66 MA's), (17, 10611), (37, 10761),

Gene: Cyan_14 Start: 10113, Stop: 10385, Start Num: 11
Candidate Starts for Cyan_14:
(Start: 11 @10113 has 66 MA's), (22, 10200), (37, 10311), (40, 10344), (41, 10347),

Gene: Donkey_14 Start: 9570, Stop: 9839, Start Num: 11
Candidate Starts for Donkey_14:
(5, 9507), (Start: 11 @9570 has 66 MA's), (31, 9711), (36, 9756), (42, 9807),

Gene: DrManhattan_14 Start: 10088, Stop: 10357, Start Num: 11
Candidate Starts for DrManhattan_14:
(Start: 11 @10088 has 66 MA's), (17, 10133), (41, 10319),

Gene: DrSierra_14 Start: 10119, Stop: 10388, Start Num: 11
Candidate Starts for DrSierra_14:
(Start: 11 @10119 has 66 MA's), (17, 10164), (21, 10200), (37, 10314), (41, 10350),

Gene: Elezi_14 Start: 10091, Stop: 10360, Start Num: 11
Candidate Starts for Elezi_14:
(Start: 11 @10091 has 66 MA's), (37, 10286), (41, 10322),

Gene: Emotion_13 Start: 8425, Stop: 8691, Start Num: 10
Candidate Starts for Emotion_13:
(4, 8359), (Start: 10 @8425 has 7 MA's), (16, 8458), (40, 8650),

Gene: Eraser_14 Start: 10091, Stop: 10360, Start Num: 11
Candidate Starts for Eraser_14:
(Start: 11 @10091 has 66 MA's), (37, 10286), (41, 10322),

Gene: Exile_13 Start: 10019, Stop: 10291, Start Num: 10
Candidate Starts for Exile_13:

(Start: 10 @10019 has 7 MA's),

Gene: Floof_13 Start: 8909, Stop: 9184, Start Num: 11
Candidate Starts for Floof_13:
(Start: 11 @8909 has 66 MA's), (25, 9026), (40, 9143), (42, 9152),

Gene: Gambol_14 Start: 9570, Stop: 9839, Start Num: 11
Candidate Starts for Gambol_14:
(5, 9507), (Start: 11 @9570 has 66 MA's), (31, 9711), (36, 9756), (42, 9807),

Gene: GardenState_13 Start: 9573, Stop: 9848, Start Num: 11
Candidate Starts for GardenState_13:
(Start: 11 @9573 has 66 MA's), (33, 9726), (42, 9816),

Gene: Gretchen_13 Start: 10435, Stop: 10710, Start Num: 11
Candidate Starts for Gretchen_13:
(Start: 11 @10435 has 66 MA's), (38, 10648), (40, 10669),

Gene: Halsey_14 Start: 9665, Stop: 9934, Start Num: 11
Candidate Starts for Halsey_14:
(Start: 11 @9665 has 66 MA's), (31, 9806), (36, 9851), (42, 9902),

Gene: Honk_12 Start: 8396, Stop: 8665, Start Num: 11
Candidate Starts for Honk_12:
(Start: 11 @8396 has 66 MA's), (34, 8558),

Gene: IAmGroot_13 Start: 10217, Stop: 10492, Start Num: 11
Candidate Starts for IAmGroot_13:
(Start: 11 @10217 has 66 MA's), (33, 10370), (42, 10460),

Gene: Ibantik_77 Start: 36465, Stop: 36803, Start Num: 8
Candidate Starts for Ibantik_77:
(Start: 8 @36465 has 3 MA's), (21, 36606), (25, 36633), (34, 36681), (43, 36759),

Gene: IdentityCrisis_13 Start: 9415, Stop: 9732, Start Num: 8
Candidate Starts for IdentityCrisis_13:
(3, 9364), (Start: 8 @9415 has 3 MA's), (18, 9520), (24, 9571), (27, 9589), (45, 9721),

Gene: Iter_14 Start: 10125, Stop: 10394, Start Num: 11
Candidate Starts for Iter_14:
(Start: 11 @10125 has 66 MA's), (37, 10320),

Gene: IttyBittyPiggy_14 Start: 10108, Stop: 10371, Start Num: 11
Candidate Starts for IttyBittyPiggy_14:
(Start: 11 @10108 has 66 MA's), (37, 10297),

Gene: Janeemi_15 Start: 11204, Stop: 11476, Start Num: 11
Candidate Starts for Janeemi_15:
(Start: 11 @11204 has 66 MA's), (37, 11402),

Gene: JasmineDragon_13 Start: 8354, Stop: 8620, Start Num: 10
Candidate Starts for JasmineDragon_13:
(Start: 10 @8354 has 7 MA's),

Gene: Joemato_14 Start: 10113, Stop: 10385, Start Num: 11
Candidate Starts for Joemato_14:
(Start: 11 @10113 has 66 MA's), (22, 10200), (37, 10311), (40, 10344), (41, 10347),

Gene: JohnDoe_14 Start: 10108, Stop: 10380, Start Num: 11
Candidate Starts for JohnDoe_14:
(Start: 11 @10108 has 66 MA's), (22, 10195), (37, 10306), (40, 10339), (41, 10342),

Gene: Jstan_14 Start: 10091, Stop: 10360, Start Num: 11
Candidate Starts for Jstan_14:
(Start: 11 @10091 has 66 MA's), (37, 10286), (41, 10322),

Gene: JuneStar_14 Start: 10206, Stop: 10472, Start Num: 11
Candidate Starts for JuneStar_14:
(Start: 11 @10206 has 66 MA's), (37, 10398),

Gene: Kalimba_14 Start: 9571, Stop: 9840, Start Num: 11
Candidate Starts for Kalimba_14:
(Start: 11 @9571 has 66 MA's), (31, 9712), (36, 9757), (42, 9808),

Gene: Kaylissa_14 Start: 10114, Stop: 10386, Start Num: 11
Candidate Starts for Kaylissa_14:
(Start: 11 @10114 has 66 MA's), (22, 10201), (37, 10312), (40, 10345), (41, 10348),

Gene: KeAlii_14 Start: 10157, Stop: 10426, Start Num: 11
Candidate Starts for KeAlii_14:
(Start: 11 @10157 has 66 MA's), (21, 10238), (35, 10334), (37, 10352),

Gene: LadyAstra_13 Start: 8357, Stop: 8623, Start Num: 11
Candidate Starts for LadyAstra_13:
(Start: 11 @8357 has 66 MA's),

Gene: Lego_14 Start: 10113, Stop: 10385, Start Num: 11
Candidate Starts for Lego_14:
(2, 9882), (4, 10044), (Start: 11 @10113 has 66 MA's), (37, 10311), (40, 10344), (41, 10347),

Gene: Liebe_13 Start: 8595, Stop: 8864, Start Num: 10
Candidate Starts for Liebe_13:
(Start: 10 @8595 has 7 MA's), (32, 8739),

Gene: Lizalica_14 Start: 10098, Stop: 10370, Start Num: 11
Candidate Starts for Lizalica_14:
(Start: 11 @10098 has 66 MA's), (37, 10296), (40, 10329), (41, 10332),

Gene: London_14 Start: 10091, Stop: 10360, Start Num: 11
Candidate Starts for London_14:
(Start: 11 @10091 has 66 MA's), (37, 10286), (41, 10322),

Gene: MaGuCo_13 Start: 8529, Stop: 8798, Start Num: 10
Candidate Starts for MaGuCo_13:
(Start: 10 @8529 has 7 MA's), (32, 8673),

Gene: Mabodamaca_13 Start: 9642, Stop: 9917, Start Num: 11
Candidate Starts for Mabodamaca_13:
(Start: 11 @9642 has 66 MA's), (33, 9795), (40, 9876),

Gene: Maureen_13 Start: 8595, Stop: 8864, Start Num: 10
Candidate Starts for Maureen_13:
(Start: 10 @8595 has 7 MA's), (32, 8739),

Gene: MiniMommy_12 Start: 8355, Stop: 8621, Start Num: 10
Candidate Starts for MiniMommy_12:
(Start: 10 @8355 has 7 MA's),

Gene: MissSwiss_14 Start: 10094, Stop: 10360, Start Num: 12
Candidate Starts for MissSwiss_14:
(Start: 12 @10094 has 2 MA's), (17, 10136), (39, 10304),

Gene: Moss_14 Start: 9665, Stop: 9934, Start Num: 11
Candidate Starts for Moss_14:
(Start: 11 @9665 has 66 MA's), (31, 9806), (36, 9851), (42, 9902),

Gene: Mudpuppy_14 Start: 10112, Stop: 10384, Start Num: 11
Candidate Starts for Mudpuppy_14:
(Start: 11 @10112 has 66 MA's), (37, 10310), (40, 10343), (41, 10346),

Gene: Mysterium_14 Start: 9666, Stop: 9935, Start Num: 11
Candidate Starts for Mysterium_14:
(Start: 11 @9666 has 66 MA's), (31, 9807), (36, 9852), (42, 9903),

Gene: Nesbitt_13 Start: 8915, Stop: 9181, Start Num: 14
Candidate Starts for Nesbitt_13:
(Start: 14 @8915 has 2 MA's), (19, 8966), (40, 9140), (44, 9161),

Gene: Niobe_14 Start: 10091, Stop: 10360, Start Num: 11
Candidate Starts for Niobe_14:
(Start: 11 @10091 has 66 MA's), (37, 10286), (41, 10322),

Gene: Nitro_14 Start: 10114, Stop: 10383, Start Num: 11
Candidate Starts for Nitro_14:
(Start: 11 @10114 has 66 MA's), (37, 10309), (41, 10345),

Gene: ObiToo_14 Start: 10303, Stop: 10572, Start Num: 11
Candidate Starts for ObiToo_14:
(Start: 11 @10303 has 66 MA's), (17, 10348), (37, 10498),

Gene: Percival_13 Start: 10269, Stop: 10544, Start Num: 11
Candidate Starts for Percival_13:
(Start: 11 @10269 has 66 MA's), (38, 10482), (40, 10503),

Gene: Phives_15 Start: 11192, Stop: 11461, Start Num: 11
Candidate Starts for Phives_15:
(Start: 11 @11192 has 66 MA's), (37, 11387),

Gene: Pixelle_14 Start: 10135, Stop: 10404, Start Num: 11

Candidate Starts for Pixelle_14:
(Start: 11 @10135 has 66 MA's), (21, 10216), (37, 10330),

Gene: Ponzi_52 Start: 29867, Stop: 30178, Start Num: 8
Candidate Starts for Ponzi_52:
(7, 29849), (Start: 8 @29867 has 3 MA's), (23, 30020), (27, 30038), (28, 30041),

Gene: Powerpuff_14 Start: 10164, Stop: 10436, Start Num: 11
Candidate Starts for Powerpuff_14:
(2, 9933), (4, 10095), (Start: 11 @10164 has 66 MA's), (37, 10362), (40, 10395), (41, 10398),

Gene: Pumpkins_14 Start: 10215, Stop: 10484, Start Num: 11
Candidate Starts for Pumpkins_14:
(Start: 11 @10215 has 66 MA's), (37, 10410), (40, 10443),

Gene: Reedo_14 Start: 10171, Stop: 10437, Start Num: 12
Candidate Starts for Reedo_14:
(Start: 12 @10171 has 2 MA's), (21, 10249), (37, 10363),

Gene: Rowa_13 Start: 8677, Stop: 8931, Start Num: 15
Candidate Starts for Rowa_13:
(13, 8662), (Start: 15 @8677 has 1 MA's), (30, 8800), (38, 8869), (44, 8911),

Gene: Shaffner_15 Start: 10202, Stop: 10471, Start Num: 11
Candidate Starts for Shaffner_15:
(Start: 11 @10202 has 66 MA's), (37, 10397), (40, 10430),

Gene: ShakeItOph_13 Start: 8354, Stop: 8620, Start Num: 10
Candidate Starts for ShakeItOph_13:
(Start: 10 @8354 has 7 MA's),

Gene: Simpson_15 Start: 10113, Stop: 10385, Start Num: 11
Candidate Starts for Simpson_15:
(Start: 11 @10113 has 66 MA's), (22, 10200), (37, 10311), (40, 10344), (41, 10347),

Gene: Snek_14 Start: 9207, Stop: 9476, Start Num: 11
Candidate Starts for Snek_14:
(Start: 11 @9207 has 66 MA's), (17, 9252), (26, 9321),

Gene: Soondubu_13 Start: 10020, Stop: 10292, Start Num: 10
Candidate Starts for Soondubu_13:
(Start: 10 @10020 has 7 MA's),

Gene: Sooty_14 Start: 9572, Stop: 9841, Start Num: 11
Candidate Starts for Sooty_14:
(Start: 11 @9572 has 66 MA's), (31, 9713), (36, 9758), (42, 9809),

Gene: SpecialK_14 Start: 9572, Stop: 9841, Start Num: 11
Candidate Starts for SpecialK_14:
(Start: 11 @9572 has 66 MA's), (31, 9713), (36, 9758), (42, 9809),

Gene: Spooks_57 Start: 33765, Stop: 34070, Start Num: 9
Candidate Starts for Spooks_57:

(Start: 9 @33765 has 1 MA's), (27, 33912), (29, 33918), (42, 34029),

Gene: SuMoo_12 Start: 8599, Stop: 8874, Start Num: 11
Candidate Starts for SuMoo_12:
(Start: 11 @8599 has 66 MA's), (33, 8752), (40, 8833),

Gene: Success_59 Start: 32884, Stop: 33189, Start Num: 9
Candidate Starts for Success_59:
(Start: 9 @32884 has 1 MA's), (27, 33031), (29, 33037), (42, 33148),

Gene: Sue2_14 Start: 10128, Stop: 10391, Start Num: 11
Candidate Starts for Sue2_14:
(Start: 11 @10128 has 66 MA's), (16, 10158),

Gene: Tallboi_14 Start: 10118, Stop: 10387, Start Num: 11
Candidate Starts for Tallboi_14:
(Start: 11 @10118 has 66 MA's), (37, 10313), (41, 10349),

Gene: Tbone_14 Start: 10117, Stop: 10389, Start Num: 11
Candidate Starts for Tbone_14:
(1, 9646), (Start: 11 @10117 has 66 MA's), (37, 10315), (40, 10348), (41, 10351),

Gene: TforTroy_14 Start: 10233, Stop: 10502, Start Num: 11
Candidate Starts for TforTroy_14:
(Start: 11 @10233 has 66 MA's), (37, 10428), (40, 10461),

Gene: Tian_14 Start: 10132, Stop: 10401, Start Num: 11
Candidate Starts for Tian_14:
(Start: 11 @10132 has 66 MA's), (37, 10327),

Gene: Tuck_15 Start: 11156, Stop: 11428, Start Num: 11
Candidate Starts for Tuck_15:
(Start: 11 @11156 has 66 MA's), (37, 11354),

Gene: Turab_14 Start: 10120, Stop: 10389, Start Num: 11
Candidate Starts for Turab_14:
(Start: 11 @10120 has 66 MA's), (20, 10198), (37, 10315), (41, 10351),

Gene: Tutumahutu_14 Start: 10164, Stop: 10436, Start Num: 11
Candidate Starts for Tutumahutu_14:
(2, 9933), (4, 10095), (Start: 11 @10164 has 66 MA's), (37, 10362), (40, 10395), (41, 10398),

Gene: Tweety19_14 Start: 9206, Stop: 9475, Start Num: 11
Candidate Starts for Tweety19_14:
(Start: 11 @9206 has 66 MA's), (17, 9251), (26, 9320),

Gene: UtzChips_12 Start: 9292, Stop: 9567, Start Num: 11
Candidate Starts for UtzChips_12:
(Start: 11 @9292 has 66 MA's),

Gene: VResidence_14 Start: 10200, Stop: 10466, Start Num: 11
Candidate Starts for VResidence_14:
(4, 10125), (Start: 11 @10200 has 66 MA's), (22, 10281), (40, 10425),

Gene: VroomVroom_13 Start: 8366, Stop: 8632, Start Num: 10
Candidate Starts for VroomVroom_13:
(Start: 10 @8366 has 7 MA's),

Gene: Warda_14 Start: 10109, Stop: 10381, Start Num: 11
Candidate Starts for Warda_14:
(Start: 11 @10109 has 66 MA's), (37, 10307), (40, 10340), (41, 10343),

Gene: Wildwest_15 Start: 11039, Stop: 11308, Start Num: 11
Candidate Starts for Wildwest_15:
(Start: 11 @11039 has 66 MA's), (17, 11084), (21, 11120), (37, 11234),

Gene: Yang_14 Start: 10203, Stop: 10472, Start Num: 11
Candidate Starts for Yang_14:
(Start: 11 @10203 has 66 MA's), (37, 10398), (40, 10431),

Gene: YesChef_14 Start: 10164, Stop: 10436, Start Num: 11
Candidate Starts for YesChef_14:
(2, 9933), (4, 10095), (Start: 11 @10164 has 66 MA's), (37, 10362), (40, 10395), (41, 10398),

Gene: Zeta1847_12 Start: 8400, Stop: 8708, Start Num: 6
Candidate Starts for Zeta1847_12:
(Start: 6 @8400 has 1 MA's),