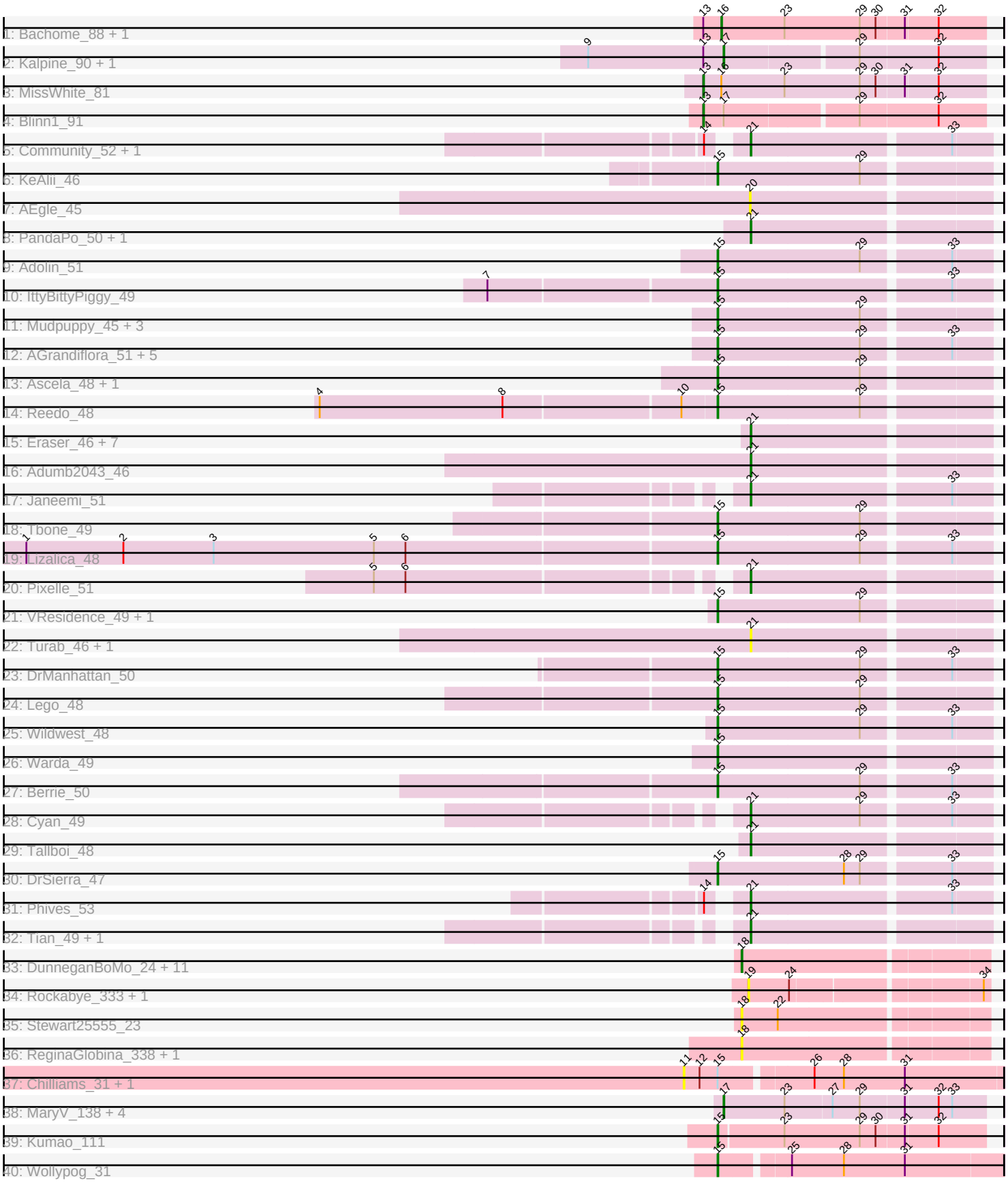
Pham 298363


1: Bachome_88 + 1
2: Kalpine_90 + 1
3: MissWhite_81
4: Blinn1_91
5: Community_52 + 1
6: KeAlii_46
7: AEgle_45
8: PandaPo_50 + 1
9: Adolin_51
10: IttyBittyPiggy_49
11: Mudpuppy_45 + 3
12: AGrandiflora_51 + 5
13: Ascela_48 + 1
14: Reedo_48
15: Eraser_46 + 7
16: Adumb2043_46
17: Janeemi_51
18: Tbone_49
19: Lizalica_48
20: Pixelle_51
21: VResidence_49 + 1
22: Turab_46 + 1
23: DrManhattan_50
24: Lego_48
25: Wildwest_48
26: Warda_49
27: Berrie_50
28: Cyan_49
29: Tallboi_48
30: DrSierra_47
31: Phives_53
32: Tian_49 + 1
33: DunneganBoMo_24 + 11
34: Rockabye_333 + 1
35: Stewart25555_23
36: ReginaGlobina_338 + 1
37: Chilliams_31 + 1
38: MaryV_138 + 4
39: Kumao_111
40: Wollypog_31

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 298363 Report

This analysis was run 06/08/26 on database version 649.

Pham number 298363 has 81 members, 28 are drafts.

Phages represented in each track:
- Track 1 : Bachome_88, Saskia_87
- Track 2 : Kalpine_90, Trixie_87
- Track 3 : MissWhite_81
- Track 4 : Blinn1_91
- Track 5 : Community_52, Tuck_52
- Track 6 : KeAlii_46
- Track 7 : AEgle_45
- Track 8 : PandaPo_50, MissSwiss_50
- Track 9 : Adolin_51
- Track 10 : IttyBittyPiggy_49
- Track 11 : Mudpuppy_45, YesChef_49, Tutumahutu_50, Powerpuff_51
- Track 12 : AGrandiflora_51, Joemato_49, Simpson_51, Flutur_48, Kaylissa_50, JohnDoe_49
- Track 13 : Ascela_48, Iter_48
- Track 14 : Reedo_48
- Track 15 : Eraser_46, Asa16_46, Elezi_46, London_46, Skelbel_47, Subaru_47, Niobe_46, Jstan_48
- Track 16 : Adumb2043_46
- Track 17 : Janeemi_51
- Track 18 : Tbone_49
- Track 19 : Lizalica_48
- Track 20 : Pixelle_51
- Track 21 : VResidence_49, Nitro_48
- Track 22 : Turab_46, Amploria_47
- Track 23 : DrManhattan_50
- Track 24 : Lego_48
- Track 25 : Wildwest_48
- Track 26 : Warda_49
- Track 27 : Berrie_50
- Track 28 : Cyan_49
- Track 29 : Tallboi_48
- Track 30 : DrSierra_47
- Track 31 : Phives_53
- Track 32 : Tian_49, Amyev_50
- Track 33 : DunneganBoMo_24, Artu_25, BooTeria_326, WaddleDee_314, Emmetator_318, KSunshine22_318, DunneganBoMo_319, Artu_312, KSunshine22_26, WaddleDee_23, BooTeria_27, Emmetator_24

• Track 34 : Rockabye_333, Rockabye_34
• Track 35 : Stewart25555_23
• Track 36 : ReginaGlobina_338, ReginaGlobina_27
• Track 37 : Chilliams_31, Chilliams_322
• Track 38 : MaryV_138, Wildcat_152, EniyanLRS_145, Azrael100_145, Cosmo_153
• Track 39 : Kumao_111
• Track 40 : Wollypog_31

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

The start number called the most often in the published annotations is 15, it was called in 25 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AGrandiflora_51, Adolin_51, Ascela_48, Berrie_50, DrManhattan_50, DrSierra_47, Flutur_48, Iter_48, IttyBittyPiggy_49, Joemato_49, JohnDoe_49, Kaylissa_50, KeAlii_46, Kumao_111, Lego_48, Lizalica_48, Mudpuppy_45, Nitro_48, Powerpuff_51, Reedo_48, Simpson_51, Tbone_49, Tutumahutu_50, VResidence_49, Warda_49, Wildwest_48, Wollypog_31, YesChef_49,

Genes that have the "Most Annotated" start but do not call it:
• Chilliams_31, Chilliams_322,

Genes that do not have the "Most Annotated" start:
• AEgle_45, Adumb2043_46, Amploria_47, Amyev_50, Artu_25, Artu_312, Asa16_46, Azrael100_145, Bachome_88, Blinn1_91, BooTeria_27, BooTeria_326, Community_52, Cosmo_153, Cyan_49, DunneganBoMo_24, DunneganBoMo_319, Elezi_46, Emmetator_24, Emmetator_318, EniyanLRS_145, Eraser_46, Janeemi_51, Jstan_48, KSunshine22_26, KSunshine22_318, Kalpine_90, London_46, MaryV_138, MissSwiss_50, MissWhite_81, Niobe_46, PandaPo_50, Phives_53, Pixelle_51, ReginaGlobina_27, ReginaGlobina_338, Rockabye_333, Rockabye_34, Saskia_87, Skelbel_47, Stewart25555_23, Subaru_47, Tallboi_48, Tian_49, Trixie_87, Tuck_52, Turab_46, WaddleDee_23, WaddleDee_314, Wildcat_152,

Summary by start number:

Start 11:
• Found in 2 of 81 (2.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chilliams_31 (FC), Chilliams_322 (FC),

Start 13:
• Found in 6 of 81 (7.4%) of genes in pham
• Manual Annotations of this start: 2 of 53
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Blinn1_91 (A6), MissWhite_81 (A2),

Start 15:
• Found in 30 of 81 (37.0%) of genes in pham

• Manual Annotations of this start: 25 of 53
• Called 93.3% of time when present
• Phage (with cluster) where this start called: AGrandiflora_51 (AZ1), Adolin_51 (AZ1), Ascela_48 (AZ1), Berrie_50 (AZ1), DrManhattan_50 (AZ1), DrSierra_47 (AZ1), Flutur_48 (AZ), Iter_48 (AZ1), IttyBittyPiggy_49 (AZ1), Joemato_49 (AZ1), JohnDoe_49 (AZ1), Kaylissa_50 (AZ1), KeAlii_46 (AZ1), Kumao_111 (singleton), Lego_48 (AZ1), Lizalica_48 (AZ1), Mudpuppy_45 (AZ1), Nitro_48 (AZ1), Powerpuff_51 (AZ1), Reedo_48 (AZ1), Simpson_51 (AZ1), Tbone_49 (AZ1), Tutumahutu_50 (AZ1), VResidence_49 (AZ1), Warda_49 (AZ1), Wildwest_48 (AZ1), Wollypog_31 (singleton), YesChef_49 (AZ1),

Start 16:
• Found in 3 of 81 (3.7%) of genes in pham
• Manual Annotations of this start: 1 of 53
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Bachome_88 (A11), Saskia_87 (A11),

Start 17:
• Found in 8 of 81 (9.9%) of genes in pham
• Manual Annotations of this start: 7 of 53
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Azrael100_145 (V), Cosmo_153 (V), EniyanLRS_145 (V), Kalpine_90 (A2), MaryV_138 (V), Trixie_87 (A2), Wildcat_152 (V),

Start 18:
• Found in 15 of 81 (18.5%) of genes in pham
• Manual Annotations of this start: 4 of 53
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Artu_25 (FC), Artu_312 (FC), BooTeria_27 (FC), BooTeria_326 (FC), DunneganBoMo_24 (FC), DunneganBoMo_319 (FC), Emmetator_24 (FC), Emmetator_318 (FC), KSunshine22_26 (FC), KSunshine22_318 (FC), ReginaGlobina_27 (FC), ReginaGlobina_338 (FC), Stewart25555_23 (FC), WaddleDee_23 (FC), WaddleDee_314 (FC),

Start 19:
• Found in 2 of 81 (2.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rockabye_333 (FC), Rockabye_34 (FC),

Start 20:
• Found in 1 of 81 (1.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AEgle_45 (AZ1),

Start 21:
• Found in 22 of 81 (27.2%) of genes in pham
• Manual Annotations of this start: 14 of 53
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Adumb2043_46 (AZ1), Amploria_47 (AZ1), Amyev_50 (AZ1), Asa16_46 (AZ1), Community_52 (AZ1), Cyan_49 (AZ1), Elezi_46 (AZ1), Eraser_46 (AZ1), Janeemi_51 (AZ1), Jstan_48 (AZ1), London_46 (AZ1), MissSwiss_50 (AZ1), Niobe_46 (AZ1), PandaPo_50 (AZ1), Phives_53 (AZ1), Pixelle_51 (AZ1), Skelbel_47 (AZ1), Subaru_47 (AZ1), Tallboi_48 (AZ1), Tian_49 (AZ1), Tuck_52 (AZ1), Turab_46 (AZ1),

Summary by clusters:

There are 8 clusters represented in this pham: singleton, A11, A6, FC, V, AZ1, AZ, A2,

Info for manual annotations of cluster A11:
•Start number 16 was manually annotated 1 time for cluster A11.

Info for manual annotations of cluster A2:
•Start number 13 was manually annotated 1 time for cluster A2.
•Start number 17 was manually annotated 2 times for cluster A2.

Info for manual annotations of cluster A6:
•Start number 13 was manually annotated 1 time for cluster A6.

Info for manual annotations of cluster AZ1:
•Start number 15 was manually annotated 23 times for cluster AZ1.
•Start number 21 was manually annotated 14 times for cluster AZ1.

Info for manual annotations of cluster FC:
•Start number 18 was manually annotated 4 times for cluster FC.

Info for manual annotations of cluster V:
•Start number 17 was manually annotated 5 times for cluster V.

Gene Information:

Gene: AEgle_45 Start: 33909, Stop: 34211, Start Num: 20
Candidate Starts for AEgle_45:
(20, 33909),

Gene: AGrandiflora_51 Start: 35186, Stop: 35530, Start Num: 15
Candidate Starts for AGrandiflora_51:
(Start: 15 @35186 has 25 MA's), (29, 35372), (33, 35480),

Gene: Adolin_51 Start: 33940, Stop: 34284, Start Num: 15
Candidate Starts for Adolin_51:
(Start: 15 @33940 has 25 MA's), (29, 34126), (33, 34234),

Gene: Adumb2043_46 Start: 33931, Stop: 34233, Start Num: 21
Candidate Starts for Adumb2043_46:
(Start: 21 @33931 has 14 MA's),

Gene: Amploria_47 Start: 34114, Stop: 34416, Start Num: 21
Candidate Starts for Amploria_47:
(Start: 21 @34114 has 14 MA's),

Gene: Amyev_50 Start: 37254, Stop: 37556, Start Num: 21
Candidate Starts for Amyev_50:
(Start: 21 @37254 has 14 MA's),

Gene: Artu_25 Start: 10281, Stop: 10592, Start Num: 18
Candidate Starts for Artu_25:
(Start: 18 @10281 has 4 MA's),

Gene: Artu_312 Start: 189435, Stop: 189746, Start Num: 18
Candidate Starts for Artu_312:
(Start: 18 @189435 has 4 MA's),

Gene: Asa16_46 Start: 35253, Stop: 35555, Start Num: 21
Candidate Starts for Asa16_46:
(Start: 21 @35253 has 14 MA's),

Gene: Ascela_48 Start: 34498, Stop: 34842, Start Num: 15
Candidate Starts for Ascela_48:
(Start: 15 @34498 has 25 MA's), (29, 34684),

Gene: Azrael100_145 Start: 69859, Stop: 69524, Start Num: 17
Candidate Starts for Azrael100_145:
(Start: 17 @69859 has 7 MA's), (23, 69778), (27, 69721), (29, 69685), (31, 69628), (32, 69586), (33, 69568),

Gene: Bachome_88 Start: 47603, Stop: 47259, Start Num: 16
Candidate Starts for Bachome_88:
(Start: 13 @47627 has 2 MA's), (Start: 16 @47603 has 1 MA's), (23, 47519), (29, 47420), (30, 47399), (31, 47363), (32, 47321),

Gene: Berrie_50 Start: 35600, Stop: 35944, Start Num: 15
Candidate Starts for Berrie_50:
(Start: 15 @35600 has 25 MA's), (29, 35786), (33, 35894),

Gene: Blinn1_91 Start: 47767, Stop: 47411, Start Num: 13
Candidate Starts for Blinn1_91:
(Start: 13 @47767 has 2 MA's), (Start: 17 @47743 has 7 MA's), (29, 47575), (32, 47473),

Gene: BooTeria_326 Start: 189730, Stop: 190041, Start Num: 18
Candidate Starts for BooTeria_326:
(Start: 18 @189730 has 4 MA's),

Gene: BooTeria_27 Start: 10821, Stop: 11132, Start Num: 18
Candidate Starts for BooTeria_27:
(Start: 18 @10821 has 4 MA's),

Gene: Chilliams_31 Start: 14259, Stop: 14663, Start Num: 11
Candidate Starts for Chilliams_31:
(11, 14259), (12, 14280), (Start: 15 @14304 has 25 MA's), (26, 14415), (28, 14454), (31, 14535),

Gene: Chilliams_322 Start: 186993, Stop: 187397, Start Num: 11
Candidate Starts for Chilliams_322:
(11, 186993), (12, 187014), (Start: 15 @187038 has 25 MA's), (26, 187149), (28, 187188), (31, 187269),

Gene: Community_52 Start: 36974, Stop: 37276, Start Num: 21
Candidate Starts for Community_52:
(14, 36938), (Start: 21 @36974 has 14 MA's), (33, 37226),

Gene: Cosmo_153 Start: 70023, Stop: 69688, Start Num: 17
Candidate Starts for Cosmo_153:
(Start: 17 @70023 has 7 MA's), (23, 69942), (27, 69885), (29, 69849), (31, 69792), (32, 69750), (33, 69732),

Gene: Cyan_49 Start: 34784, Stop: 35086, Start Num: 21
Candidate Starts for Cyan_49:
(Start: 21 @34784 has 14 MA's), (29, 34928), (33, 35036),

Gene: DrManhattan_50 Start: 33507, Stop: 33851, Start Num: 15
Candidate Starts for DrManhattan_50:
(Start: 15 @33507 has 25 MA's), (29, 33693), (33, 33801),

Gene: DrSierra_47 Start: 33655, Stop: 33999, Start Num: 15
Candidate Starts for DrSierra_47:
(Start: 15 @33655 has 25 MA's), (28, 33820), (29, 33841), (33, 33949),

Gene: DunneganBoMo_24 Start: 10807, Stop: 11118, Start Num: 18
Candidate Starts for DunneganBoMo_24:
(Start: 18 @10807 has 4 MA's),

Gene: DunneganBoMo_319 Start: 190219, Stop: 190530, Start Num: 18
Candidate Starts for DunneganBoMo_319:
(Start: 18 @190219 has 4 MA's),

Gene: Elezi_46 Start: 35250, Stop: 35552, Start Num: 21
Candidate Starts for Elezi_46:
(Start: 21 @35250 has 14 MA's),

Gene: Emmetator_318 Start: 188956, Stop: 189267, Start Num: 18
Candidate Starts for Emmetator_318:
(Start: 18 @188956 has 4 MA's),

Gene: Emmetator_24 Start: 10656, Stop: 10967, Start Num: 18
Candidate Starts for Emmetator_24:
(Start: 18 @10656 has 4 MA's),

Gene: EniyanLRS_145 Start: 70352, Stop: 70017, Start Num: 17
Candidate Starts for EniyanLRS_145:
(Start: 17 @70352 has 7 MA's), (23, 70271), (27, 70214), (29, 70178), (31, 70121), (32, 70079), (33, 70061),

Gene: Eraser_46 Start: 35260, Stop: 35562, Start Num: 21

Candidate Starts for Eraser_46:
(Start: 21 @35260 has 14 MA's),

Gene: Flutur_48 Start: 35040, Stop: 35384, Start Num: 15
Candidate Starts for Flutur_48:
(Start: 15 @35040 has 25 MA's), (29, 35226), (33, 35334),

Gene: Iter_48 Start: 34492, Stop: 34836, Start Num: 15
Candidate Starts for Iter_48:
(Start: 15 @34492 has 25 MA's), (29, 34678),

Gene: IttyBittyPiggy_49 Start: 34220, Stop: 34564, Start Num: 15
Candidate Starts for IttyBittyPiggy_49:
(7, 33926), (Start: 15 @34220 has 25 MA's), (33, 34514),

Gene: Janeemi_51 Start: 36499, Stop: 36801, Start Num: 21
Candidate Starts for Janeemi_51:
(Start: 21 @36499 has 14 MA's), (33, 36751),

Gene: Joemato_49 Start: 34811, Stop: 35155, Start Num: 15
Candidate Starts for Joemato_49:
(Start: 15 @34811 has 25 MA's), (29, 34997), (33, 35105),

Gene: JohnDoe_49 Start: 34807, Stop: 35151, Start Num: 15
Candidate Starts for JohnDoe_49:
(Start: 15 @34807 has 25 MA's), (29, 34993), (33, 35101),

Gene: Jstan_48 Start: 35255, Stop: 35557, Start Num: 21
Candidate Starts for Jstan_48:
(Start: 21 @35255 has 14 MA's),

Gene: KSunshine22_318 Start: 188079, Stop: 188390, Start Num: 18
Candidate Starts for KSunshine22_318:
(Start: 18 @188079 has 4 MA's),

Gene: KSunshine22_26 Start: 11178, Stop: 11489, Start Num: 18
Candidate Starts for KSunshine22_26:
(Start: 18 @11178 has 4 MA's),

Gene: Kalpine_90 Start: 49691, Stop: 49359, Start Num: 17
Candidate Starts for Kalpine_90:
(9, 49868), (Start: 13 @49715 has 2 MA's), (Start: 17 @49691 has 7 MA's), (29, 49523), (32, 49421),

Gene: Kaylissa_50 Start: 35202, Stop: 35546, Start Num: 15
Candidate Starts for Kaylissa_50:
(Start: 15 @35202 has 25 MA's), (29, 35388), (33, 35496),

Gene: KeAlii_46 Start: 34316, Stop: 34660, Start Num: 15
Candidate Starts for KeAlii_46:
(Start: 15 @34316 has 25 MA's), (29, 34502),

Gene: Kumao_111 Start: 66431, Stop: 66087, Start Num: 15
Candidate Starts for Kumao_111:

(Start: 15 @66431 has 25 MA's), (23, 66347), (29, 66248), (30, 66227), (31, 66191), (32, 66149),

Gene: Lego_48 Start: 34521, Stop: 34865, Start Num: 15
Candidate Starts for Lego_48:
(Start: 15 @34521 has 25 MA's), (29, 34707),

Gene: Lizalica_48 Start: 34265, Stop: 34609, Start Num: 15
Candidate Starts for Lizalica_48:
(1, 33359), (2, 33488), (3, 33608), (5, 33821), (6, 33863), (Start: 15 @34265 has 25 MA's), (29, 34451), (33, 34559),

Gene: London_46 Start: 35251, Stop: 35553, Start Num: 21
Candidate Starts for London_46:
(Start: 21 @35251 has 14 MA's),

Gene: MaryV_138 Start: 68201, Stop: 67863, Start Num: 17
Candidate Starts for MaryV_138:
(Start: 17 @68201 has 7 MA's), (23, 68120), (27, 68060), (29, 68024), (31, 67967), (32, 67925), (33, 67907),

Gene: MissSwiss_50 Start: 33782, Stop: 34084, Start Num: 21
Candidate Starts for MissSwiss_50:
(Start: 21 @33782 has 14 MA's),

Gene: MissWhite_81 Start: 45575, Stop: 45207, Start Num: 13
Candidate Starts for MissWhite_81:
(Start: 13 @45575 has 2 MA's), (Start: 16 @45551 has 1 MA's), (23, 45467), (29, 45368), (30, 45347), (31, 45311), (32, 45269),

Gene: Mudpuppy_45 Start: 34463, Stop: 34807, Start Num: 15
Candidate Starts for Mudpuppy_45:
(Start: 15 @34463 has 25 MA's), (29, 34649),

Gene: Niobe_46 Start: 35254, Stop: 35556, Start Num: 21
Candidate Starts for Niobe_46:
(Start: 21 @35254 has 14 MA's),

Gene: Nitro_48 Start: 35561, Stop: 35905, Start Num: 15
Candidate Starts for Nitro_48:
(Start: 15 @35561 has 25 MA's), (29, 35747),

Gene: PandaPo_50 Start: 33790, Stop: 34092, Start Num: 21
Candidate Starts for PandaPo_50:
(Start: 21 @33790 has 14 MA's),

Gene: Phives_53 Start: 36999, Stop: 37301, Start Num: 21
Candidate Starts for Phives_53:
(14, 36963), (Start: 21 @36999 has 14 MA's), (33, 37251),

Gene: Pixelle_51 Start: 37599, Stop: 37901, Start Num: 21
Candidate Starts for Pixelle_51:
(5, 37155), (6, 37197), (Start: 21 @37599 has 14 MA's),

Gene: Powerpuff_51 Start: 35909, Stop: 36253, Start Num: 15
Candidate Starts for Powerpuff_51:
(Start: 15 @35909 has 25 MA's), (29, 36095),

Gene: Reedo_48 Start: 33265, Stop: 33609, Start Num: 15
Candidate Starts for Reedo_48:
(4, 32752), (8, 32995), (10, 33220), (Start: 15 @33265 has 25 MA's), (29, 33451),

Gene: ReginaGlobina_338 Start: 189582, Stop: 189893, Start Num: 18
Candidate Starts for ReginaGlobina_338:
(Start: 18 @189582 has 4 MA's),

Gene: ReginaGlobina_27 Start: 12135, Stop: 12446, Start Num: 18
Candidate Starts for ReginaGlobina_27:
(Start: 18 @12135 has 4 MA's),

Gene: Rockabye_333 Start: 187549, Stop: 187842, Start Num: 19
Candidate Starts for Rockabye_333:
(19, 187549), (24, 187603), (34, 187834),

Gene: Rockabye_34 Start: 14936, Stop: 15229, Start Num: 19
Candidate Starts for Rockabye_34:
(19, 14936), (24, 14990), (34, 15221),

Gene: Saskia_87 Start: 47617, Stop: 47273, Start Num: 16
Candidate Starts for Saskia_87:
(Start: 13 @47641 has 2 MA's), (Start: 16 @47617 has 1 MA's), (23, 47533), (29, 47434), (30, 47413), (31, 47377), (32, 47335),

Gene: Simpson_51 Start: 34815, Stop: 35159, Start Num: 15
Candidate Starts for Simpson_51:
(Start: 15 @34815 has 25 MA's), (29, 35001), (33, 35109),

Gene: Skelbel_47 Start: 35254, Stop: 35556, Start Num: 21
Candidate Starts for Skelbel_47:
(Start: 21 @35254 has 14 MA's),

Gene: Stewart25555_23 Start: 10418, Stop: 10729, Start Num: 18
Candidate Starts for Stewart25555_23:
(Start: 18 @10418 has 4 MA's), (22, 10466),

Gene: Subaru_47 Start: 35250, Stop: 35552, Start Num: 21
Candidate Starts for Subaru_47:
(Start: 21 @35250 has 14 MA's),

Gene: Tallboi_48 Start: 35843, Stop: 36145, Start Num: 21
Candidate Starts for Tallboi_48:
(Start: 21 @35843 has 14 MA's),

Gene: Tbone_49 Start: 35369, Stop: 35713, Start Num: 15
Candidate Starts for Tbone_49:
(Start: 15 @35369 has 25 MA's), (29, 35555),

Gene: Tian_49 Start: 37254, Stop: 37556, Start Num: 21
Candidate Starts for Tian_49:
(Start: 21 @37254 has 14 MA's),

Gene: Trixie_87 Start: 49773, Stop: 49441, Start Num: 17
Candidate Starts for Trixie_87:
(9, 49950), (Start: 13 @49797 has 2 MA's), (Start: 17 @49773 has 7 MA's), (29, 49605), (32, 49503),

Gene: Tuck_52 Start: 36882, Stop: 37184, Start Num: 21
Candidate Starts for Tuck_52:
(14, 36846), (Start: 21 @36882 has 14 MA's), (33, 37134),

Gene: Turab_46 Start: 33951, Stop: 34253, Start Num: 21
Candidate Starts for Turab_46:
(Start: 21 @33951 has 14 MA's),

Gene: Tutumahutu_50 Start: 34792, Stop: 35136, Start Num: 15
Candidate Starts for Tutumahutu_50:
(Start: 15 @34792 has 25 MA's), (29, 34978),

Gene: VResidence_49 Start: 34157, Stop: 34501, Start Num: 15
Candidate Starts for VResidence_49:
(Start: 15 @34157 has 25 MA's), (29, 34343),

Gene: WaddleDee_314 Start: 188748, Stop: 189059, Start Num: 18
Candidate Starts for WaddleDee_314:
(Start: 18 @188748 has 4 MA's),

Gene: WaddleDee_23 Start: 10553, Stop: 10864, Start Num: 18
Candidate Starts for WaddleDee_23:
(Start: 18 @10553 has 4 MA's),

Gene: Warda_49 Start: 34856, Stop: 35200, Start Num: 15
Candidate Starts for Warda_49:
(Start: 15 @34856 has 25 MA's),

Gene: Wildcat_152 Start: 70094, Stop: 69756, Start Num: 17
Candidate Starts for Wildcat_152:
(Start: 17 @70094 has 7 MA's), (23, 70013), (27, 69953), (29, 69917), (31, 69860), (32, 69818), (33, 69800),

Gene: Wildwest_48 Start: 34842, Stop: 35186, Start Num: 15
Candidate Starts for Wildwest_48:
(Start: 15 @34842 has 25 MA's), (29, 35028), (33, 35136),

Gene: Wollypog_31 Start: 26104, Stop: 26463, Start Num: 15
Candidate Starts for Wollypog_31:
(Start: 15 @26104 has 25 MA's), (25, 26185), (28, 26254), (31, 26335),

Gene: YesChef_49 Start: 34768, Stop: 35112, Start Num: 15
Candidate Starts for YesChef_49:
(Start: 15 @34768 has 25 MA's), (29, 34954),