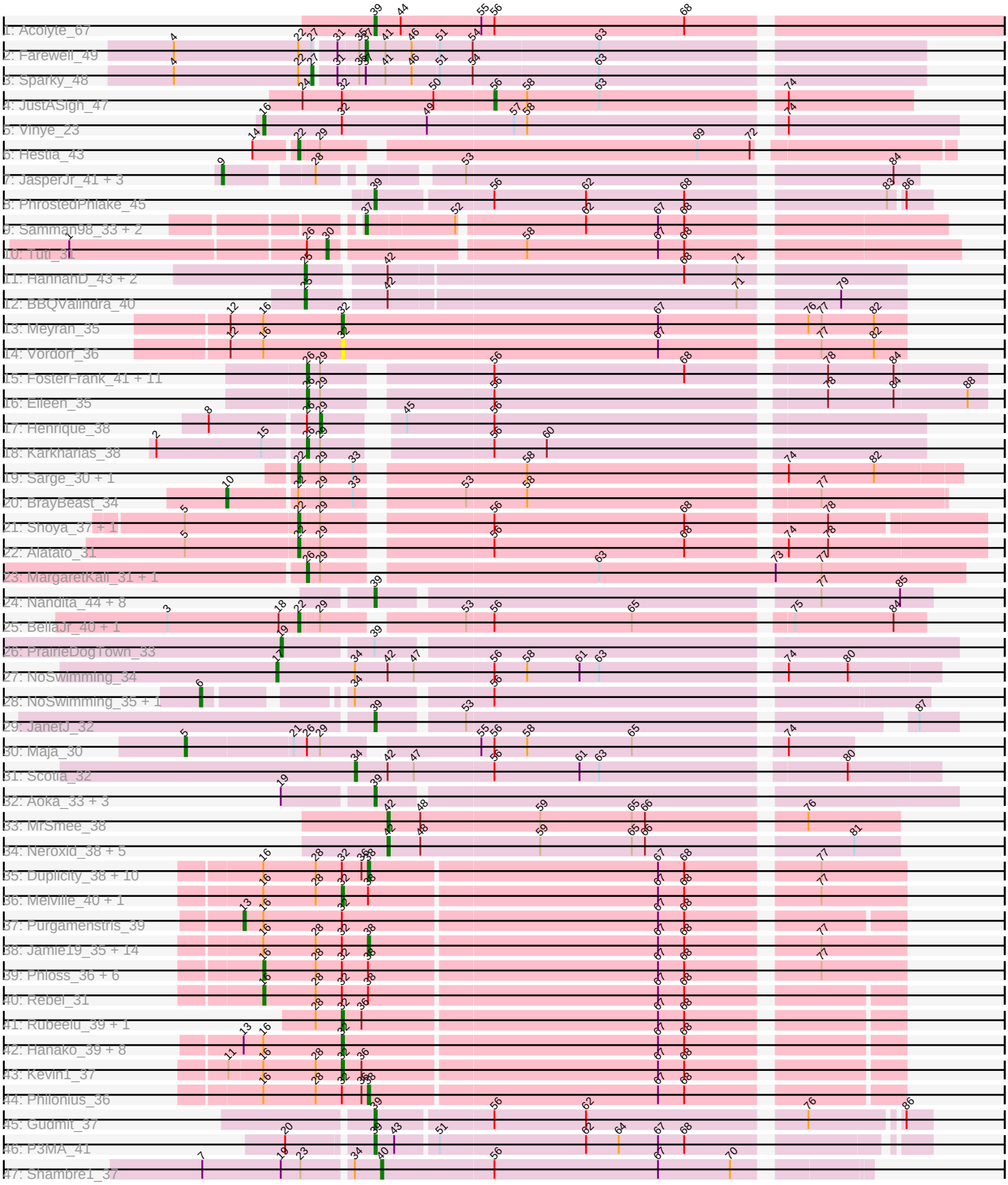
Pham 330611


1: Acolyte_67
2: Farewell_49
3: Sparky_48
4: JustASigh_47
5: Vinye_23
6: Hestia_43
7: JasperJr_41 + 3
8: PhrostedPhlake_45
9: Samman98_33 + 2
10: Tuti_31
11: HannahD_43 + 2
12: BBQValindra_40
13: Meyran_35
14: Vordori_36
15: FosterFrank_41 + 11
16: Eileen_35
17: Henrique_38
18: Karkharias_38
19: Sarge_30 + 1
20: BrayBeast_34
21: Shoya_37 + 1
22: Alatato_31
23: MargaretKail_31 + 1
24: Nandita_44 + 8
25: BellaJr_40 + 1
26: PrairieDogTown_33
27: NoSwimming_34
28: NoSwimming_35 + 1
29: JanetJ_32
30: Maja_30
31: Scotia_32
32: Aoka_33 + 3
33: MrSmee_38
34: Neroxid_38 + 5
35: Duplicity_38 + 10
36: Melville_40 + 1
37: Purgamenstris_39
38: Jamie19_35 + 14
39: Phloss_36 + 6
40: Rebel_31
41: Rubeelu_39 + 1
42: Hanako_39 + 8
43: Kevin1_37
44: Philonius_36
45: Gudmit_37
46: P3MA_41
47: Shambre1_37

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 330611 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330611 has 126 members, 17 are drafts.

Phages represented in each track:
- Track 1 : Acolyte_67
- Track 2 : Farewell_49
- Track 3 : Sparky_48
- Track 4 : JustASigh_47
- Track 5 : Vinye_23
- Track 6 : Hestia_43
- Track 7 : JasperJr_41, Walrus_42, Hitter_44, Guacamole_41
- Track 8 : PhrostedPhlake_45
- Track 9 : Samman98_33, Dolores_34, WinkNick_35
- Track 10 : Tuti_31
- Track 11 : HannahD_43, NaLuna_42, GEazy_45
- Track 12 : BBQValindra_40
- Track 13 : Meyran_35
- Track 14 : Vordorf_36
- Track 15 : FosterFrank_41, NidoQ_34, ChuckDuck_40, KayMoney_39, LittleRon_37, LilyBell_39, Judy_40, Constance_39, Peas_36, GlobiWarming_39, RootBeer_30, Bridgette_39
- Track 16 : Eileen_35
- Track 17 : Henrique_38
- Track 18 : Karkharias_38
- Track 19 : Sarge_30, Bauer_41
- Track 20 : BrayBeast_34
- Track 21 : Shoya_37, Rooter_33
- Track 22 : Alatato_31
- Track 23 : MargaretKali_31, Kumotta_31
- Track 24 : Nandita_44, Donatella_42, Saintcarr_43, Ryan_44, BigSherm_43, Toodles_43, Lenoxika_44, Yonex_44, ToastyOats_45
- Track 25 : BellaJr_40, BlackSpider_37
- Track 26 : PrairieDogTown_33
- Track 27 : NoSwimming_34
- Track 28 : NoSwimming_35, Scotia_33
- Track 29 : JanetJ_32
- Track 30 : Maja_30
- Track 31 : Scotia_32
- Track 32 : Aoka_33, EvenBluerMoon_32, Hereford_33, Morrey_48
- Track 33 : MrSmee_38
- Track 34 : Neroxid_38, Skyerus_34, Pitbull_38, Skitty_36, Hum25_39, Raya_38

• Track 35 : Duplicity_38, Tapioca_39, Tessdabest_39, Cubone_38, Silvy_36, Charlie_36, Gex_38, Aggie_36, Journey_36, Scitech_35, Xeno_35
• Track 36 : Melville_40, Shweta_35
• Track 37 : Purgamenstris_39
• Track 38 : Jamie19_35, Phrann_39, Parmesanjohn_38, Panchino_34, Smurph_38, EGUnicorn_36, Silvafighter_39, Magsby_38, SpongeBob_35, MichelleMyBell_36, Pipsqueaks_38, SkinnyPete_33, Fulbright_37, Xerxes_38, Snekmaggedon_35
• Track 39 : Phloss_36, Andies_35, Chewbacca_39, Tortoise12_36, Schnauzer_38, Bosection6_36, Carcharodon_38
• Track 40 : Rebel_31
• Track 41 : Rubeelu_39, Butters_39
• Track 42 : Hanako_39, PhancyPhin_39, BabeRuth_40, Impisi_41, Redi_39, ShrimpFriedEgg_39, Spinach_39, Nenae_39, Raymond7_33
• Track 43 : Kevin1_37
• Track 44 : Philonius_36
• Track 45 : Gudmit_37
• Track 46 : P3MA_41
• Track 47 : Shambre1_37

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

The start number called the most often in the published annotations is 38, it was called in 24 of the 109 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aggie_36, Charlie_36, Cubone_38, Duplicity_38, EGUnicorn_36, Fulbright_37, Gex_38, Jamie19_35, Journey_36, Magsby_38, MichelleMyBell_36, Panchino_34, Parmesanjohn_38, Philonius_36, Phrann_39, Pipsqueaks_38, Scitech_35, Silvafighter_39, Silvy_36, SkinnyPete_33, Smurph_38, Snekmaggedon_35, SpongeBob_35, Tapioca_39, Tessdabest_39, Xeno_35, Xerxes_38,

Genes that have the "Most Annotated" start but do not call it:
• Andies_35, Bosection6_36, Carcharodon_38, Chewbacca_39, Melville_40, Phloss_36, Rebel_31, Schnauzer_38, Shweta_35, Tortoise12_36,

Genes that do not have the "Most Annotated" start:
• Acolyte_67, Alatato_31, Aoka_33, BBQValindra_40, BabeRuth_40, Bauer_41, BellaJr_40, BigSherm_43, BlackSpider_37, BrayBeast_34, Bridgette_39, Butters_39, ChuckDuck_40, Constance_39, Dolores_34, Donatella_42, Eileen_35, EvenBluerMoon_32, Farewell_49, FosterFrank_41, GEazy_45, GlobiWarming_39, Guacamole_41, Gudmit_37, Hanako_39, HannahD_43, Henrique_38, Hereford_33, Hestia_43, Hitter_44, Hum25_39, Impisi_41, JanetJ_32, JasperJr_41, Judy_40, JustASigh_47, Karkharias_38, KayMoney_39, Kevin1_37, Kumotta_31, Lenoxika_44, LilyBell_39, LittleRon_37, Maja_30, MargaretKali_31, Meyran_35, Morrey_48, MrSmee_38, NaLuna_42, Nandita_44, Nenae_39, Neroxid_38, NidoQ_34, NoSwimming_34, NoSwimming_35, P3MA_41, Peas_36, PhancyPhin_39, PhrostedPhlake_45, Pitbull_38, PrairieDogTown_33, Purgamenstris_39, Raya_38, Raymond7_33, Redi_39, RootBeer_30, Rooter_33, Rubeelu_39, Ryan_44, Saintcarr_43, Samman98_33, Sarge_30, Scotia_32, Scotia_33, Shambre1_37, Shoya_37, ShrimpFriedEgg_39, Skitty_36, Skyerus_34, Sparky_48, Spinach_39,

ToastyOats_45, Toodles_43, Tuti_31, Vinye_23, Vordorf_36, Walrus_42, WinkNick_35, Yonex_44,

Summary by start number:

Start 5:
• Found in 4 of 126 (3.2%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Maja_30 (FO),

Start 6:
• Found in 2 of 126 (1.6%) of genes in pham
• Manual Annotations of this start: 2 of 109
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NoSwimming_35 (FO), Scotia_33 (FO),

Start 9:
• Found in 4 of 126 (3.2%) of genes in pham
• Manual Annotations of this start: 4 of 109
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Guacamole_41 (CV), Hitter_44 (CV), JasperJr_41 (CV), Walrus_42 (CV),

Start 10:
• Found in 1 of 126 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BrayBeast_34 (FB),

Start 13:
• Found in 10 of 126 (7.9%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Purgamenstris_39 (N),

Start 16:
• Found in 51 of 126 (40.5%) of genes in pham
• Manual Annotations of this start: 9 of 109
• Called 17.6% of time when present
• Phage (with cluster) where this start called: Andies_35 (N), Bosection6_36 (N), Carcharodon_38 (N), Chewbacca_39 (N), Phloss_36 (N), Rebel_31 (N), Schnauzer_38 (N), Tortoise12_36 (N), Vinye_23 (AN),

Start 17:
• Found in 1 of 126 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NoSwimming_34 (FO),

Start 19:
• Found in 6 of 126 (4.8%) of genes in pham
• Manual Annotations of this start: 1 of 109

• Called 16.7% of time when present
• Phage (with cluster) where this start called: PrairieDogTown_33 (FO),

Start 22:
• Found in 11 of 126 (8.7%) of genes in pham
• Manual Annotations of this start: 7 of 109
• Called 72.7% of time when present
• Phage (with cluster) where this start called: Alatato_31 (FB), Bauer_41 (FN), BellaJr_40 (FN), BlackSpider_37 (FN), Hestia_43 (AY), Rooter_33 (FB), Sarge_30 (FB), Shoya_37 (FB),

Start 25:
• Found in 4 of 126 (3.2%) of genes in pham
• Manual Annotations of this start: 3 of 109
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BBQValindra_40 (DB), GEazy_45 (DB), HannahD_43 (DB), NaLuna_42 (DB),

Start 26:
• Found in 19 of 126 (15.1%) of genes in pham
• Manual Annotations of this start: 13 of 109
• Called 84.2% of time when present
• Phage (with cluster) where this start called: Bridgette_39 (FA), ChuckDuck_40 (FA), Constance_39 (FA), Eileen_35 (FA), FosterFrank_41 (FA), GlobiWarming_39 (FA), Judy_40 (FA), Karkharias_38 (FA), KayMoney_39 (FA), Kumotta_31 (FB), LilyBell_39 (FA), LittleRon_37 (FA), MargaretKali_31 (FB), NidoQ_34 (FA), Peas_36 (FA), RootBeer_30 (FA),

Start 27:
• Found in 2 of 126 (1.6%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Sparky_48 (AF),

Start 29:
• Found in 27 of 126 (21.4%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 3.7% of time when present
• Phage (with cluster) where this start called: Henrique_38 (FA),

Start 30:
• Found in 1 of 126 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Tuti_31 (CZ4),

Start 32:
• Found in 54 of 126 (42.9%) of genes in pham
• Manual Annotations of this start: 14 of 109
• Called 29.6% of time when present
• Phage (with cluster) where this start called: BabeRuth_40 (N), Butters_39 (N), Hanako_39 (N), Impisi_41 (N), Kevin1_37 (N), Melville_40 (N), Meyran_35 (DT), Nenae_39 (N), PhancyPhin_39 (N), Raymond7_33 (N), Redi_39 (N), Rubeelu_39 (N),

ShrimpFriedEgg_39 (N), Shweta_35 (N), Spinach_39 (N), Vordorf_36 (DT),

Start 34:
• Found in 5 of 126 (4.0%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Scotia_32 (FO),

Start 37:
• Found in 5 of 126 (4.0%) of genes in pham
• Manual Annotations of this start: 4 of 109
• Called 80.0% of time when present
• Phage (with cluster) where this start called: Dolores_34 (CZ4), Farewell_49 (AF), Samman98_33 (CZ4), WinkNick_35 (CZ4),

Start 38:
• Found in 37 of 126 (29.4%) of genes in pham
• Manual Annotations of this start: 24 of 109
• Called 73.0% of time when present
• Phage (with cluster) where this start called: Aggie_36 (N), Charlie_36 (N), Cubone_38 (N), Duplicity_38 (N), EGUnicorn_36 (N), Fulbright_37 (N), Gex_38 (N), Jamie19_35 (N), Journey_36 (N), Magsby_38 (N), MichelleMyBell_36 (N), Panchino_34 (N), Parmesanjohn_38 (N), Philonius_36 (N), Phrann_39 (N), Pipsqueaks_38 (N), Scitech_35 (N), Silvafighter_39 (N), Silvy_36 (N), SkinnyPete_33 (N), Smurph_38 (N), Snekmaggedon_35 (N), SpongeBob_35 (N), Tapioca_39 (N), Tessdabest_39 (N), Xeno_35 (N), Xerxes_38 (N),

Start 39:
• Found in 19 of 126 (15.1%) of genes in pham
• Manual Annotations of this start: 14 of 109
• Called 94.7% of time when present
• Phage (with cluster) where this start called: Acolyte_67 (A2), Aoka_33 (FO), BigSherm_43 (FF), Donatella_42 (FF), EvenBluerMoon_32 (FO), Gudmit_37 (singleton), Hereford_33 (FO), JanetJ_32 (FO), Lenoxika_44 (FF), Morrey_48 (FO), Nandita_44 (FF), P3MA_41 (singleton), PhrostedPhlake_45 (CV), Ryan_44 (FF), Saintcarr_43 (FF), ToastyOats_45 (FF), Toodles_43 (FF), Yonex_44 (FF),

Start 40:
• Found in 1 of 126 (0.8%) of genes in pham
• Manual Annotations of this start: 1 of 109
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Shambre1_37 (singleton),

Start 42:
• Found in 13 of 126 (10.3%) of genes in pham
• Manual Annotations of this start: 4 of 109
• Called 53.8% of time when present
• Phage (with cluster) where this start called: Hum25_39 (FQ1), MrSmee_38 (FQ1), Neroxid_38 (FQ2), Pitbull_38 (FQ1), Raya_38 (FQ2), Skitty_36 (FQ1), Skyerus_34 (FQ2),

Start 56:
• Found in 30 of 126 (23.8%) of genes in pham

• Manual Annotations of this start: 1 of 109
• Called 3.3% of time when present
• Phage (with cluster) where this start called: JustASigh_47 (AH),

Summary by clusters:

There are 18 clusters represented in this pham: singleton, AN, AF, AH, DB, CZ4, N, FA, FB, A2, AY, FF, FQ2, DT, FQ1, CV, FN, FO,

Info for manual annotations of cluster A2:
•Start number 39 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster AF:
•Start number 27 was manually annotated 1 time for cluster AF.
•Start number 37 was manually annotated 1 time for cluster AF.

Info for manual annotations of cluster AH:
•Start number 56 was manually annotated 1 time for cluster AH.

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

Info for manual annotations of cluster AY:
•Start number 22 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster CV:
•Start number 9 was manually annotated 4 times for cluster CV.
•Start number 39 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ4:
•Start number 30 was manually annotated 1 time for cluster CZ4.
•Start number 37 was manually annotated 3 times for cluster CZ4.

Info for manual annotations of cluster DB:
•Start number 25 was manually annotated 3 times for cluster DB.

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

Info for manual annotations of cluster FA:
•Start number 26 was manually annotated 11 times for cluster FA.
•Start number 29 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FB:
•Start number 10 was manually annotated 1 time for cluster FB.
•Start number 22 was manually annotated 4 times for cluster FB.
•Start number 26 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FF:
•Start number 39 was manually annotated 6 times for cluster FF.

Info for manual annotations of cluster FN:
•Start number 22 was manually annotated 2 times for cluster FN.

Info for manual annotations of cluster FO:
•Start number 5 was manually annotated 1 time for cluster FO.
•Start number 6 was manually annotated 2 times for cluster FO.
•Start number 17 was manually annotated 1 time for cluster FO.
•Start number 19 was manually annotated 1 time for cluster FO.
•Start number 34 was manually annotated 1 time for cluster FO.
•Start number 39 was manually annotated 4 times for cluster FO.

Info for manual annotations of cluster FQ1:
•Start number 42 was manually annotated 4 times for cluster FQ1.

Info for manual annotations of cluster N:
•Start number 13 was manually annotated 1 time for cluster N.
•Start number 16 was manually annotated 8 times for cluster N.
•Start number 32 was manually annotated 13 times for cluster N.
•Start number 38 was manually annotated 24 times for cluster N.

Gene Information:

Gene: Acolyte_67 Start: 43619, Stop: 43897, Start Num: 39
Candidate Starts for Acolyte_67:
(Start: 39 @43619 has 14 MA's), (44, 43631), (55, 43667), (Start: 56 @43673 has 1 MA's), (68, 43760),

Gene: Aggie_36 Start: 27900, Stop: 28133, Start Num: 38
Candidate Starts for Aggie_36:
(Start: 16 @27852 has 9 MA's), (28, 27876), (Start: 32 @27888 has 14 MA's), (36, 27897), (Start: 38 @27900 has 24 MA's), (67, 28029), (68, 28041), (77, 28095),

Gene: Alatato_31 Start: 24615, Stop: 24322, Start Num: 22
Candidate Starts for Alatato_31:
(Start: 5 @24666 has 1 MA's), (Start: 22 @24615 has 7 MA's), (Start: 29 @24606 has 1 MA's), (Start: 56 @24537 has 1 MA's), (68, 24450), (74, 24411), (78, 24393),

Gene: Andies_35 Start: 28370, Stop: 28651, Start Num: 16
Candidate Starts for Andies_35:
(Start: 16 @28370 has 9 MA's), (28, 28394), (Start: 32 @28406 has 14 MA's), (Start: 38 @28418 has 24 MA's), (67, 28547), (68, 28559), (77, 28613),

Gene: Aoka_33 Start: 26261, Stop: 26512, Start Num: 39
Candidate Starts for Aoka_33:
(Start: 19 @26222 has 1 MA's), (Start: 39 @26261 has 14 MA's),

Gene: BBQValindra_40 Start: 33028, Stop: 33285, Start Num: 25
Candidate Starts for BBQValindra_40:
(Start: 25 @33028 has 3 MA's), (Start: 42 @33061 has 4 MA's), (71, 33217), (79, 33256),

Gene: BabeRuth_40 Start: 29534, Stop: 29776, Start Num: 32
Candidate Starts for BabeRuth_40:

(Start: 13 @29489 has 1 MA's), (Start: 16 @29498 has 9 MA's), (Start: 32 @29534 has 14 MA's), (67, 29675), (68, 29687),

Gene: Bauer_41 Start: 28925, Stop: 28644, Start Num: 22
Candidate Starts for Bauer_41:
(Start: 22 @28925 has 7 MA's), (Start: 29 @28916 has 1 MA's), (33, 28901), (58, 28832), (74, 28721), (82, 28682),

Gene: BellaJr_40 Start: 29513, Stop: 29247, Start Num: 22
Candidate Starts for BellaJr_40:
(3, 29573), (18, 29522), (Start: 22 @29513 has 7 MA's), (Start: 29 @29504 has 1 MA's), (53, 29447), (Start: 56 @29435 has 1 MA's), (65, 29372), (75, 29306), (84, 29261),

Gene: BigSherm_43 Start: 29987, Stop: 30226, Start Num: 39
Candidate Starts for BigSherm_43:
(Start: 39 @29987 has 14 MA's), (77, 30176), (85, 30212),

Gene: BlackSpider_37 Start: 28105, Stop: 27839, Start Num: 22
Candidate Starts for BlackSpider_37:
(3, 28165), (18, 28114), (Start: 22 @28105 has 7 MA's), (Start: 29 @28096 has 1 MA's), (53, 28039), (Start: 56 @28027 has 1 MA's), (65, 27964), (75, 27898), (84, 27853),

Gene: Bosection6_36 Start: 27873, Stop: 28154, Start Num: 16
Candidate Starts for Bosection6_36:
(Start: 16 @27873 has 9 MA's), (28, 27897), (Start: 32 @27909 has 14 MA's), (Start: 38 @27921 has 24 MA's), (67, 28050), (68, 28062), (77, 28116),

Gene: BrayBeast_34 Start: 25453, Stop: 25148, Start Num: 10
Candidate Starts for BrayBeast_34:
(Start: 10 @25453 has 1 MA's), (Start: 22 @25423 has 7 MA's), (Start: 29 @25414 has 1 MA's), (33, 25399), (53, 25357), (58, 25330), (77, 25204),

Gene: Bridgette_39 Start: 28174, Stop: 27884, Start Num: 26
Candidate Starts for Bridgette_39:
(Start: 26 @28174 has 13 MA's), (Start: 29 @28168 has 1 MA's), (Start: 56 @28099 has 1 MA's), (68, 28012), (78, 27955), (84, 27925),

Gene: Butters_39 Start: 29960, Stop: 30202, Start Num: 32
Candidate Starts for Butters_39:
(28, 29948), (Start: 32 @29960 has 14 MA's), (36, 29969), (67, 30101), (68, 30113),

Gene: Carcharodon_38 Start: 29181, Stop: 29462, Start Num: 16
Candidate Starts for Carcharodon_38:
(Start: 16 @29181 has 9 MA's), (28, 29205), (Start: 32 @29217 has 14 MA's), (Start: 38 @29229 has 24 MA's), (67, 29358), (68, 29370), (77, 29424),

Gene: Charlie_36 Start: 27920, Stop: 28153, Start Num: 38
Candidate Starts for Charlie_36:
(Start: 16 @27872 has 9 MA's), (28, 27896), (Start: 32 @27908 has 14 MA's), (36, 27917), (Start: 38 @27920 has 24 MA's), (67, 28049), (68, 28061), (77, 28115),

Gene: Chewbacca_39 Start: 29181, Stop: 29462, Start Num: 16
Candidate Starts for Chewbacca_39:

(Start: 16 @29181 has 9 MA's), (28, 29205), (Start: 32 @29217 has 14 MA's), (Start: 38 @29229 has 24 MA's), (67, 29358), (68, 29370), (77, 29424),

Gene: ChuckDuck_40 Start: 27998, Stop: 27708, Start Num: 26
Candidate Starts for ChuckDuck_40:
(Start: 26 @27998 has 13 MA's), (Start: 29 @27992 has 1 MA's), (Start: 56 @27923 has 1 MA's), (68, 27836), (78, 27779), (84, 27749),

Gene: Constance_39 Start: 28327, Stop: 28037, Start Num: 26
Candidate Starts for Constance_39:
(Start: 26 @28327 has 13 MA's), (Start: 29 @28321 has 1 MA's), (Start: 56 @28252 has 1 MA's), (68, 28165), (78, 28108), (84, 28078),

Gene: Cubone_38 Start: 27942, Stop: 28175, Start Num: 38
Candidate Starts for Cubone_38:
(Start: 16 @27894 has 9 MA's), (28, 27918), (Start: 32 @27930 has 14 MA's), (36, 27939), (Start: 38 @27942 has 24 MA's), (67, 28071), (68, 28083), (77, 28137),

Gene: Dolores_34 Start: 27272, Stop: 27024, Start Num: 37
Candidate Starts for Dolores_34:
(Start: 37 @27272 has 4 MA's), (52, 27233), (62, 27179), (67, 27146), (68, 27134),

Gene: Donatella_42 Start: 30460, Stop: 30699, Start Num: 39
Candidate Starts for Donatella_42:
(Start: 39 @30460 has 14 MA's), (77, 30649), (85, 30685),

Gene: Duplicity_38 Start: 29238, Stop: 29471, Start Num: 38
Candidate Starts for Duplicity_38:
(Start: 16 @29190 has 9 MA's), (28, 29214), (Start: 32 @29226 has 14 MA's), (36, 29235), (Start: 38 @29238 has 24 MA's), (67, 29367), (68, 29379), (77, 29433),

Gene: EGUnicorn_36 Start: 27921, Stop: 28154, Start Num: 38
Candidate Starts for EGUnicorn_36:
(Start: 16 @27873 has 9 MA's), (28, 27897), (Start: 32 @27909 has 14 MA's), (Start: 38 @27921 has 24 MA's), (67, 28050), (68, 28062), (77, 28116),

Gene: Eileen_35 Start: 26405, Stop: 26115, Start Num: 26
Candidate Starts for Eileen_35:
(Start: 26 @26405 has 13 MA's), (Start: 29 @26399 has 1 MA's), (Start: 56 @26330 has 1 MA's), (78, 26186), (84, 26156), (88, 26123),

Gene: EvenBluerMoon_32 Start: 26499, Stop: 26750, Start Num: 39
Candidate Starts for EvenBluerMoon_32:
(Start: 19 @26460 has 1 MA's), (Start: 39 @26499 has 14 MA's),

Gene: Farewell_49 Start: 36104, Stop: 36349, Start Num: 37
Candidate Starts for Farewell_49:
(4, 36020), (Start: 22 @36077 has 7 MA's), (Start: 27 @36083 has 1 MA's), (31, 36092), (35, 36101), (Start: 37 @36104 has 4 MA's), (41, 36113), (46, 36125), (51, 36137), (54, 36152), (63, 36209),

Gene: FosterFrank_41 Start: 28057, Stop: 27767, Start Num: 26
Candidate Starts for FosterFrank_41:

(Start: 26 @28057 has 13 MA's), (Start: 29 @28051 has 1 MA's), (Start: 56 @27982 has 1 MA's), (68, 27895), (78, 27838), (84, 27808),

Gene: Fulbright_37 Start: 28318, Stop: 28551, Start Num: 38
Candidate Starts for Fulbright_37:
(Start: 16 @28270 has 9 MA's), (28, 28294), (Start: 32 @28306 has 14 MA's), (Start: 38 @28318 has 24 MA's), (67, 28447), (68, 28459), (77, 28513),

Gene: GEazy_45 Start: 32607, Stop: 32864, Start Num: 25
Candidate Starts for GEazy_45:
(Start: 25 @32607 has 3 MA's), (Start: 42 @32640 has 4 MA's), (68, 32772), (71, 32796),

Gene: Gex_38 Start: 29245, Stop: 29478, Start Num: 38
Candidate Starts for Gex_38:
(Start: 16 @29197 has 9 MA's), (28, 29221), (Start: 32 @29233 has 14 MA's), (36, 29242), (Start: 38 @29245 has 24 MA's), (67, 29374), (68, 29386), (77, 29440),

Gene: GlobiWarming_39 Start: 27581, Stop: 27291, Start Num: 26
Candidate Starts for GlobiWarming_39:
(Start: 26 @27581 has 13 MA's), (Start: 29 @27575 has 1 MA's), (Start: 56 @27506 has 1 MA's), (68, 27419), (78, 27362), (84, 27332),

Gene: Guacamole_41 Start: 33011, Stop: 33295, Start Num: 9
Candidate Starts for Guacamole_41:
(Start: 9 @33011 has 4 MA's), (28, 33047), (53, 33098), (84, 33284),

Gene: Gudmit_37 Start: 27130, Stop: 27366, Start Num: 39
Candidate Starts for Gudmit_37:
(Start: 39 @27130 has 14 MA's), (Start: 56 @27181 has 1 MA's), (62, 27223), (76, 27316), (86, 27355),

Gene: Hanako_39 Start: 29533, Stop: 29775, Start Num: 32
Candidate Starts for Hanako_39:
(Start: 13 @29488 has 1 MA's), (Start: 16 @29497 has 9 MA's), (Start: 32 @29533 has 14 MA's), (67, 29674), (68, 29686),

Gene: HannahD_43 Start: 31974, Stop: 32231, Start Num: 25
Candidate Starts for HannahD_43:
(Start: 25 @31974 has 3 MA's), (Start: 42 @32007 has 4 MA's), (68, 32139), (71, 32163),

Gene: Henrique_38 Start: 27540, Stop: 27286, Start Num: 29
Candidate Starts for Henrique_38:
(8, 27588), (Start: 26 @27546 has 13 MA's), (Start: 29 @27540 has 1 MA's), (45, 27513), (Start: 56 @27474 has 1 MA's),

Gene: Hereford_33 Start: 26333, Stop: 26584, Start Num: 39
Candidate Starts for Hereford_33:
(Start: 19 @26294 has 1 MA's), (Start: 39 @26333 has 14 MA's),

Gene: Hestia_43 Start: 28715, Stop: 28437, Start Num: 22
Candidate Starts for Hestia_43:
(14, 28733), (Start: 22 @28715 has 7 MA's), (Start: 29 @28706 has 1 MA's), (69, 28544), (72, 28520),

Gene: Hitter_44 Start: 32655, Stop: 32939, Start Num: 9

Candidate Starts for Hitter_44:
(Start: 9 @32655 has 4 MA's), (28, 32691), (53, 32742), (84, 32928),

Gene: Hum25_39 Start: 26196, Stop: 26420, Start Num: 42
Candidate Starts for Hum25_39:
(Start: 42 @26196 has 4 MA's), (48, 26211), (59, 26265), (65, 26307), (66, 26313), (81, 26400),

Gene: Impisi_41 Start: 30089, Stop: 30331, Start Num: 32
Candidate Starts for Impisi_41:
(Start: 13 @30044 has 1 MA's), (Start: 16 @30053 has 9 MA's), (Start: 32 @30089 has 14 MA's), (67, 30230), (68, 30242),

Gene: Jamie19_35 Start: 28299, Stop: 28532, Start Num: 38
Candidate Starts for Jamie19_35:
(Start: 16 @28251 has 9 MA's), (28, 28275), (Start: 32 @28287 has 14 MA's), (Start: 38 @28299 has 24 MA's), (67, 28428), (68, 28440), (77, 28494),

Gene: JanetJ_32 Start: 26887, Stop: 27126, Start Num: 39
Candidate Starts for JanetJ_32:
(Start: 39 @26887 has 14 MA's), (53, 26923), (87, 27109),

Gene: JasperJr_41 Start: 33011, Stop: 33295, Start Num: 9
Candidate Starts for JasperJr_41:
(Start: 9 @33011 has 4 MA's), (28, 33047), (53, 33098), (84, 33284),

Gene: Journey_36 Start: 27920, Stop: 28153, Start Num: 38
Candidate Starts for Journey_36:
(Start: 16 @27872 has 9 MA's), (28, 27896), (Start: 32 @27908 has 14 MA's), (36, 27917), (Start: 38 @27920 has 24 MA's), (67, 28049), (68, 28061), (77, 28115),

Gene: Judy_40 Start: 28493, Stop: 28203, Start Num: 26
Candidate Starts for Judy_40:
(Start: 26 @28493 has 13 MA's), (Start: 29 @28487 has 1 MA's), (Start: 56 @28418 has 1 MA's), (68, 28331), (78, 28274), (84, 28244),

Gene: JustASigh_47 Start: 34656, Stop: 34838, Start Num: 56
Candidate Starts for JustASigh_47:
(24, 34569), (Start: 32 @34587 has 14 MA's), (50, 34629), (Start: 56 @34656 has 1 MA's), (58, 34671), (63, 34704), (74, 34782),

Gene: Karkharias_38 Start: 28017, Stop: 27757, Start Num: 26
Candidate Starts for Karkharias_38:
(2, 28083), (15, 28035), (Start: 26 @28017 has 13 MA's), (Start: 29 @28011 has 1 MA's), (Start: 56 @27945 has 1 MA's), (60, 27921),

Gene: KayMoney_39 Start: 27670, Stop: 27380, Start Num: 26
Candidate Starts for KayMoney_39:
(Start: 26 @27670 has 13 MA's), (Start: 29 @27664 has 1 MA's), (Start: 56 @27595 has 1 MA's), (68, 27508), (78, 27451), (84, 27421),

Gene: Kevin1_37 Start: 29139, Stop: 29381, Start Num: 32
Candidate Starts for Kevin1_37:

(11, 29088), (Start: 16 @29103 has 9 MA's), (28, 29127), (Start: 32 @29139 has 14 MA's), (36, 29148), (67, 29280), (68, 29292),

Gene: Kumotta_31 Start: 25315, Stop: 25025, Start Num: 26
Candidate Starts for Kumotta_31:
(Start: 26 @25315 has 13 MA's), (Start: 29 @25309 has 1 MA's), (63, 25192), (73, 25111), (77, 25090),

Gene: Lenoxika_44 Start: 30350, Stop: 30589, Start Num: 39
Candidate Starts for Lenoxika_44:
(Start: 39 @30350 has 14 MA's), (77, 30539), (85, 30575),

Gene: LilyBell_39 Start: 27899, Stop: 27609, Start Num: 26
Candidate Starts for LilyBell_39:
(Start: 26 @27899 has 13 MA's), (Start: 29 @27893 has 1 MA's), (Start: 56 @27824 has 1 MA's), (68, 27737), (78, 27680), (84, 27650),

Gene: LittleRon_37 Start: 27279, Stop: 26989, Start Num: 26
Candidate Starts for LittleRon_37:
(Start: 26 @27279 has 13 MA's), (Start: 29 @27273 has 1 MA's), (Start: 56 @27204 has 1 MA's), (68, 27117), (78, 27060), (84, 27030),

Gene: Magsby_38 Start: 29246, Stop: 29479, Start Num: 38
Candidate Starts for Magsby_38:
(Start: 16 @29198 has 9 MA's), (28, 29222), (Start: 32 @29234 has 14 MA's), (Start: 38 @29246 has 24 MA's), (67, 29375), (68, 29387), (77, 29441),

Gene: Maja_30 Start: 25873, Stop: 25589, Start Num: 5
Candidate Starts for Maja_30:
(Start: 5 @25873 has 1 MA's), (21, 25825), (Start: 26 @25819 has 13 MA's), (Start: 29 @25813 has 1 MA's), (55, 25750), (Start: 56 @25744 has 1 MA's), (58, 25729), (65, 25681), (74, 25618),

Gene: MargaretKali_31 Start: 24950, Stop: 24660, Start Num: 26
Candidate Starts for MargaretKali_31:
(Start: 26 @24950 has 13 MA's), (Start: 29 @24944 has 1 MA's), (63, 24827), (73, 24746), (77, 24725),

Gene: Melville_40 Start: 29218, Stop: 29463, Start Num: 32
Candidate Starts for Melville_40:
(Start: 16 @29182 has 9 MA's), (28, 29206), (Start: 32 @29218 has 14 MA's), (Start: 38 @29230 has 24 MA's), (67, 29359), (68, 29371), (77, 29425),

Gene: Meyran_35 Start: 31028, Stop: 31276, Start Num: 32
Candidate Starts for Meyran_35:
(12, 30977), (Start: 16 @30992 has 9 MA's), (Start: 32 @31028 has 14 MA's), (67, 31172), (76, 31232), (77, 31238), (82, 31262),

Gene: MichelleMyBell_36 Start: 28237, Stop: 28470, Start Num: 38
Candidate Starts for MichelleMyBell_36:
(Start: 16 @28189 has 9 MA's), (28, 28213), (Start: 32 @28225 has 14 MA's), (Start: 38 @28237 has 24 MA's), (67, 28366), (68, 28378), (77, 28432),

Gene: Morrey_48 Start: 26501, Stop: 26752, Start Num: 39
Candidate Starts for Morrey_48:
(Start: 19 @26462 has 1 MA's), (Start: 39 @26501 has 14 MA's),

Gene: MrSmee_38 Start: 26835, Stop: 27059, Start Num: 42
Candidate Starts for MrSmee_38:
(Start: 42 @26835 has 4 MA's), (48, 26850), (59, 26904), (65, 26946), (66, 26952), (76, 27018),

Gene: NaLuna_42 Start: 31974, Stop: 32231, Start Num: 25
Candidate Starts for NaLuna_42:
(Start: 25 @31974 has 3 MA's), (Start: 42 @32007 has 4 MA's), (68, 32139), (71, 32163),

Gene: Nandita_44 Start: 30213, Stop: 30452, Start Num: 39
Candidate Starts for Nandita_44:
(Start: 39 @30213 has 14 MA's), (77, 30402), (85, 30438),

Gene: Nenae_39 Start: 29536, Stop: 29778, Start Num: 32
Candidate Starts for Nenae_39:
(Start: 13 @29491 has 1 MA's), (Start: 16 @29500 has 9 MA's), (Start: 32 @29536 has 14 MA's), (67, 29677), (68, 29689),

Gene: Neroxid_38 Start: 25514, Stop: 25738, Start Num: 42
Candidate Starts for Neroxid_38:
(Start: 42 @25514 has 4 MA's), (48, 25529), (59, 25583), (65, 25625), (66, 25631), (81, 25718),

Gene: NidoQ_34 Start: 27004, Stop: 26714, Start Num: 26
Candidate Starts for NidoQ_34:
(Start: 26 @27004 has 13 MA's), (Start: 29 @26998 has 1 MA's), (Start: 56 @26929 has 1 MA's), (68, 26842), (78, 26785), (84, 26755),

Gene: NoSwimming_34 Start: 27843, Stop: 27550, Start Num: 17
Candidate Starts for NoSwimming_34:
(Start: 17 @27843 has 1 MA's), (Start: 34 @27807 has 1 MA's), (Start: 42 @27792 has 4 MA's), (47, 27780), (Start: 56 @27744 has 1 MA's), (58, 27729), (61, 27705), (63, 27696), (74, 27618), (80, 27591),

Gene: NoSwimming_35 Start: 27992, Stop: 28291, Start Num: 6
Candidate Starts for NoSwimming_35:
(Start: 6 @27992 has 2 MA's), (Start: 34 @28046 has 1 MA's), (Start: 56 @28103 has 1 MA's),

Gene: P3MA_41 Start: 31039, Stop: 31272, Start Num: 39
Candidate Starts for P3MA_41:
(20, 31003), (Start: 39 @31039 has 14 MA's), (43, 31048), (51, 31066), (62, 31132), (64, 31147), (67, 31165), (68, 31177),

Gene: Panchino_34 Start: 29645, Stop: 29878, Start Num: 38
Candidate Starts for Panchino_34:
(Start: 16 @29597 has 9 MA's), (28, 29621), (Start: 32 @29633 has 14 MA's), (Start: 38 @29645 has 24 MA's), (67, 29774), (68, 29786), (77, 29840),

Gene: Parmesanjohn_38 Start: 29249, Stop: 29482, Start Num: 38
Candidate Starts for Parmesanjohn_38:
(Start: 16 @29201 has 9 MA's), (28, 29225), (Start: 32 @29237 has 14 MA's), (Start: 38 @29249 has 24 MA's), (67, 29378), (68, 29390), (77, 29444),

Gene: Peas_36 Start: 28552, Stop: 28262, Start Num: 26

Candidate Starts for Peas_36:
(Start: 26 @28552 has 13 MA's), (Start: 29 @28546 has 1 MA's), (Start: 56 @28477 has 1 MA's), (68, 28390), (78, 28333), (84, 28303),

Gene: PhancyPhin_39 Start: 29530, Stop: 29772, Start Num: 32
Candidate Starts for PhancyPhin_39:
(Start: 13 @29485 has 1 MA's), (Start: 16 @29494 has 9 MA's), (Start: 32 @29530 has 14 MA's), (67, 29671), (68, 29683),

Gene: Philonius_36 Start: 27911, Stop: 28141, Start Num: 38
Candidate Starts for Philonius_36:
(Start: 16 @27863 has 9 MA's), (28, 27887), (Start: 32 @27899 has 14 MA's), (36, 27908), (Start: 38 @27911 has 24 MA's), (67, 28040), (68, 28052),

Gene: Phloss_36 Start: 28608, Stop: 28889, Start Num: 16
Candidate Starts for Phloss_36:
(Start: 16 @28608 has 9 MA's), (28, 28632), (Start: 32 @28644 has 14 MA's), (Start: 38 @28656 has 24 MA's), (67, 28785), (68, 28797), (77, 28851),

Gene: Phrann_39 Start: 30325, Stop: 30558, Start Num: 38
Candidate Starts for Phrann_39:
(Start: 16 @30277 has 9 MA's), (28, 30301), (Start: 32 @30313 has 14 MA's), (Start: 38 @30325 has 24 MA's), (67, 30454), (68, 30466), (77, 30520),

Gene: PhrostedPhlake_45 Start: 32973, Stop: 33212, Start Num: 39
Candidate Starts for PhrostedPhlake_45:
(Start: 39 @32973 has 14 MA's), (Start: 56 @33024 has 1 MA's), (62, 33066), (68, 33111), (83, 33195), (86, 33201),

Gene: Pipsqueaks_38 Start: 29226, Stop: 29459, Start Num: 38
Candidate Starts for Pipsqueaks_38:
(Start: 16 @29178 has 9 MA's), (28, 29202), (Start: 32 @29214 has 14 MA's), (Start: 38 @29226 has 24 MA's), (67, 29355), (68, 29367), (77, 29421),

Gene: Pitbull_38 Start: 25916, Stop: 26140, Start Num: 42
Candidate Starts for Pitbull_38:
(Start: 42 @25916 has 4 MA's), (48, 25931), (59, 25985), (65, 26027), (66, 26033), (81, 26120),

Gene: PrairieDogTown_33 Start: 26462, Stop: 26752, Start Num: 19
Candidate Starts for PrairieDogTown_33:
(Start: 19 @26462 has 1 MA's), (Start: 39 @26501 has 14 MA's),

Gene: Purgamenstris_39 Start: 29489, Stop: 29776, Start Num: 13
Candidate Starts for Purgamenstris_39:
(Start: 13 @29489 has 1 MA's), (Start: 16 @29498 has 9 MA's), (Start: 32 @29534 has 14 MA's), (67, 29675), (68, 29687),

Gene: Raya_38 Start: 25514, Stop: 25738, Start Num: 42
Candidate Starts for Raya_38:
(Start: 42 @25514 has 4 MA's), (48, 25529), (59, 25583), (65, 25625), (66, 25631), (81, 25718),

Gene: Raymond7_33 Start: 29346, Stop: 29588, Start Num: 32
Candidate Starts for Raymond7_33:

(Start: 13 @29301 has 1 MA's), (Start: 16 @29310 has 9 MA's), (Start: 32 @29346 has 14 MA's), (67, 29487), (68, 29499),

Gene: Rebel_31 Start: 25628, Stop: 25906, Start Num: 16
Candidate Starts for Rebel_31:
(Start: 16 @25628 has 9 MA's), (28, 25652), (Start: 32 @25664 has 14 MA's), (Start: 38 @25676 has 24 MA's), (67, 25805), (68, 25817),

Gene: Redi_39 Start: 29533, Stop: 29775, Start Num: 32
Candidate Starts for Redi_39:
(Start: 13 @29488 has 1 MA's), (Start: 16 @29497 has 9 MA's), (Start: 32 @29533 has 14 MA's), (67, 29674), (68, 29686),

Gene: RootBeer_30 Start: 24454, Stop: 24164, Start Num: 26
Candidate Starts for RootBeer_30:
(Start: 26 @24454 has 13 MA's), (Start: 29 @24448 has 1 MA's), (Start: 56 @24379 has 1 MA's), (68, 24292), (78, 24235), (84, 24205),

Gene: Rooter_33 Start: 24872, Stop: 24582, Start Num: 22
Candidate Starts for Rooter_33:
(Start: 5 @24923 has 1 MA's), (Start: 22 @24872 has 7 MA's), (Start: 29 @24863 has 1 MA's), (Start: 56 @24794 has 1 MA's), (68, 24707), (78, 24650),

Gene: Rubeelu_39 Start: 29960, Stop: 30202, Start Num: 32
Candidate Starts for Rubeelu_39:
(28, 29948), (Start: 32 @29960 has 14 MA's), (36, 29969), (67, 30101), (68, 30113),

Gene: Ryan_44 Start: 30762, Stop: 31001, Start Num: 39
Candidate Starts for Ryan_44:
(Start: 39 @30762 has 14 MA's), (77, 30951), (85, 30987),

Gene: Saintcarr_43 Start: 30533, Stop: 30772, Start Num: 39
Candidate Starts for Saintcarr_43:
(Start: 39 @30533 has 14 MA's), (77, 30722), (85, 30758),

Gene: Samman98_33 Start: 26503, Stop: 26255, Start Num: 37
Candidate Starts for Samman98_33:
(Start: 37 @26503 has 4 MA's), (52, 26464), (62, 26410), (67, 26377), (68, 26365),

Gene: Sarge_30 Start: 23262, Stop: 22981, Start Num: 22
Candidate Starts for Sarge_30:
(Start: 22 @23262 has 7 MA's), (Start: 29 @23253 has 1 MA's), (33, 23238), (58, 23169), (74, 23058), (82, 23019),

Gene: Schnauzer_38 Start: 29201, Stop: 29482, Start Num: 16
Candidate Starts for Schnauzer_38:
(Start: 16 @29201 has 9 MA's), (28, 29225), (Start: 32 @29237 has 14 MA's), (Start: 38 @29249 has 24 MA's), (67, 29378), (68, 29390), (77, 29444),

Gene: Scitech_35 Start: 27097, Stop: 27330, Start Num: 38
Candidate Starts for Scitech_35:
(Start: 16 @27049 has 9 MA's), (28, 27073), (Start: 32 @27085 has 14 MA's), (36, 27094), (Start: 38 @27097 has 24 MA's), (67, 27226), (68, 27238), (77, 27292),

Gene: Scotia_33 Start: 27033, Stop: 27332, Start Num: 6
Candidate Starts for Scotia_33:
(Start: 6 @27033 has 2 MA's), (Start: 34 @27087 has 1 MA's), (Start: 56 @27144 has 1 MA's),

Gene: Scotia_32 Start: 26848, Stop: 26591, Start Num: 34
Candidate Starts for Scotia_32:
(Start: 34 @26848 has 1 MA's), (Start: 42 @26833 has 4 MA's), (47, 26821), (Start: 56 @26785 has 1 MA's), (61, 26746), (63, 26737), (80, 26632),

Gene: Shambre1_37 Start: 25536, Stop: 25748, Start Num: 40
Candidate Starts for Shambre1_37:
(7, 25458), (Start: 19 @25494 has 1 MA's), (23, 25503), (Start: 34 @25524 has 1 MA's), (Start: 40 @25536 has 1 MA's), (Start: 56 @25587 has 1 MA's), (67, 25662), (70, 25695),

Gene: Shoya_37 Start: 25648, Stop: 25358, Start Num: 22
Candidate Starts for Shoya_37:
(Start: 5 @25699 has 1 MA's), (Start: 22 @25648 has 7 MA's), (Start: 29 @25639 has 1 MA's), (Start: 56 @25570 has 1 MA's), (68, 25483), (78, 25426),

Gene: ShrimpFriedEgg_39 Start: 29533, Stop: 29775, Start Num: 32
Candidate Starts for ShrimpFriedEgg_39:
(Start: 13 @29488 has 1 MA's), (Start: 16 @29497 has 9 MA's), (Start: 32 @29533 has 14 MA's), (67, 29674), (68, 29686),

Gene: Shweta_35 Start: 28417, Stop: 28662, Start Num: 32
Candidate Starts for Shweta_35:
(Start: 16 @28381 has 9 MA's), (28, 28405), (Start: 32 @28417 has 14 MA's), (Start: 38 @28429 has 24 MA's), (67, 28558), (68, 28570), (77, 28624),

Gene: Silvafighter_39 Start: 29222, Stop: 29455, Start Num: 38
Candidate Starts for Silvafighter_39:
(Start: 16 @29174 has 9 MA's), (28, 29198), (Start: 32 @29210 has 14 MA's), (Start: 38 @29222 has 24 MA's), (67, 29351), (68, 29363), (77, 29417),

Gene: Silvy_36 Start: 27900, Stop: 28133, Start Num: 38
Candidate Starts for Silvy_36:
(Start: 16 @27852 has 9 MA's), (28, 27876), (Start: 32 @27888 has 14 MA's), (36, 27897), (Start: 38 @27900 has 24 MA's), (67, 28029), (68, 28041), (77, 28095),

Gene: SkinnyPete_33 Start: 26960, Stop: 27193, Start Num: 38
Candidate Starts for SkinnyPete_33:
(Start: 16 @26912 has 9 MA's), (28, 26936), (Start: 32 @26948 has 14 MA's), (Start: 38 @26960 has 24 MA's), (67, 27089), (68, 27101), (77, 27155),

Gene: Skitty_36 Start: 25462, Stop: 25686, Start Num: 42
Candidate Starts for Skitty_36:
(Start: 42 @25462 has 4 MA's), (48, 25477), (59, 25531), (65, 25573), (66, 25579), (81, 25666),

Gene: Skyerus_34 Start: 23632, Stop: 23856, Start Num: 42
Candidate Starts for Skyerus_34:
(Start: 42 @23632 has 4 MA's), (48, 23647), (59, 23701), (65, 23743), (66, 23749), (81, 23836),

Gene: Smurph_38 Start: 29249, Stop: 29482, Start Num: 38
Candidate Starts for Smurph_38:
(Start: 16 @29201 has 9 MA's), (28, 29225), (Start: 32 @29237 has 14 MA's), (Start: 38 @29249 has 24 MA's), (67, 29378), (68, 29390), (77, 29444),

Gene: Snekmaggedon_35 Start: 28299, Stop: 28532, Start Num: 38
Candidate Starts for Snekmaggedon_35:
(Start: 16 @28251 has 9 MA's), (28, 28275), (Start: 32 @28287 has 14 MA's), (Start: 38 @28299 has 24 MA's), (67, 28428), (68, 28440), (77, 28494),

Gene: Sparky_48 Start: 36514, Stop: 36780, Start Num: 27
Candidate Starts for Sparky_48:
(4, 36451), (Start: 22 @36508 has 7 MA's), (Start: 27 @36514 has 1 MA's), (31, 36523), (35, 36532), (Start: 37 @36535 has 4 MA's), (41, 36544), (46, 36556), (51, 36568), (54, 36583), (63, 36640),

Gene: Spinach_39 Start: 29533, Stop: 29775, Start Num: 32
Candidate Starts for Spinach_39:
(Start: 13 @29488 has 1 MA's), (Start: 16 @29497 has 9 MA's), (Start: 32 @29533 has 14 MA's), (67, 29674), (68, 29686),

Gene: SpongeBob_35 Start: 28299, Stop: 28532, Start Num: 38
Candidate Starts for SpongeBob_35:
(Start: 16 @28251 has 9 MA's), (28, 28275), (Start: 32 @28287 has 14 MA's), (Start: 38 @28299 has 24 MA's), (67, 28428), (68, 28440), (77, 28494),

Gene: Tapioca_39 Start: 29215, Stop: 29448, Start Num: 38
Candidate Starts for Tapioca_39:
(Start: 16 @29167 has 9 MA's), (28, 29191), (Start: 32 @29203 has 14 MA's), (36, 29212), (Start: 38 @29215 has 24 MA's), (67, 29344), (68, 29356), (77, 29410),

Gene: Tessdabest_39 Start: 29246, Stop: 29479, Start Num: 38
Candidate Starts for Tessdabest_39:
(Start: 16 @29198 has 9 MA's), (28, 29222), (Start: 32 @29234 has 14 MA's), (36, 29243), (Start: 38 @29246 has 24 MA's), (67, 29375), (68, 29387), (77, 29441),

Gene: ToastyOats_45 Start: 30537, Stop: 30776, Start Num: 39
Candidate Starts for ToastyOats_45:
(Start: 39 @30537 has 14 MA's), (77, 30726), (85, 30762),

Gene: Toodles_43 Start: 31153, Stop: 31392, Start Num: 39
Candidate Starts for Toodles_43:
(Start: 39 @31153 has 14 MA's), (77, 31342), (85, 31378),

Gene: Tortoise12_36 Start: 27884, Stop: 28165, Start Num: 16
Candidate Starts for Tortoise12_36:
(Start: 16 @27884 has 9 MA's), (28, 27908), (Start: 32 @27920 has 14 MA's), (Start: 38 @27932 has 24 MA's), (67, 28061), (68, 28073), (77, 28127),

Gene: Tuti_31 Start: 27865, Stop: 27596, Start Num: 30
Candidate Starts for Tuti_31:
(1, 27979), (Start: 26 @27874 has 13 MA's), (Start: 30 @27865 has 1 MA's), (58, 27784), (67, 27724), (68, 27712),

Gene: Vinye_23 Start: 14300, Stop: 13992, Start Num: 16
Candidate Starts for Vinye_23:
(Start: 16 @14300 has 9 MA's), (Start: 32 @14264 has 14 MA's), (49, 14225), (57, 14186), (58, 14180), (74, 14069),

Gene: Vordorf_36 Start: 30303, Stop: 30551, Start Num: 32
Candidate Starts for Vordorf_36:
(12, 30252), (Start: 16 @30267 has 9 MA's), (Start: 32 @30303 has 14 MA's), (67, 30447), (77, 30513), (82, 30537),

Gene: Walrus_42 Start: 32790, Stop: 33074, Start Num: 9
Candidate Starts for Walrus_42:
(Start: 9 @32790 has 4 MA's), (28, 32826), (53, 32877), (84, 33063),

Gene: WinkNick_35 Start: 27195, Stop: 26947, Start Num: 37
Candidate Starts for WinkNick_35:
(Start: 37 @27195 has 4 MA's), (52, 27156), (62, 27102), (67, 27069), (68, 27057),

Gene: Xeno_35 Start: 27686, Stop: 27919, Start Num: 38
Candidate Starts for Xeno_35:
(Start: 16 @27638 has 9 MA's), (28, 27662), (Start: 32 @27674 has 14 MA's), (36, 27683), (Start: 38 @27686 has 24 MA's), (67, 27815), (68, 27827), (77, 27881),

Gene: Xerxes_38 Start: 29246, Stop: 29479, Start Num: 38
Candidate Starts for Xerxes_38:
(Start: 16 @29198 has 9 MA's), (28, 29222), (Start: 32 @29234 has 14 MA's), (Start: 38 @29246 has 24 MA's), (67, 29375), (68, 29387), (77, 29441),

Gene: Yonex_44 Start: 30762, Stop: 31001, Start Num: 39
Candidate Starts for Yonex_44:
(Start: 39 @30762 has 14 MA's), (77, 30951), (85, 30987),