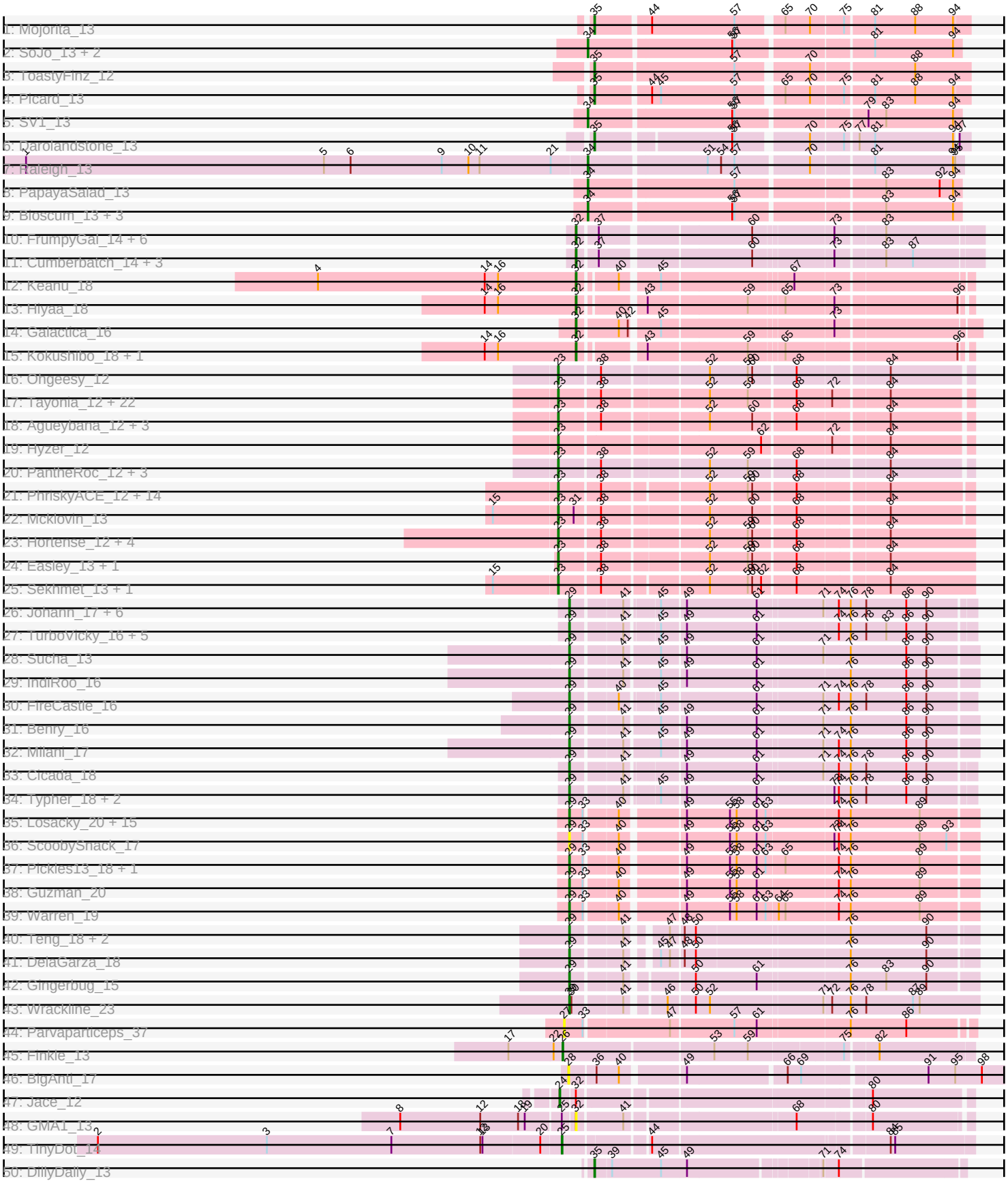
Pham 347356


1: Mojorita_13
2: SoJo_13 + 2
3: ToastyFinz_12
4: Picard_13
5: SV1_13
6: Carolandstone_13
7: Raleigh_13
8: PapayaSalad_13
9: Bloscum_13 + 3
10: FrumpyGal_14 + 6
11: Cumberbatch_14 + 3
12: Keanu_18
13: Hlyaa_18
14: Galactica_16
15: Kokushibo_18 + 1
16: Ongeesy_12
17: Tayonia_12 + 22
18: Agueybana_12 + 3
19: Hyzer_12
20: PantheRoc_12 + 3
21: PhriskyACE_12 + 14
22: Mcklovin_13
23: Hortense_12 + 4
24: Easley_13 + 1
25: Sekhmet_13 + 1
26: Johann_17 + 6
27: TurboVicky_16 + 5
28: Sucha_13
29: IndiRoo_16
30: FireCastle_16
31: Benry_16
32: Miami_17
33: Cicada_18
34: Typher_18 + 2
35: Losacky_20 + 15
36: ScoobySnack_17
37: Pickles13_18 + 1
38: Guzman_20
39: Warren_19
40: Teng_18 + 2
41: DelaGarza_18
42: Gingerbug_15
43: Wrackline_23
44: Parvaparticeps_37
45: Finkle_13
46: BigAnti_17
47: Jace_12
48: GMA1_13
49: TinyDot_14
50: DillyDally_13

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 347356 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 347356 has 144 members, 13 are drafts.

Phages represented in each track:
• Track 1 : Mojorita_13
• Track 2 : SoJo_13, DaRealMyers_13, Tubberson_13
• Track 3 : ToastyFinz_12
• Track 4 : Picard_13
• Track 5 : SV1_13
• Track 6 : Darolandstone_13
• Track 7 : Raleigh_13
• Track 8 : PapayaSalad_13
• Track 9 : Bioscum_13, Ididsumtinwong_13, Austintatious_13, Lishka_13
• Track 10 : FrumpyGal_14, Eastland_14, HFrancette_14, Vondra_14, Eklok_14, AxeJC_14, Ignacio_14
• Track 11 : Cumberbatch_14, Piccadilly_14, Schlegelian_14, ArizonaGT_14
• Track 12 : Keanu_18
• Track 13 : Hiyaa_18
• Track 14 : Galactica_16
• Track 15 : Kokushibo_18, Spocter_18
• Track 16 : Ohgeesy_12
• Track 17 : Tayonia_12, BatStarr_12, SushiChef_12, Maridalia_12, Hugley_12, Zameen_12, BaxterFox_12, Kita_12, Suscepit_12, TimTam_12, Bosnia_12, Neobush_12, Antonio_12, AlumE_12, Herod_12, Eviarto_12, Polly_12, Manasvini_12, Eudoria_12, BoyNamedSue_12, Dillpickles_12, Nymphadora_12, Trumpet_12
• Track 18 : Agueybana_12, Madeline_12, Madavieve_12, Sidious_12
• Track 19 : Hyzer_12
• Track 20 : PantheRoc_12, Bialota_12, Zirinka_12, Yeezy_12
• Track 21 : PhriskyACE_12, Clark_13, MichaelScott_13, Annalisa_13, Tuti_13, WinkNick_13, Oregano_13, Dolores_13, Dorito_12, Beenie_13, Samman98_13, Thimann_13, DobbysSock_12, Suerte_12, Rizz_14
• Track 22 : Mcklovin_13
• Track 23 : Hortense_12, Twinkle_12, Howe_12, Adora_12, Shlim410_12
• Track 24 : Easley_13, Powerball_12
• Track 25 : Sekhmet_13, Invectra_13

• Track 26 : Johann_17, Htur_16, Linayshia_16, PermaG_17, Goodman_17, Rasovi_16, Olympi_18
• Track 27 : TurboVicky_16, Jera_17, SBlackberry_16, Zanella_16, Rootkit7_16, Alove_16
• Track 28 : Sucha_13
• Track 29 : IndiRoo_16
• Track 30 : FireCastle_16
• Track 31 : Benry_16
• Track 32 : Milani_17
• Track 33 : Cicada_18
• Track 34 : Typher_18, Labella_18, AyoTeo_18
• Track 35 : Losacky_20, Appa_18, PhillyJawn_19, Carrillo_20, MenE_19, Antuna_19, Blett_19, CookieDog_19, Bush_19, Phingu_21, Violeta_20, Jakelyne_20, Mariel_20, Dropshot_18, Winchester007_20, Phonegingi_18
• Track 36 : ScoobySnack_17
• Track 37 : Pickles13_18, NCRodriguez_20
• Track 38 : Guzman_20
• Track 39 : Warren_19
• Track 40 : Teng_18, Sweetums_19, Lesiram_18
• Track 41 : DelaGarza_18
• Track 42 : Gingerbug_15
• Track 43 : Wrackline_23
• Track 44 : Parvaparticeps_37
• Track 45 : Finkle_13
• Track 46 : BigAnti_17
• Track 47 : Jace_12
• Track 48 : GMA1_13
• Track 49 : TinyDot_14
• Track 50 : DillyDally_13

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

The start number called the most often in the published annotations is 23, it was called in 53 of the 131 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adora_12, Agueybana_12, AlumE_12, Annalisa_13, Antonio_12, BatStarr_12, BaxterFox_12, Beenie_13, Bialota_12, Bosnia_12, BoyNamedSue_12, Clark_13, Dillpickles_12, DobbysSock_12, Dolores_13, Dorito_12, Easley_13, Eudoria_12, Eviarto_12, Herod_12, Hortense_12, Howe_12, Hugley_12, Hyzer_12, Invectra_13, Kita_12, Madavieve_12, Madeline_12, Manasvini_12, Maridalia_12, Mcklovin_13, MichaelScott_13, Neobush_12, Nymphadora_12, Ohgeesy_12, Oregano_13, PantheRoc_12, PhriskyACE_12, Polly_12, Powerball_12, Rizz_14, Samman98_13, Sekhmet_13, Shlim410_12, Sidious_12, Suerte_12, Suscepit_12, SushiChef_12, Tayonia_12, Thimann_13, TimTam_12, Trumpet_12, Tuti_13, Twinkle_12, WinkNick_13, Yeezy_12, Zameen_12, Zirinka_12,

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

Genes that do not have the "Most Annotated" start:
• Alove_16, Antuna_19, Appa_18, ArizonaGT_14, Austintatious_13, AxeJC_14, AyoTeo_18, Benry_16, BigAnti_17, Bioscum_13, Blett_19, Bush_19, Carrillo_20, Cicada_18, CookieDog_19, Cumberbatch_14, DaRealMyers_13, Darolandstone_13, DelaGarza_18, DillyDally_13, Dropshot_18, Eastland_14, Eklok_14, Finkle_13, FireCastle_16, FrumpyGal_14, GMA1_13, Galactica_16, Gingerbug_15, Goodman_17, Guzman_20, HFrancette_14, Hiyaa_18, Htur_16, Ididsumtinwong_13, Ignacio_14, IndiRoo_16, Jace_12, Jakelyne_20, Jera_17, Johann_17, Keanu_18, Kokushibo_18, Labella_18, Lesiram_18, Linayshia_16, Lishka_13, Losacky_20, Mariel_20, MenE_19, Milani_17, Mojorita_13, NCRodriguez_20, Olympi_18, PapayaSalad_13, Parvaparticeps_37, PermaG_17, PhillyJawn_19, Phingu_21, Phonegingi_18, Picard_13, Piccadilly_14, Pickles13_18, Raleigh_13, Rasovi_16, Rootkit7_16, SBlackberry_16, SV1_13, Schlegelian_14, ScoobySnack_17, SoJo_13, Spocter_18, Sucha_13, Sweetums_19, Teng_18, TinyDot_14, ToastyFinz_12, Tubberson_13, TurboVicky_16, Typher_18, Violeta_20, Vondra_14, Warren_19, Winchester007_20, Wrackline_23, Zanella_16,

Summary by start number:

Start 23:
• Found in 58 of 144 (40.3%) of genes in pham
• Manual Annotations of this start: 53 of 131
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adora_12 (CZ4), Agueybana_12 (CZ1), AlumE_12 (CZ1), Annalisa_13 (CZ4), Antonio_12 (CZ1), BatStarr_12 (CZ1), BaxterFox_12 (CZ3), Beenie_13 (CZ4), Bialota_12 (CZ1), Bosnia_12 (CZ1), BoyNamedSue_12 (CZ1), Clark_13 (CZ4), Dillpickles_12 (CZ1), DobbysSock_12 (CZ4), Dolores_13 (CZ4), Dorito_12 (CZ4), Easley_13 (CZ4), Eudoria_12 (CZ1), Eviarto_12 (CZ1), Herod_12 (CZ1), Hortense_12 (CZ4), Howe_12 (CZ4), Hugley_12 (CZ1), Hyzer_12 (CZ1), Invectra_13 (CZ4), Kita_12 (CZ1), Madavieve_12 (CZ1), Madeline_12 (CZ1), Manasvini_12 (CZ1), Maridalia_12 (CZ1), Mcklovin_13 (CZ4), MichaelScott_13 (CZ4), Neobush_12 (CZ1), Nymphadora_12 (CZ1), Ohgeesy_12 (CZ), Oregano_13 (CZ4), PantheRoc_12 (CZ3), PhriskyACE_12 (CZ4), Polly_12 (CZ1), Powerball_12 (CZ4), Rizz_14 (CZ4), Samman98_13 (CZ4), Sekhmet_13 (CZ4), Shlim410_12 (CZ4), Sidious_12 (CZ7), Suerte_12 (CZ4), Suscepit_12 (CZ1), SushiChef_12 (CZ), Tayonia_12 (CZ1), Thimann_13 (CZ4), TimTam_12 (CZ1), Trumpet_12 (CZ1), Tuti_13 (CZ4), Twinkle_12 (CZ4), WinkNick_13 (CZ4), Yeezy_12 (CZ3), Zameen_12 (CZ1), Zirinka_12 (CZ1),

Start 24:
• Found in 1 of 144 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 131
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jace_12 (singleton),

Start 25:
• Found in 2 of 144 (1.4%) of genes in pham
• Manual Annotations of this start: 1 of 131
• Called 50.0% of time when present
• Phage (with cluster) where this start called: TinyDot_14 (singleton),

Start 26:
• Found in 1 of 144 (0.7%) of genes in pham

• Manual Annotations of this start: 1 of 131
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Finkle_13 (singleton),

Start 27:
• Found in 1 of 144 (0.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Parvaparticeps_37 (UNK),

Start 28:
• Found in 1 of 144 (0.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BigAnti_17 (singleton),

Start 29:
• Found in 49 of 144 (34.0%) of genes in pham
• Manual Annotations of this start: 44 of 131
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alove_16 (EJ), Antuna_19 (GA), Appa_18 (GA), AyoTeo_18 (EJ), Benry_16 (EJ), Blett_19 (GA), Bush_19 (GA), Carrillo_20 (GA), Cicada_18 (EJ), CookieDog_19 (GA), DelaGarza_18 (GF), Dropshot_18 (GA), FireCastle_16 (EJ), Gingerbug_15 (GF), Goodman_17 (EJ), Guzman_20 (GA), Htur_16 (EJ), IndiRoo_16 (EJ), Jakelyne_20 (GA), Jera_17 (EJ), Johann_17 (EJ), Labella_18 (EJ), Lesiram_18 (GF), Linayshia_16 (EJ), Losacky_20 (GA), Mariel_20 (GA), MenE_19 (GA), Milani_17 (EJ), NCRodriguez_20 (GA), Olympi_18 (EJ), PermaG_17 (EJ), PhillyJawn_19 (GA), Phingu_21 (GA), Phonegingi_18 (GA), Pickles13_18 (GA), Rasovi_16 (EJ), Rootkit7_16 (EJ), SBlackberry_16 (EJ), ScoobySnack_17 (GA), Sucha_13 (EJ), Sweetums_19 (GF), Teng_18 (GF), TurboVicky_16 (EJ), Typher_18 (EJ), Violeta_20 (GA), Warren_19 (GA), Winchester007_20 (GA), Wrackline_23 (GF), Zanella_16 (EJ),

Start 32:
• Found in 18 of 144 (12.5%) of genes in pham
• Manual Annotations of this start: 16 of 131
• Called 94.4% of time when present
• Phage (with cluster) where this start called: ArizonaGT_14 (BP), AxeJC_14 (BP), Cumberbatch_14 (BP), Eastland_14 (BP), Eklok_14 (BP), FrumpyGal_14 (BP), GMA1_13 (singleton), Galactica_16 (BQ), HFrancette_14 (BP), Hiyaa_18 (BQ), Ignacio_14 (BP), Keanu_18 (BQ), Kokushibo_18 (BQ), Piccadilly_14 (BP), Schlegelian_14 (BP), Spocter_18 (BQ), Vondra_14 (BP),

Start 34:
• Found in 10 of 144 (6.9%) of genes in pham
• Manual Annotations of this start: 10 of 131
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Austintatious_13 (BC3), Bioscum_13 (BC3), DaRealMyers_13 (BC1), Ididsumtinwong_13 (BC3), Lishka_13 (BC3), PapayaSalad_13 (BC3), Raleigh_13 (BC2), SV1_13 (BC1), SoJo_13 (BC1), Tubberson_13 (BC1),

Start 35:

• Found in 5 of 144 (3.5%) of genes in pham
• Manual Annotations of this start: 5 of 131
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Darolandstone_13 (BC2), DillyDally_13 (singleton), Mojorita_13 (BC1), Picard_13 (BC1), ToastyFinz_12 (BC1),

Summary by clusters:

There are 15 clusters represented in this pham: singleton, GF, EJ, CZ3, CZ1, CZ7, CZ4, CZ, BP, BQ, GA, UNK, BC1, BC2, BC3,

Info for manual annotations of cluster BC1:
•Start number 34 was manually annotated 4 times for cluster BC1.
•Start number 35 was manually annotated 3 times for cluster BC1.

Info for manual annotations of cluster BC2:
•Start number 34 was manually annotated 1 time for cluster BC2.
•Start number 35 was manually annotated 1 time for cluster BC2.

Info for manual annotations of cluster BC3:
•Start number 34 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BP:
•Start number 32 was manually annotated 11 times for cluster BP.

Info for manual annotations of cluster BQ:
•Start number 32 was manually annotated 5 times for cluster BQ.

Info for manual annotations of cluster CZ:
•Start number 23 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 23 was manually annotated 24 times for cluster CZ1.

Info for manual annotations of cluster CZ3:
•Start number 23 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:
•Start number 23 was manually annotated 24 times for cluster CZ4.

Info for manual annotations of cluster CZ7:
•Start number 23 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster EJ:
•Start number 29 was manually annotated 21 times for cluster EJ.

Info for manual annotations of cluster GA:
•Start number 29 was manually annotated 17 times for cluster GA.

Info for manual annotations of cluster GF:
•Start number 29 was manually annotated 6 times for cluster GF.

Gene Information:

Gene: Adora_12 Start: 7820, Stop: 8341, Start Num: 23
Candidate Starts for Adora_12:
(Start: 23 @7820 has 53 MA's), (38, 7871), (52, 8003), (59, 8054), (60, 8060), (68, 8114), (84, 8228),

Gene: Agueybana_12 Start: 8479, Stop: 8991, Start Num: 23
Candidate Starts for Agueybana_12:
(Start: 23 @8479 has 53 MA's), (38, 8530), (52, 8662), (60, 8719), (68, 8773), (84, 8887),

Gene: Alove_16 Start: 12044, Stop: 12544, Start Num: 29
Candidate Starts for Alove_16:
(Start: 29 @12044 has 44 MA's), (41, 12107), (45, 12143), (49, 12173), (61, 12266), (74, 12368), (76, 12383), (78, 12404), (83, 12431), (86, 12458), (90, 12485),

Gene: AlumE_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for AlumE_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Annalisa_13 Start: 8126, Stop: 8638, Start Num: 23
Candidate Starts for Annalisa_13:
(Start: 23 @8126 has 53 MA's), (38, 8177), (52, 8306), (59, 8357), (60, 8363), (68, 8417), (84, 8531),

Gene: Antonio_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Antonio_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Antuna_19 Start: 10118, Stop: 10630, Start Num: 29
Candidate Starts for Antuna_19:
(Start: 29 @10118 has 44 MA's), (33, 10136), (40, 10175), (49, 10250), (55, 10307), (58, 10316), (61, 10343), (63, 10355), (74, 10448), (76, 10463), (89, 10556),

Gene: Appa_18 Start: 9980, Stop: 10492, Start Num: 29
Candidate Starts for Appa_18:
(Start: 29 @9980 has 44 MA's), (33, 9998), (40, 10037), (49, 10112), (55, 10169), (58, 10178), (61, 10205), (63, 10217), (74, 10310), (76, 10325), (89, 10418),

Gene: ArizonaGT_14 Start: 8759, Stop: 9256, Start Num: 32
Candidate Starts for ArizonaGT_14:
(Start: 32 @8759 has 16 MA's), (37, 8783), (60, 8972), (73, 9071), (83, 9131), (87, 9167),

Gene: Austintatious_13 Start: 8602, Stop: 9072, Start Num: 34
Candidate Starts for Austintatious_13:
(Start: 34 @8602 has 10 MA's), (56, 8785), (57, 8788), (83, 8971), (94, 9061),

Gene: AxeJC_14 Start: 8772, Stop: 9272, Start Num: 32
Candidate Starts for AxeJC_14:
(Start: 32 @8772 has 16 MA's), (37, 8796), (60, 8985), (73, 9084), (83, 9144),

Gene: AyoTeo_18 Start: 12175, Stop: 12675, Start Num: 29
Candidate Starts for AyoTeo_18:

(Start: 29 @12175 has 44 MA's), (41, 12238), (45, 12274), (49, 12304), (61, 12397), (73, 12493), (74, 12499), (76, 12514), (78, 12535), (86, 12589), (90, 12616),

Gene: BatStarr_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for BatStarr_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: BaxterFox_12 Start: 7826, Stop: 8338, Start Num: 23
Candidate Starts for BaxterFox_12:
(Start: 23 @7826 has 53 MA's), (38, 7877), (52, 8009), (59, 8060), (68, 8120), (72, 8165), (84, 8234),

Gene: Beenie_13 Start: 8119, Stop: 8637, Start Num: 23
Candidate Starts for Beenie_13:
(Start: 23 @8119 has 53 MA's), (38, 8170), (52, 8299), (59, 8350), (60, 8356), (68, 8410), (84, 8524),

Gene: Benry_16 Start: 10229, Stop: 10741, Start Num: 29
Candidate Starts for Benry_16:
(Start: 29 @10229 has 44 MA's), (41, 10292), (45, 10334), (49, 10364), (61, 10457), (71, 10541), (76, 10574), (86, 10649), (90, 10676),

Gene: Bialota_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Bialota_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (84, 8886),

Gene: BigAnti_17 Start: 12741, Stop: 13310, Start Num: 28
Candidate Starts for BigAnti_17:
(28, 12741), (36, 12774), (40, 12804), (49, 12879), (66, 13005), (69, 13023), (91, 13179), (95, 13215), (98, 13251),

Gene: Bioscum_13 Start: 8638, Stop: 9108, Start Num: 34
Candidate Starts for Bioscum_13:
(Start: 34 @8638 has 10 MA's), (56, 8821), (57, 8824), (83, 9007), (94, 9097),

Gene: Blett_19 Start: 10133, Stop: 10645, Start Num: 29
Candidate Starts for Blett_19:
(Start: 29 @10133 has 44 MA's), (33, 10151), (40, 10190), (49, 10265), (55, 10322), (58, 10331), (61, 10358), (63, 10370), (74, 10463), (76, 10478), (89, 10571),

Gene: Bosnia_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Bosnia_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: BoyNamedSue_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for BoyNamedSue_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Bush_19 Start: 10114, Stop: 10626, Start Num: 29
Candidate Starts for Bush_19:
(Start: 29 @10114 has 44 MA's), (33, 10132), (40, 10171), (49, 10246), (55, 10303), (58, 10312), (61, 10339), (63, 10351), (74, 10444), (76, 10459), (89, 10552),

Gene: Carrillo_20 Start: 10087, Stop: 10599, Start Num: 29
Candidate Starts for Carrillo_20:

(Start: 29 @10087 has 44 MA's), (33, 10105), (40, 10144), (49, 10219), (55, 10276), (58, 10285), (61, 10312), (63, 10324), (74, 10417), (76, 10432), (89, 10525),

Gene: Cicada_18 Start: 12280, Stop: 12780, Start Num: 29
Candidate Starts for Cicada_18:
(Start: 29 @12280 has 44 MA's), (41, 12343), (49, 12409), (61, 12502), (71, 12586), (74, 12604), (76, 12619), (78, 12640), (86, 12694), (90, 12721),

Gene: Clark_13 Start: 8126, Stop: 8638, Start Num: 23
Candidate Starts for Clark_13:
(Start: 23 @8126 has 53 MA's), (38, 8177), (52, 8306), (59, 8357), (60, 8363), (68, 8417), (84, 8531),

Gene: CookieDog_19 Start: 10114, Stop: 10626, Start Num: 29
Candidate Starts for CookieDog_19:
(Start: 29 @10114 has 44 MA's), (33, 10132), (40, 10171), (49, 10246), (55, 10303), (58, 10312), (61, 10339), (63, 10351), (74, 10444), (76, 10459), (89, 10552),

Gene: Cumberbatch_14 Start: 8759, Stop: 9256, Start Num: 32
Candidate Starts for Cumberbatch_14:
(Start: 32 @8759 has 16 MA's), (37, 8783), (60, 8972), (73, 9071), (83, 9131), (87, 9167),

Gene: DaRealMyers_13 Start: 8836, Stop: 9306, Start Num: 34
Candidate Starts for DaRealMyers_13:
(Start: 34 @8836 has 10 MA's), (56, 9019), (57, 9022), (81, 9190), (94, 9295),

Gene: Darolandstone_13 Start: 9086, Stop: 9541, Start Num: 35
Candidate Starts for Darolandstone_13:
(Start: 35 @9086 has 5 MA's), (56, 9254), (57, 9257), (70, 9344), (75, 9383), (77, 9398), (81, 9419), (94, 9524), (97, 9527),

Gene: DelaGarza_18 Start: 10753, Stop: 11244, Start Num: 29
Candidate Starts for DelaGarza_18:
(Start: 29 @10753 has 44 MA's), (41, 10816), (45, 10843), (47, 10855), (48, 10870), (50, 10885), (76, 11080), (90, 11182),

Gene: Dillpickles_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Dillpickles_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: DillyDally_13 Start: 8708, Stop: 9166, Start Num: 35
Candidate Starts for DillyDally_13:
(Start: 35 @8708 has 5 MA's), (39, 8729), (45, 8795), (49, 8828), (71, 8990), (74, 9008),

Gene: DobbysSock_12 Start: 7618, Stop: 8136, Start Num: 23
Candidate Starts for DobbysSock_12:
(Start: 23 @7618 has 53 MA's), (38, 7669), (52, 7798), (59, 7849), (60, 7855), (68, 7909), (84, 8023),

Gene: Dolores_13 Start: 8120, Stop: 8638, Start Num: 23
Candidate Starts for Dolores_13:
(Start: 23 @8120 has 53 MA's), (38, 8171), (52, 8300), (59, 8351), (60, 8357), (68, 8411), (84, 8525),

Gene: Dorito_12 Start: 7623, Stop: 8135, Start Num: 23
Candidate Starts for Dorito_12:

(Start: 23 @7623 has 53 MA's), (38, 7674), (52, 7803), (59, 7854), (60, 7860), (68, 7914), (84, 8028),

Gene: Dropshot_18 Start: 9980, Stop: 10492, Start Num: 29
Candidate Starts for Dropshot_18:
(Start: 29 @9980 has 44 MA's), (33, 9998), (40, 10037), (49, 10112), (55, 10169), (58, 10178), (61, 10205), (63, 10217), (74, 10310), (76, 10325), (89, 10418),

Gene: Easley_13 Start: 8121, Stop: 8642, Start Num: 23
Candidate Starts for Easley_13:
(Start: 23 @8121 has 53 MA's), (38, 8172), (52, 8304), (59, 8355), (60, 8361), (68, 8415), (84, 8529),

Gene: Eastland_14 Start: 8760, Stop: 9257, Start Num: 32
Candidate Starts for Eastland_14:
(Start: 32 @8760 has 16 MA's), (37, 8784), (60, 8973), (73, 9072), (83, 9132),

Gene: Eklok_14 Start: 8772, Stop: 9272, Start Num: 32
Candidate Starts for Eklok_14:
(Start: 32 @8772 has 16 MA's), (37, 8796), (60, 8985), (73, 9084), (83, 9144),

Gene: Eudoria_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Eudoria_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Eviarto_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Eviarto_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Finkle_13 Start: 8088, Stop: 8609, Start Num: 26
Candidate Starts for Finkle_13:
(17, 8016), (22, 8076), (Start: 26 @8088 has 1 MA's), (53, 8280), (59, 8325), (75, 8445), (82, 8484),

Gene: FireCastle_16 Start: 11944, Stop: 12447, Start Num: 29
Candidate Starts for FireCastle_16:
(Start: 29 @11944 has 44 MA's), (40, 12001), (45, 12043), (61, 12166), (71, 12250), (74, 12268), (76, 12283), (78, 12304), (86, 12358), (90, 12385),

Gene: FrumpyGal_14 Start: 8760, Stop: 9257, Start Num: 32
Candidate Starts for FrumpyGal_14:
(Start: 32 @8760 has 16 MA's), (37, 8784), (60, 8973), (73, 9072), (83, 9132),

Gene: GMA1_13 Start: 8266, Stop: 8748, Start Num: 32
Candidate Starts for GMA1_13:
(8, 8038), (12, 8146), (18, 8197), (19, 8206), (Start: 25 @8251 has 1 MA's), (Start: 32 @8266 has 16 MA's), (41, 8323), (68, 8533), (80, 8623),

Gene: Galactica_16 Start: 13620, Stop: 14111, Start Num: 32
Candidate Starts for Galactica_16:
(Start: 32 @13620 has 16 MA's), (40, 13671), (42, 13683), (45, 13716), (73, 13932),

Gene: Gingerbug_15 Start: 9935, Stop: 10438, Start Num: 29
Candidate Starts for Gingerbug_15:
(Start: 29 @9935 has 44 MA's), (41, 9998), (50, 10073), (61, 10154), (76, 10271), (83, 10319), (90, 10373),

Gene: Goodman_17 Start: 12192, Stop: 12692, Start Num: 29
Candidate Starts for Goodman_17:
(Start: 29 @12192 has 44 MA's), (41, 12255), (45, 12291), (49, 12321), (61, 12414), (71, 12498), (74, 12516), (76, 12531), (78, 12552), (86, 12606), (90, 12633),

Gene: Guzman_20 Start: 10395, Stop: 10907, Start Num: 29
Candidate Starts for Guzman_20:
(Start: 29 @10395 has 44 MA's), (33, 10413), (40, 10452), (49, 10527), (55, 10584), (58, 10593), (61, 10620), (74, 10725), (76, 10740), (89, 10833),

Gene: HFrancette_14 Start: 8771, Stop: 9271, Start Num: 32
Candidate Starts for HFrancette_14:
(Start: 32 @8771 has 16 MA's), (37, 8795), (60, 8984), (73, 9083), (83, 9143),

Gene: Herod_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Herod_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Hiyaa_18 Start: 14661, Stop: 15134, Start Num: 32
Candidate Starts for Hiyaa_18:
(14, 14538), (16, 14556), (Start: 32 @14661 has 16 MA's), (43, 14733), (59, 14862), (65, 14904), (73, 14967), (96, 15123),

Gene: Hortense_12 Start: 7820, Stop: 8341, Start Num: 23
Candidate Starts for Hortense_12:
(Start: 23 @7820 has 53 MA's), (38, 7871), (52, 8003), (59, 8054), (60, 8060), (68, 8114), (84, 8228),

Gene: Howe_12 Start: 7820, Stop: 8341, Start Num: 23
Candidate Starts for Howe_12:
(Start: 23 @7820 has 53 MA's), (38, 7871), (52, 8003), (59, 8054), (60, 8060), (68, 8114), (84, 8228),

Gene: Htur_16 Start: 12213, Stop: 12713, Start Num: 29
Candidate Starts for Htur_16:
(Start: 29 @12213 has 44 MA's), (41, 12276), (45, 12312), (49, 12342), (61, 12435), (71, 12519), (74, 12537), (76, 12552), (78, 12573), (86, 12627), (90, 12654),

Gene: Hugley_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Hugley_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Hyzer_12 Start: 8479, Stop: 8991, Start Num: 23
Candidate Starts for Hyzer_12:
(Start: 23 @8479 has 53 MA's), (62, 8731), (72, 8818), (84, 8887),

Gene: Ididsumtinwong_13 Start: 8638, Stop: 9108, Start Num: 34
Candidate Starts for Ididsumtinwong_13:
(Start: 34 @8638 has 10 MA's), (56, 8821), (57, 8824), (83, 9007), (94, 9097),

Gene: Ignacio_14 Start: 8771, Stop: 9271, Start Num: 32
Candidate Starts for Ignacio_14:
(Start: 32 @8771 has 16 MA's), (37, 8795), (60, 8984), (73, 9083), (83, 9143),

Gene: IndiRoo_16 Start: 10237, Stop: 10749, Start Num: 29
Candidate Starts for IndiRoo_16:
(Start: 29 @10237 has 44 MA's), (41, 10300), (45, 10342), (49, 10372), (61, 10465), (76, 10582), (86, 10657), (90, 10684),

Gene: Invectra_13 Start: 8119, Stop: 8637, Start Num: 23
Candidate Starts for Invectra_13:
(15, 8035), (Start: 23 @8119 has 53 MA's), (38, 8170), (52, 8299), (59, 8350), (60, 8356), (62, 8368), (68, 8410), (84, 8524),

Gene: Jace_12 Start: 8389, Stop: 8895, Start Num: 24
Candidate Starts for Jace_12:
(Start: 24 @8389 has 1 MA's), (Start: 32 @8407 has 16 MA's), (80, 8767),

Gene: Jakelyne_20 Start: 10136, Stop: 10648, Start Num: 29
Candidate Starts for Jakelyne_20:
(Start: 29 @10136 has 44 MA's), (33, 10154), (40, 10193), (49, 10268), (55, 10325), (58, 10334), (61, 10361), (63, 10373), (74, 10466), (76, 10481), (89, 10574),

Gene: Jera_17 Start: 11291, Stop: 11791, Start Num: 29
Candidate Starts for Jera_17:
(Start: 29 @11291 has 44 MA's), (41, 11354), (45, 11390), (49, 11420), (61, 11513), (74, 11615), (76, 11630), (78, 11651), (83, 11678), (86, 11705), (90, 11732),

Gene: Johann_17 Start: 12192, Stop: 12692, Start Num: 29
Candidate Starts for Johann_17:
(Start: 29 @12192 has 44 MA's), (41, 12255), (45, 12291), (49, 12321), (61, 12414), (71, 12498), (74, 12516), (76, 12531), (78, 12552), (86, 12606), (90, 12633),

Gene: Keanu_18 Start: 14701, Stop: 15177, Start Num: 32
Candidate Starts for Keanu_18:
(4, 14353), (14, 14578), (16, 14596), (Start: 32 @14701 has 16 MA's), (40, 14746), (45, 14791), (67, 14956),

Gene: Kita_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Kita_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Kokushibo_18 Start: 14676, Stop: 15149, Start Num: 32
Candidate Starts for Kokushibo_18:
(14, 14553), (16, 14571), (Start: 32 @14676 has 16 MA's), (43, 14748), (59, 14877), (65, 14919), (96, 15138),

Gene: Labella_18 Start: 12179, Stop: 12679, Start Num: 29
Candidate Starts for Labella_18:
(Start: 29 @12179 has 44 MA's), (41, 12242), (45, 12278), (49, 12308), (61, 12401), (73, 12497), (74, 12503), (76, 12518), (78, 12539), (86, 12593), (90, 12620),

Gene: Lesiram_18 Start: 10729, Stop: 11214, Start Num: 29
Candidate Starts for Lesiram_18:
(Start: 29 @10729 has 44 MA's), (41, 10792), (47, 10831), (48, 10846), (50, 10861), (76, 11056), (90, 11158),

Gene: Linayshia_16 Start: 12205, Stop: 12705, Start Num: 29
Candidate Starts for Linayshia_16:
(Start: 29 @12205 has 44 MA's), (41, 12268), (45, 12304), (49, 12334), (61, 12427), (71, 12511), (74, 12529), (76, 12544), (78, 12565), (86, 12619), (90, 12646),

Gene: Lishka_13 Start: 8602, Stop: 9072, Start Num: 34
Candidate Starts for Lishka_13:
(Start: 34 @8602 has 10 MA's), (56, 8785), (57, 8788), (83, 8971), (94, 9061),

Gene: Losacky_20 Start: 10260, Stop: 10772, Start Num: 29
Candidate Starts for Losacky_20:
(Start: 29 @10260 has 44 MA's), (33, 10278), (40, 10317), (49, 10392), (55, 10449), (58, 10458), (61, 10485), (63, 10497), (74, 10590), (76, 10605), (89, 10698),

Gene: Madavieve_12 Start: 8479, Stop: 8991, Start Num: 23
Candidate Starts for Madavieve_12:
(Start: 23 @8479 has 53 MA's), (38, 8530), (52, 8662), (60, 8719), (68, 8773), (84, 8887),

Gene: Madeline_12 Start: 8479, Stop: 8991, Start Num: 23
Candidate Starts for Madeline_12:
(Start: 23 @8479 has 53 MA's), (38, 8530), (52, 8662), (60, 8719), (68, 8773), (84, 8887),

Gene: Manasvini_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Manasvini_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Maridalia_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Maridalia_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Mariel_20 Start: 10291, Stop: 10803, Start Num: 29
Candidate Starts for Mariel_20:
(Start: 29 @10291 has 44 MA's), (33, 10309), (40, 10348), (49, 10423), (55, 10480), (58, 10489), (61, 10516), (63, 10528), (74, 10621), (76, 10636), (89, 10729),

Gene: Mcklovin_13 Start: 8936, Stop: 9451, Start Num: 23
Candidate Starts for Mcklovin_13:
(15, 8852), (Start: 23 @8936 has 53 MA's), (31, 8957), (38, 8987), (52, 9119), (60, 9176), (68, 9230), (84, 9344),

Gene: MenE_19 Start: 10248, Stop: 10760, Start Num: 29
Candidate Starts for MenE_19:
(Start: 29 @10248 has 44 MA's), (33, 10266), (40, 10305), (49, 10380), (55, 10437), (58, 10446), (61, 10473), (63, 10485), (74, 10578), (76, 10593), (89, 10686),

Gene: MichaelScott_13 Start: 8119, Stop: 8637, Start Num: 23
Candidate Starts for MichaelScott_13:
(Start: 23 @8119 has 53 MA's), (38, 8170), (52, 8299), (59, 8350), (60, 8356), (68, 8410), (84, 8524),

Gene: Milani_17 Start: 10888, Stop: 11400, Start Num: 29
Candidate Starts for Milani_17:
(Start: 29 @10888 has 44 MA's), (41, 10951), (45, 10993), (49, 11023), (61, 11116), (71, 11200), (74, 11218), (76, 11233), (86, 11308), (90, 11335),

Gene: Mojorita_13 Start: 8930, Stop: 9394, Start Num: 35
Candidate Starts for Mojorita_13:
(Start: 35 @8930 has 5 MA's), (44, 8996), (57, 9107), (65, 9161), (70, 9194), (75, 9233), (81, 9269), (88, 9323), (94, 9374),

Gene: NCRodriguez_20 Start: 10249, Stop: 10761, Start Num: 29
Candidate Starts for NCRodriguez_20:
(Start: 29 @10249 has 44 MA's), (33, 10267), (40, 10306), (49, 10381), (55, 10438), (58, 10447), (61, 10474), (63, 10486), (65, 10510), (74, 10579), (76, 10594), (89, 10687),

Gene: Neobush_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Neobush_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Nymphadora_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Nymphadora_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Ohgeesy_12 Start: 7826, Stop: 8338, Start Num: 23
Candidate Starts for Ohgeesy_12:
(Start: 23 @7826 has 53 MA's), (38, 7877), (52, 8009), (59, 8060), (60, 8066), (68, 8120), (84, 8234),

Gene: Olympi_18 Start: 12183, Stop: 12683, Start Num: 29
Candidate Starts for Olympi_18:
(Start: 29 @12183 has 44 MA's), (41, 12246), (45, 12282), (49, 12312), (61, 12405), (71, 12489), (74, 12507), (76, 12522), (78, 12543), (86, 12597), (90, 12624),

Gene: Oregano_13 Start: 7790, Stop: 8308, Start Num: 23
Candidate Starts for Oregano_13:
(Start: 23 @7790 has 53 MA's), (38, 7841), (52, 7970), (59, 8021), (60, 8027), (68, 8081), (84, 8195),

Gene: PantheRoc_12 Start: 7826, Stop: 8338, Start Num: 23
Candidate Starts for PantheRoc_12:
(Start: 23 @7826 has 53 MA's), (38, 7877), (52, 8009), (59, 8060), (68, 8120), (84, 8234),

Gene: PapayaSalad_13 Start: 8607, Stop: 9077, Start Num: 34
Candidate Starts for PapayaSalad_13:
(Start: 34 @8607 has 10 MA's), (57, 8793), (83, 8976), (92, 9048), (94, 9066),

Gene: Parvaparticeps_37 Start: 28010, Stop: 27492, Start Num: 27
Candidate Starts for Parvaparticeps_37:
(27, 28010), (33, 27986), (47, 27878), (57, 27797), (61, 27767), (76, 27650), (86, 27575),

Gene: PermaG_17 Start: 12255, Stop: 12755, Start Num: 29
Candidate Starts for PermaG_17:
(Start: 29 @12255 has 44 MA's), (41, 12318), (45, 12354), (49, 12384), (61, 12477), (71, 12561), (74, 12579), (76, 12594), (78, 12615), (86, 12669), (90, 12696),

Gene: PhillyJawn_19 Start: 9980, Stop: 10492, Start Num: 29
Candidate Starts for PhillyJawn_19:
(Start: 29 @9980 has 44 MA's), (33, 9998), (40, 10037), (49, 10112), (55, 10169), (58, 10178), (61, 10205), (63, 10217), (74, 10310), (76, 10325), (89, 10418),

Gene: Phingu_21 Start: 10139, Stop: 10651, Start Num: 29
Candidate Starts for Phingu_21:
(Start: 29 @10139 has 44 MA's), (33, 10157), (40, 10196), (49, 10271), (55, 10328), (58, 10337), (61, 10364), (63, 10376), (74, 10469), (76, 10484), (89, 10577),

Gene: Phonegingi_18 Start: 9980, Stop: 10492, Start Num: 29
Candidate Starts for Phonegingi_18:
(Start: 29 @9980 has 44 MA's), (33, 9998), (40, 10037), (49, 10112), (55, 10169), (58, 10178), (61, 10205), (63, 10217), (74, 10310), (76, 10325), (89, 10418),

Gene: PhriskyACE_12 Start: 7623, Stop: 8135, Start Num: 23
Candidate Starts for PhriskyACE_12:
(Start: 23 @7623 has 53 MA's), (38, 7674), (52, 7803), (59, 7854), (60, 7860), (68, 7914), (84, 8028),

Gene: Picard_13 Start: 8930, Stop: 9394, Start Num: 35
Candidate Starts for Picard_13:
(Start: 35 @8930 has 5 MA's), (44, 8996), (45, 9008), (57, 9107), (65, 9161), (70, 9194), (75, 9233), (81, 9269), (88, 9323), (94, 9374),

Gene: Piccadilly_14 Start: 8759, Stop: 9256, Start Num: 32
Candidate Starts for Piccadilly_14:
(Start: 32 @8759 has 16 MA's), (37, 8783), (60, 8972), (73, 9071), (83, 9131), (87, 9167),

Gene: Pickles13_18 Start: 10150, Stop: 10662, Start Num: 29
Candidate Starts for Pickles13_18:
(Start: 29 @10150 has 44 MA's), (33, 10168), (40, 10207), (49, 10282), (55, 10339), (58, 10348), (61, 10375), (63, 10387), (65, 10411), (74, 10480), (76, 10495), (89, 10588),

Gene: Polly_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Polly_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Powerball_12 Start: 7626, Stop: 8144, Start Num: 23
Candidate Starts for Powerball_12:
(Start: 23 @7626 has 53 MA's), (38, 7677), (52, 7812), (59, 7863), (60, 7869), (68, 7923), (84, 8037),

Gene: Raleigh_13 Start: 9041, Stop: 9514, Start Num: 34
Candidate Starts for Raleigh_13:
(1, 8291), (5, 8693), (6, 8729), (9, 8852), (10, 8888), (11, 8903), (21, 8999), (Start: 34 @9041 has 10 MA's), (51, 9191), (54, 9209), (57, 9227), (70, 9320), (81, 9395), (94, 9500), (95, 9503),

Gene: Rasovi_16 Start: 12213, Stop: 12713, Start Num: 29
Candidate Starts for Rasovi_16:
(Start: 29 @12213 has 44 MA's), (41, 12276), (45, 12312), (49, 12342), (61, 12435), (71, 12519), (74, 12537), (76, 12552), (78, 12573), (86, 12627), (90, 12654),

Gene: Rizz_14 Start: 8119, Stop: 8637, Start Num: 23
Candidate Starts for Rizz_14:
(Start: 23 @8119 has 53 MA's), (38, 8170), (52, 8299), (59, 8350), (60, 8356), (68, 8410), (84, 8524),

Gene: Rootkit7_16 Start: 12044, Stop: 12544, Start Num: 29
Candidate Starts for Rootkit7_16:

(Start: 29 @12044 has 44 MA's), (41, 12107), (45, 12143), (49, 12173), (61, 12266), (74, 12368), (76, 12383), (78, 12404), (83, 12431), (86, 12458), (90, 12485),

Gene: SBlackberry_16 Start: 12050, Stop: 12550, Start Num: 29
Candidate Starts for SBlackberry_16:
(Start: 29 @12050 has 44 MA's), (41, 12113), (45, 12149), (49, 12179), (61, 12272), (74, 12374), (76, 12389), (78, 12410), (83, 12437), (86, 12464), (90, 12491),

Gene: SV1_13 Start: 8813, Stop: 9283, Start Num: 34
Candidate Starts for SV1_13:
(Start: 34 @8813 has 10 MA's), (56, 8996), (57, 8999), (79, 9158), (83, 9182), (94, 9272),

Gene: Samman98_13 Start: 8120, Stop: 8638, Start Num: 23
Candidate Starts for Samman98_13:
(Start: 23 @8120 has 53 MA's), (38, 8171), (52, 8300), (59, 8351), (60, 8357), (68, 8411), (84, 8525),

Gene: Schlegelian_14 Start: 8759, Stop: 9256, Start Num: 32
Candidate Starts for Schlegelian_14:
(Start: 32 @8759 has 16 MA's), (37, 8783), (60, 8972), (73, 9071), (83, 9131), (87, 9167),

Gene: ScoobySnack_17 Start: 9849, Stop: 10361, Start Num: 29
Candidate Starts for ScoobySnack_17:
(Start: 29 @9849 has 44 MA's), (33, 9867), (40, 9906), (49, 9981), (55, 10038), (58, 10047), (61, 10074), (63, 10086), (73, 10173), (74, 10179), (76, 10194), (89, 10287), (93, 10323),

Gene: Sekhmet_13 Start: 8119, Stop: 8637, Start Num: 23
Candidate Starts for Sekhmet_13:
(15, 8035), (Start: 23 @8119 has 53 MA's), (38, 8170), (52, 8299), (59, 8350), (60, 8356), (62, 8368), (68, 8410), (84, 8524),

Gene: Shlim410_12 Start: 7820, Stop: 8341, Start Num: 23
Candidate Starts for Shlim410_12:
(Start: 23 @7820 has 53 MA's), (38, 7871), (52, 8003), (59, 8054), (60, 8060), (68, 8114), (84, 8228),

Gene: Sidious_12 Start: 7821, Stop: 8336, Start Num: 23
Candidate Starts for Sidious_12:
(Start: 23 @7821 has 53 MA's), (38, 7872), (52, 8004), (60, 8061), (68, 8115), (84, 8229),

Gene: SoJo_13 Start: 8836, Stop: 9306, Start Num: 34
Candidate Starts for SoJo_13:
(Start: 34 @8836 has 10 MA's), (56, 9019), (57, 9022), (81, 9190), (94, 9295),

Gene: Spocter_18 Start: 14649, Stop: 15122, Start Num: 32
Candidate Starts for Spocter_18:
(14, 14526), (16, 14544), (Start: 32 @14649 has 16 MA's), (43, 14721), (59, 14850), (65, 14892), (96, 15111),

Gene: Sucha_13 Start: 9226, Stop: 9738, Start Num: 29
Candidate Starts for Sucha_13:
(Start: 29 @9226 has 44 MA's), (41, 9289), (45, 9331), (49, 9361), (61, 9454), (71, 9538), (76, 9571), (86, 9646), (90, 9673),

Gene: Suerte_12 Start: 7618, Stop: 8136, Start Num: 23

Candidate Starts for Suerte_12:
(Start: 23 @7618 has 53 MA's), (38, 7669), (52, 7798), (59, 7849), (60, 7855), (68, 7909), (84, 8023),

Gene: Suscepit_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Suscepit_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: SushiChef_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for SushiChef_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Sweetums_19 Start: 10827, Stop: 11318, Start Num: 29
Candidate Starts for Sweetums_19:
(Start: 29 @10827 has 44 MA's), (41, 10890), (47, 10929), (48, 10944), (50, 10959), (76, 11154), (90, 11256),

Gene: Tayonia_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Tayonia_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Teng_18 Start: 10750, Stop: 11241, Start Num: 29
Candidate Starts for Teng_18:
(Start: 29 @10750 has 44 MA's), (41, 10813), (47, 10852), (48, 10867), (50, 10882), (76, 11077), (90, 11179),

Gene: Thimann_13 Start: 8120, Stop: 8638, Start Num: 23
Candidate Starts for Thimann_13:
(Start: 23 @8120 has 53 MA's), (38, 8171), (52, 8300), (59, 8351), (60, 8357), (68, 8411), (84, 8525),

Gene: TimTam_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for TimTam_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: TinyDot_14 Start: 8749, Stop: 9258, Start Num: 25
Candidate Starts for TinyDot_14:
(2, 8131), (3, 8359), (7, 8527), (12, 8647), (13, 8650), (20, 8725), (Start: 25 @8749 has 1 MA's), (44, 8851), (84, 9148), (85, 9154),

Gene: ToastyFinz_12 Start: 8701, Stop: 9171, Start Num: 35
Candidate Starts for ToastyFinz_12:
(Start: 35 @8701 has 5 MA's), (57, 8881), (70, 8968), (88, 9097),

Gene: Trumpet_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Trumpet_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Tubberson_13 Start: 8836, Stop: 9306, Start Num: 34
Candidate Starts for Tubberson_13:
(Start: 34 @8836 has 10 MA's), (56, 9019), (57, 9022), (81, 9190), (94, 9295),

Gene: TurboVicky_16 Start: 12044, Stop: 12544, Start Num: 29
Candidate Starts for TurboVicky_16:

(Start: 29 @12044 has 44 MA's), (41, 12107), (45, 12143), (49, 12173), (61, 12266), (74, 12368), (76, 12383), (78, 12404), (83, 12431), (86, 12458), (90, 12485),

Gene: Tuti_13 Start: 8119, Stop: 8640, Start Num: 23
Candidate Starts for Tuti_13:
(Start: 23 @8119 has 53 MA's), (38, 8167), (52, 8302), (59, 8353), (60, 8359), (68, 8413), (84, 8527),

Gene: Twinkle_12 Start: 7820, Stop: 8341, Start Num: 23
Candidate Starts for Twinkle_12:
(Start: 23 @7820 has 53 MA's), (38, 7871), (52, 8003), (59, 8054), (60, 8060), (68, 8114), (84, 8228),

Gene: Typher_18 Start: 12178, Stop: 12678, Start Num: 29
Candidate Starts for Typher_18:
(Start: 29 @12178 has 44 MA's), (41, 12241), (45, 12277), (49, 12307), (61, 12400), (73, 12496), (74, 12502), (76, 12517), (78, 12538), (86, 12592), (90, 12619),

Gene: Violeta_20 Start: 10078, Stop: 10590, Start Num: 29
Candidate Starts for Violeta_20:
(Start: 29 @10078 has 44 MA's), (33, 10096), (40, 10135), (49, 10210), (55, 10267), (58, 10276), (61, 10303), (63, 10315), (74, 10408), (76, 10423), (89, 10516),

Gene: Vondra_14 Start: 8768, Stop: 9268, Start Num: 32
Candidate Starts for Vondra_14:
(Start: 32 @8768 has 16 MA's), (37, 8792), (60, 8981), (73, 9080), (83, 9140),

Gene: Warren_19 Start: 10177, Stop: 10689, Start Num: 29
Candidate Starts for Warren_19:
(Start: 29 @10177 has 44 MA's), (33, 10195), (40, 10234), (49, 10309), (55, 10366), (58, 10375), (61, 10402), (63, 10414), (64, 10429), (65, 10438), (74, 10507), (76, 10522), (89, 10615),

Gene: Winchester007_20 Start: 10120, Stop: 10632, Start Num: 29
Candidate Starts for Winchester007_20:
(Start: 29 @10120 has 44 MA's), (33, 10138), (40, 10177), (49, 10252), (55, 10309), (58, 10318), (61, 10345), (63, 10357), (74, 10450), (76, 10465), (89, 10558),

Gene: WinkNick_13 Start: 8120, Stop: 8638, Start Num: 23
Candidate Starts for WinkNick_13:
(Start: 23 @8120 has 53 MA's), (38, 8171), (52, 8300), (59, 8351), (60, 8357), (68, 8411), (84, 8525),

Gene: Wrackline_23 Start: 11409, Stop: 11918, Start Num: 29
Candidate Starts for Wrackline_23:
(Start: 29 @11409 has 44 MA's), (30, 11412), (41, 11472), (46, 11514), (50, 11547), (52, 11565), (71, 11712), (72, 11721), (76, 11745), (78, 11766), (87, 11829), (89, 11838),

Gene: Yeezy_12 Start: 7823, Stop: 8335, Start Num: 23
Candidate Starts for Yeezy_12:
(Start: 23 @7823 has 53 MA's), (38, 7874), (52, 8006), (59, 8057), (68, 8117), (84, 8231),

Gene: Zameen_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Zameen_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (72, 8817), (84, 8886),

Gene: Zanella_16 Start: 12047, Stop: 12547, Start Num: 29

Candidate Starts for Zanella_16:
(Start: 29 @12047 has 44 MA's), (41, 12110), (45, 12146), (49, 12176), (61, 12269), (74, 12371), (76, 12386), (78, 12407), (83, 12434), (86, 12461), (90, 12488),

Gene: Zirinka_12 Start: 8478, Stop: 8990, Start Num: 23
Candidate Starts for Zirinka_12:
(Start: 23 @8478 has 53 MA's), (38, 8529), (52, 8661), (59, 8712), (68, 8772), (84, 8886),