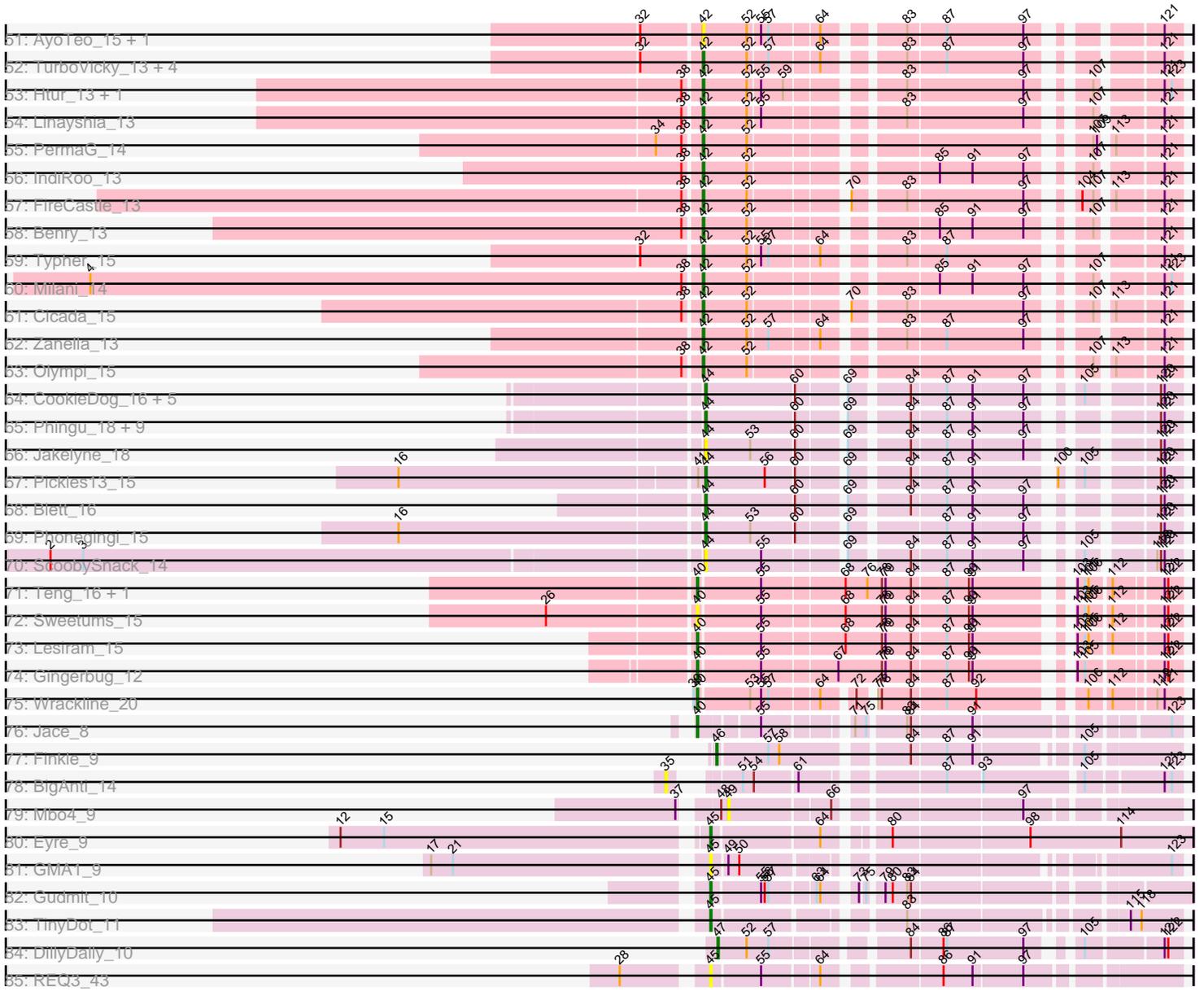# Pham 289121

Pham 289121

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 289121 Report

This analysis was run 03/28/26 on database version 641.

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 289121 has 177 members, 30 are drafts.

Phages represented in each track:
• Track 1 : Mojorita_10, Picard_10
• Track 2 : Tubberson_10, DaRealMyers_10
• Track 3 : SoJo_10
• Track 4 : SV1_10
• Track 5 : Darolandstone_10
• Track 6 : Raleigh_10
• Track 7 : PapayaSalad_10, Ididsumtinwong_10, Bioscum_10
• Track 8 : Austintatious_10, Lishka_10
• Track 9 : FrumpyGal_11, Eklok_11, Cumberbatch_11, AxeJC_11, Piccadilly_11, Schlegelian_11, ArizonaGT_11
• Track 10 : HFrancette_11, Ignacio_11
• Track 11 : Vondra_11
• Track 12 : Eastland_11
• Track 13 : Galactica_13
• Track 14 : Keanu_15
• Track 15 : Hiyaa_15
• Track 16 : Kokushibo_16
• Track 17 : Spocter_15
• Track 18 : Pepperoni_9, Lton_9
• Track 19 : Bunnybear_9
• Track 20 : WelcomeAyanna_9
• Track 21 : Herod_9, BatStarr_9, Zirinka_9
• Track 22 : Antonio_9, Maridalia_9
• Track 23 : Hyzer_9
• Track 24 : Eviarto_9, Hugley_9, TimTam_9
• Track 25 : Manasvini_9, Trumpet_9, Suscepit_9, Kita_9, Polly_9, Zameen_9, Eudoria_9, Tayonia_9, Neobush_9
• Track 26 : Madavieve_9
• Track 27 : ThankyouJordi_9
• Track 28 : Lamberg_9, EdnaMode_9, Nettuno_9
• Track 29 : JCole_9, Cynthia_9, Clap_9, GemG_9, Whiteclaw_9, Sproutie_9, Gizermo_9, Ebert_9, Savage_9, Mocha12_9, Haley23_9, TuertoX_9

- Track 30 : LordFarquaad_9, Yeet412_9, Attis_9, SoilAssassin_9, Matteo_9, Bjanes7_9, Pickett_9
- Track 31 : Vasanti_9
- Track 32 : FroggyToad_9
- Track 33 : Sahara_9
- Track 34 : Yeezy_9
- Track 35 : BaxterFox_9
- Track 36 : PantheRoc_9, Ohgeesy_9
- Track 37 : Mcklovin_10, Agueybana_9, Nymphadora_9, AlumE_9, Bialota_9, BoyNamedSue_9, Madeline_9, Bosnia_9
- Track 38 : Clark_10, Annalisa_10, Tuti_11, Dorito_9, PhriskyACE_9
- Track 39 : MichaelScott_10, DobbysSock_9, Suerte_9, WinkNick_10, Oregano_10, Easley_10, Dolores_10, Samman98_10, Beenie_10, Thimann_10, Invectra_10
- Track 40 : Shlim410_9, Hortense_9, Adora_9
- Track 41 : Howe_9, Twinkle_9
- Track 42 : Powerball_9
- Track 43 : Sekhmet_10
- Track 44 : Denise_9
- Track 45 : OneDirection_9
- Track 46 : Faith5x5_9
- Track 47 : Moosehead_9
- Track 48 : Sidious_9
- Track 49 : RavenCo17_9
- Track 50 : Johann_14, Goodman_14
- Track 51 : AyoTeo_15, Labella_15
- Track 52 : TurboVicky_13, Jera_14, SBlackberry_13, Rootkit7_13, Alove_13
- Track 53 : Htur_13, Rasovi_13
- Track 54 : Linayshia_13
- Track 55 : PermaG_14
- Track 56 : IndiRoo_13
- Track 57 : FireCastle_13
- Track 58 : Benry_13
- Track 59 : Typher_15
- Track 60 : Milani_14
- Track 61 : Cicada_15
- Track 62 : Zanella_13
- Track 63 : Olympi_15
- Track 64 : CookieDog_16, Appa_15, PhillyJawn_16, Losacky_17, Warren_16, Winchester007_31
- Track 65 : Phingu_18, Carrillo_17, Dropshot_15, MenE_16, Antuna_16, Bush_16, NCRodriguez_17, Mariel_19, Guzman_17, Violeta_17
- Track 66 : Jakelyne_18
- Track 67 : Pickles13_15
- Track 68 : Blett_16
- Track 69 : Phonegingi_15
- Track 70 : ScoobySnack_14
- Track 71 : Teng_16, DelaGarza_15
- Track 72 : Sweetums_15
- Track 73 : Lesiram_15
- Track 74 : Gingerbug_12
- Track 75 : Wrackline_20
- Track 76 : Jace_8
- Track 77 : Finkle_9

• Track 78 : BigAnti_14
• Track 79 : Mbo4_9
• Track 80 : Eyre_9
• Track 81 : GMA1_9
• Track 82 : Gudmit_10
• Track 83 : TinyDot_11
• Track 84 : DillyDally_10
• Track 85 : REQ3_43

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

The start number called the most often in the published annotations is 47, it was called in 29 of the 147 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ArizonaGT_11, Austintatious_10, AxeJC_11, BaxterFox_9, Bioscum_10, Cumberbatch_11, DaRealMyers_10, Darolandstone_10, DillyDally_10, Eklok_11, FrumpyGal_11, Galactica_13, HFrancette_11, Hiyaa_15, Ididsumtinwong_10, Ignacio_11, Keanu_15, Kokushibo_16, Lishka_10, Mojorita_10, PapayaSalad_10, Picard_10, Piccadilly_11, Raleigh_10, SV1_10, Schlegelian_11, Sekhmet_10, SoJo_10, Spocter_15, Tubberson_10, Vondra_11,

Genes that have the "Most Annotated" start but do not call it:
• Adora_9, Annalisa_10, Beenie_10, Clark_10, DobbysSock_9, Dolores_10, Dorito_9, Easley_10, Eastland_11, Hortense_9, Howe_9, Invectra_10, MichaelScott_10, Ohgeesy_9, Oregano_10, PantheRoc_9, PhriskyACE_9, Powerball_9, Samman98_10, Shlim410_9, Sidious_9, Suerte_9, Thimann_10, Tuti_11, Twinkle_9, WinkNick_10, Yeezy_9,

Genes that do not have the "Most Annotated" start:
• Agueybana_9, Alove_13, AlumE_9, Antonio_9, Antuna_16, Appa_15, Attis_9, AyoTeo_15, BatStarr_9, Benry_13, Bialota_9, BigAnti_14, Bjanes7_9, Blett_16, Bosnia_9, BoyNamedSue_9, Bunnybear_9, Bush_16, Carrillo_17, Cicada_15, Clap_9, CookieDog_16, Cynthia_9, DelaGarza_15, Denise_9, Dropshot_15, Ebert_9, EdnaMode_9, Eudoria_9, Eviarto_9, Eyre_9, Faith5x5_9, Finkle_9, FireCastle_13, FroggyToad_9, GMA1_9, GemG_9, Gingerbug_12, Gizermo_9, Goodman_14, Gudmit_10, Guzman_17, Haley23_9, Herod_9, Htur_13, Hugley_9, Hyzer_9, IndiRoo_13, JCole_9, Jace_8, Jakelyne_18, Jera_14, Johann_14, Kita_9, Labella_15, Lamberg_9, Lesiram_15, Linayshia_13, LordFarquaad_9, Losacky_17, Lton_9, Madavieve_9, Madeline_9, Manasvini_9, Maridalia_9, Mariel_19, Matteo_9, Mbo4_9, Mcklovin_10, MenE_16, Milani_14, Mocha12_9, Moosehead_9, NCRodriguez_17, Neobush_9, Nettuno_9, Nymphadora_9, Olympi_15, OneDirection_9, Pepperoni_9, PermaG_14, PhillyJawn_16, Phingu_18, Phonegingi_15, Pickett_9, Pickles13_15, Polly_9, REQ3_43, Rasovi_13, RavenCo17_9, Rootkit7_13, SBlackberry_13, Sahara_9, Savage_9, ScoobySnack_14, SoilAssassin_9, Sproutie_9, Suscepit_9, Sweetums_15, Tayonia_9, Teng_16, ThankyouJordi_9, TimTam_9, TinyDot_11, Trumpet_9, TuertoX_9, TurboVicky_13, Typher_15, Vasanti_9, Violeta_17, Warren_16, WelcomeAyanna_9, Whiteclaw_9, Winchester007_31, Wrackline_20, Yeet412_9, Zameen_9, Zanella_13, Zirinka_9,

Summary by start number:

Start 27:
• Found in 18 of 177 (10.2%) of genes in pham
• Manual Annotations of this start: 4 of 147
• Called 22.2% of time when present
• Phage (with cluster) where this start called: BatStarr_9 (CZ1), Herod_9 (CZ1), ThankyouJordi_9 (CZ1), Zirinka_9 (CZ1),

Start 30:
• Found in 40 of 177 (22.6%) of genes in pham
• Manual Annotations of this start: 26 of 147
• Called 65.0% of time when present
• Phage (with cluster) where this start called: Adora_9 (CZ4), Agueybana_9 (CZ1), AlumE_9 (CZ1), Bialota_9 (CZ1), Bosnia_9 (CZ1), BoyNamedSue_9 (CZ1), Bunnybear_9 (CZ), Eudoria_9 (CZ1), Hortense_9 (CZ4), Kita_9 (CZ1), Madeline_9 (CZ1), Manasvini_9 (CZ1), Mcklovin_10 (CZ4), Neobush_9 (CZ1), Nymphadora_9 (CZ1), Ohgeesy_9 (CZ), PantheRoc_9 (CZ3), Polly_9 (CZ1), Shlim410_9 (CZ4), Sidious_9 (CZ7), Suscepit_9 (CZ1), Tayonia_9 (CZ1), Trumpet_9 (CZ1), WelcomeAyanna_9 (CZ1), Yeezy_9 (CZ3), Zameen_9 (CZ1),

Start 33:
• Found in 18 of 177 (10.2%) of genes in pham
• Manual Annotations of this start: 15 of 147
• Called 94.4% of time when present
• Phage (with cluster) where this start called: Annalisa_10 (CZ4), Beenie_10 (CZ4), Clark_10 (CZ4), DobbysSock_9 (CZ4), Dolores_10 (CZ4), Dorito_9 (CZ4), Easley_10 (CZ4), Invectra_10 (CZ4), MichaelScott_10 (CZ4), Oregano_10 (CZ4), PhriskyACE_9 (CZ4), Powerball_9 (CZ4), Samman98_10 (CZ4), Suerte_9 (CZ4), Thimann_10 (CZ4), Tuti_11 (CZ4), WinkNick_10 (CZ4),

Start 35:
• Found in 1 of 177 (0.6%) 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_14 (singleton),

Start 36:
• Found in 30 of 177 (16.9%) of genes in pham
• Manual Annotations of this start: 4 of 147
• Called 23.3% of time when present
• Phage (with cluster) where this start called: Antonio_9 (CZ1), Eviarto_9 (CZ1), Hugley_9 (CZ1), Hyzer_9 (CZ1), Madavieve_9 (CZ1), Maridalia_9 (CZ1), TimTam_9 (CZ1),

Start 40:
• Found in 7 of 177 (4.0%) of genes in pham
• Manual Annotations of this start: 5 of 147
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DelaGarza_15 (GF), Gingerbug_12 (GF), Jace_8 (singleton), Lesiram_15 (GF), Sweetums_15 (GF), Teng_16 (GF), Wrackline_20 (GF),

Start 42:
• Found in 21 of 177 (11.9%) of genes in pham
• Manual Annotations of this start: 17 of 147
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alove_13 (EJ), AyoTeo_15 (EJ), Benry_13 (EJ), Cicada_15 (EJ), FireCastle_13 (EJ), Goodman_14 (EJ), Htur_13 (EJ), IndiRoo_13 (EJ), Jera_14 (EJ), Johann_14 (EJ), Labella_15 (EJ), Linayshia_13 (EJ), Milani_14 (EJ), Olympi_15 (EJ), PermaG_14 (EJ), Rasovi_13 (EJ), Rootkit7_13 (EJ), SBlackberry_13 (EJ), TurboVicky_13 (EJ), Typher_15 (EJ), Zanella_13 (EJ),

Start 43:
• Found in 5 of 177 (2.8%) of genes in pham
• Manual Annotations of this start: 2 of 147
• Called 40.0% of time when present
• Phage (with cluster) where this start called: Howe_9 (CZ4), Twinkle_9 (CZ4),

Start 44:
• Found in 21 of 177 (11.9%) of genes in pham
• Manual Annotations of this start: 11 of 147
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antuna_16 (GA), Appa_15 (GA), Blett_16 (GA), Bush_16 (GA), Carrillo_17 (GA), CookieDog_16 (GA), Dropshot_15 (GA), Guzman_17 (GA), Jakelyne_18 (GA), Losacky_17 (GA), Mariel_19 (GA), MenE_16 (GA), NCRodriguez_17 (GA), PhillyJawn_16 (GA), Phingu_18 (GA), Phonegingi_15 (GA), Pickles13_15 (GA), ScoobySnack_14 (GA), Violeta_17 (GA), Warren_16 (GA), Winchester007_31 (GA),

Start 45:
• Found in 11 of 177 (6.2%) of genes in pham
• Manual Annotations of this start: 8 of 147
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Eyre_9 (singleton), Faith5x5_9 (CZ6), GMA1_9 (singleton), Gudmit_10 (singleton), Lton_9 (CZ), Moosehead_9 (CZ6), OneDirection_9 (CZ6), Pepperoni_9 (CZ), REQ3_43 (singleton), RavenCo17_9 (CZ8), TinyDot_11 (singleton),

Start 46:
• Found in 1 of 177 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 147
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Finkle_9 (singleton),

Start 47:
• Found in 58 of 177 (32.8%) of genes in pham
• Manual Annotations of this start: 29 of 147
• Called 53.4% of time when present
• Phage (with cluster) where this start called: ArizonaGT_11 (BP), Austintatious_10 (BC3), AxeJC_11 (BP), BaxterFox_9 (CZ3), Bioscum_10 (BC3), Cumberbatch_11 (BP), DaRealMyers_10 (BC1), Darolandstone_10 (BC2), DillyDally_10 (singleton), Eklok_11 (BP), FrumpyGal_11 (BP), Galactica_13 (BQ), HFrancette_11 (BP), Hiyaa_15 (BQ), Ididsumtinwong_10 (BC3), Ignacio_11 (BP), Keanu_15 (BQ), Kokushibo_16 (BQ), Lishka_10 (BC3), Mojorita_10 (BC1), PapayaSalad_10 (BC3), Picard_10 (BC1), Piccadilly_11 (BP), Raleigh_10 (BC2), SV1_10 (BC1),

Schlegelian_11 (BP), Sekhmet_10 (CZ4), SoJo_10 (BC1), Spocter_15 (BQ), Tubberson_10 (BC1), Vondra_11 (BP),

Start 49:
• Found in 29 of 177 (16.4%) of genes in pham
• Manual Annotations of this start: 24 of 147
• Called 93.1% of time when present
• Phage (with cluster) where this start called: Attis_9 (CZ2), Bjanes7_9 (CZ2), Clap_9 (CZ2), Cynthia_9 (CZ2), Denise_9 (CZ5), Ebert_9 (CZ2), EdnaMode_9 (CZ2), FroggyToad_9 (CZ2), GemG_9 (CZ2), Gizermo_9 (CZ2), Haley23_9 (CZ2), JCole_9 (CZ2), Lamberg_9 (CZ2), LordFarquaad_9 (CZ2), Matteo_9 (CZ2), Mbo4_9 (singleton), Mocha12_9 (CZ2), Nettuno_9 (CZ2), Pickett_9 (CZ2), Sahara_9 (CZ2), Savage_9 (CZ2), SoilAssassin_9 (CZ2), Sproutie_9 (CZ2), TuertoX_9 (CZ2), Vasanti_9 (CZ2), Whiteclaw_9 (CZ2), Yeet412_9 (CZ2),

Start 52:
• Found in 37 of 177 (20.9%) of genes in pham
• Manual Annotations of this start: 1 of 147
• Called 2.7% of time when present
• Phage (with cluster) where this start called: Eastland_11 (BP),

Summary by clusters:

There are 18 clusters represented in this pham: singleton, EJ, CZ2, CZ3, CZ8, CZ1, CZ6, CZ7, CZ4, CZ5, GF, BP, BQ, GA, CZ, BC1, BC2, BC3,

Info for manual annotations of cluster BC1:
•Start number 47 was manually annotated 5 times for cluster BC1.

Info for manual annotations of cluster BC2:
•Start number 47 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:
•Start number 47 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BP:
•Start number 47 was manually annotated 10 times for cluster BP.
•Start number 52 was manually annotated 1 time for cluster BP.

Info for manual annotations of cluster BQ:
•Start number 47 was manually annotated 4 times for cluster BQ.

Info for manual annotations of cluster CZ:
•Start number 30 was manually annotated 2 times for cluster CZ.
•Start number 45 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 27 was manually annotated 4 times for cluster CZ1.
•Start number 30 was manually annotated 17 times for cluster CZ1.
•Start number 36 was manually annotated 4 times for cluster CZ1.

Info for manual annotations of cluster CZ2:
•Start number 49 was manually annotated 23 times for cluster CZ2.

Info for manual annotations of cluster CZ3:
•Start number 30 was manually annotated 2 times for cluster CZ3.
•Start number 47 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster CZ4:
•Start number 30 was manually annotated 4 times for cluster CZ4.
•Start number 33 was manually annotated 15 times for cluster CZ4.
•Start number 43 was manually annotated 2 times for cluster CZ4.
•Start number 47 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ5:
•Start number 49 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:
•Start number 45 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster CZ7:
•Start number 30 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster CZ8:
•Start number 45 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster EJ:
•Start number 42 was manually annotated 17 times for cluster EJ.

Info for manual annotations of cluster GA:
•Start number 44 was manually annotated 11 times for cluster GA.

Info for manual annotations of cluster GF:
•Start number 40 was manually annotated 4 times for cluster GF.

Gene Information:

Gene: Adora_9 Start: 6677, Stop: 7039, Start Num: 30
Candidate Starts for Adora_9:
(14, 6473), (Start: 30 @6677 has 26 MA's), (Start: 43 @6719 has 2 MA's), (Start: 47 @6725 has 29 MA's), (65, 6800), (74, 6818), (87, 6878), (91, 6899), (96, 6935), (97, 6938),

Gene: Agueybana_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Agueybana_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Alove_13 Start: 10895, Stop: 11218, Start Num: 42
Candidate Starts for Alove_13:
(32, 10850), (Start: 42 @10895 has 17 MA's), (Start: 52 @10931 has 1 MA's), (57, 10946), (64, 10982), (83, 11033), (87, 11063), (97, 11126), (121, 11204),

Gene: AlumE_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for AlumE_9:

(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Annalisa_10 Start: 7010, Stop: 7345, Start Num: 33
Candidate Starts for Annalisa_10:
(Start: 33 @7010 has 15 MA's), (Start: 47 @7031 has 29 MA's), (57, 7067), (88, 7190), (91, 7205),

Gene: Antonio_9 Start: 7377, Stop: 7697, Start Num: 36
Candidate Starts for Antonio_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Antuna_16 Start: 8983, Stop: 9306, Start Num: 44
Candidate Starts for Antuna_16:
(Start: 44 @8983 has 11 MA's), (60, 9052), (69, 9085), (84, 9127), (87, 9154), (91, 9175), (97, 9214), (120, 9289), (121, 9292),

Gene: Appa_15 Start: 8845, Stop: 9168, Start Num: 44
Candidate Starts for Appa_15:
(Start: 44 @8845 has 11 MA's), (60, 8914), (69, 8947), (84, 8989), (87, 9016), (91, 9037), (97, 9076), (105, 9103), (120, 9151), (121, 9154),

Gene: ArizonaGT_11 Start: 7651, Stop: 7968, Start Num: 47
Candidate Starts for ArizonaGT_11:
(18, 7459), (25, 7519), (Start: 47 @7651 has 29 MA's), (Start: 52 @7672 has 1 MA's), (82, 7774), (84, 7783), (102, 7888), (121, 7954),

Gene: Attis_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Attis_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718),

Gene: Austintatious_10 Start: 7516, Stop: 7836, Start Num: 47
Candidate Starts for Austintatious_10:
(9, 7162), (Start: 47 @7516 has 29 MA's), (56, 7555), (70, 7609), (74, 7618), (78, 7627), (82, 7642), (117, 7804), (121, 7822), (122, 7825),

Gene: AxeJC_11 Start: 7664, Stop: 7981, Start Num: 47
Candidate Starts for AxeJC_11:
(18, 7472), (25, 7532), (Start: 47 @7664 has 29 MA's), (Start: 52 @7685 has 1 MA's), (82, 7787), (84, 7796), (102, 7901), (121, 7967),

Gene: AyoTeo_15 Start: 11026, Stop: 11349, Start Num: 42
Candidate Starts for AyoTeo_15:
(32, 10981), (Start: 42 @11026 has 17 MA's), (Start: 52 @11062 has 1 MA's), (55, 11071), (57, 11077), (64, 11113), (83, 11164), (87, 11194), (97, 11257), (121, 11335),

Gene: BatStarr_9 Start: 7329, Stop: 7697, Start Num: 27
Candidate Starts for BatStarr_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: BaxterFox_9 Start: 6731, Stop: 7045, Start Num: 47

Candidate Starts for BaxterFox_9:
(11, 6434), (19, 6527), (Start: 30 @6680 has 26 MA's), (Start: 47 @6731 has 29 MA's), (91, 6905), (96, 6941),

Gene: Beenie_10 Start: 7004, Stop: 7339, Start Num: 33
Candidate Starts for Beenie_10:
(Start: 33 @7004 has 15 MA's), (Start: 47 @7025 has 29 MA's), (57, 7061), (84, 7151), (88, 7184), (91, 7199),

Gene: Benry_13 Start: 9080, Stop: 9403, Start Num: 42
Candidate Starts for Benry_13:
(38, 9071), (Start: 42 @9080 has 17 MA's), (Start: 52 @9116 has 1 MA's), (85, 9242), (91, 9269), (97, 9311), (107, 9344), (121, 9389),

Gene: Bialota_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Bialota_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: BigAnti_14 Start: 11596, Stop: 11943, Start Num: 35
Candidate Starts for BigAnti_14:
(35, 11596), (51, 11629), (54, 11638), (61, 11671), (87, 11770), (93, 11797), (105, 11872), (121, 11929), (123, 11935),

Gene: Bioscum_10 Start: 7552, Stop: 7872, Start Num: 47
Candidate Starts for Bioscum_10:
(9, 7198), (Start: 47 @7552 has 29 MA's), (56, 7591), (70, 7645), (78, 7663), (82, 7678), (121, 7858), (122, 7861),

Gene: Bjanes7_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Bjanes7_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718),

Gene: Blett_16 Start: 8998, Stop: 9321, Start Num: 44
Candidate Starts for Blett_16:
(Start: 44 @8998 has 11 MA's), (60, 9067), (69, 9100), (84, 9142), (87, 9169), (91, 9190), (97, 9229), (120, 9304), (121, 9307),

Gene: Bosnia_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Bosnia_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: BoyNamedSue_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for BoyNamedSue_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Bunnybear_9 Start: 7335, Stop: 7688, Start Num: 30
Candidate Starts for Bunnybear_9:
(Start: 27 @7320 has 4 MA's), (Start: 30 @7335 has 26 MA's), (Start: 36 @7368 has 4 MA's), (57, 7410), (71, 7461), (86, 7524), (91, 7548), (105, 7617),

Gene: Bush_16 Start: 8979, Stop: 9302, Start Num: 44
Candidate Starts for Bush_16:
(Start: 44 @8979 has 11 MA's), (60, 9048), (69, 9081), (84, 9123), (87, 9150), (91, 9171), (97, 9210), (120, 9285), (121, 9288),

Gene: Carrillo_17 Start: 8952, Stop: 9275, Start Num: 44
Candidate Starts for Carrillo_17:
(Start: 44 @8952 has 11 MA's), (60, 9021), (69, 9054), (84, 9096), (87, 9123), (91, 9144), (97, 9183), (120, 9258), (121, 9261),

Gene: Cicada_15 Start: 11149, Stop: 11472, Start Num: 42
Candidate Starts for Cicada_15:
(38, 11140), (Start: 42 @11149 has 17 MA's), (Start: 52 @11185 has 1 MA's), (70, 11251), (83, 11287), (97, 11380), (107, 11413), (113, 11422), (121, 11458),

Gene: Clap_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Clap_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: Clark_10 Start: 7010, Stop: 7345, Start Num: 33
Candidate Starts for Clark_10:
(Start: 33 @7010 has 15 MA's), (Start: 47 @7031 has 29 MA's), (57, 7067), (88, 7190), (91, 7205),

Gene: CookieDog_16 Start: 8979, Stop: 9302, Start Num: 44
Candidate Starts for CookieDog_16:
(Start: 44 @8979 has 11 MA's), (60, 9048), (69, 9081), (84, 9123), (87, 9150), (91, 9171), (97, 9210), (105, 9237), (120, 9285), (121, 9288),

Gene: Cumberbatch_11 Start: 7651, Stop: 7968, Start Num: 47
Candidate Starts for Cumberbatch_11:
(18, 7459), (25, 7519), (Start: 47 @7651 has 29 MA's), (Start: 52 @7672 has 1 MA's), (82, 7774), (84, 7783), (102, 7888), (121, 7954),

Gene: Cynthia_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Cynthia_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: DaRealMyers_10 Start: 7746, Stop: 8063, Start Num: 47
Candidate Starts for DaRealMyers_10:
(9, 7398), (13, 7476), (18, 7551), (25, 7611), (Start: 47 @7746 has 29 MA's), (74, 7845), (79, 7857), (89, 7920), (117, 8031), (121, 8049), (122, 8052),

Gene: Darolandstone_10 Start: 7986, Stop: 8303, Start Num: 47
Candidate Starts for Darolandstone_10:
(8, 7593), (9, 7638), (18, 7791), (22, 7800), (25, 7851), (Start: 47 @7986 has 29 MA's), (74, 8085), (117, 8271), (121, 8289),

Gene: DelaGarza_15 Start: 9604, Stop: 9954, Start Num: 40
Candidate Starts for DelaGarza_15:

(Start: 40 @9604 has 5 MA's), (55, 9652), (68, 9715), (76, 9733), (78, 9745), (79, 9748), (84, 9769), (87, 9796), (90, 9814), (91, 9817), (103, 9880), (105, 9886), (106, 9889), (112, 9904), (121, 9940), (122, 9943),

Gene: Denise_9 Start: 6517, Stop: 6843, Start Num: 49
Candidate Starts for Denise_9:
(Start: 49 @6517 has 24 MA's), (55, 6544), (64, 6586), (75, 6610), (80, 6625), (87, 6667), (97, 6727),

Gene: DillyDally_10 Start: 7591, Stop: 7914, Start Num: 47
Candidate Starts for DillyDally_10:
(Start: 47 @7591 has 29 MA's), (Start: 52 @7615 has 1 MA's), (57, 7633), (84, 7726), (86, 7750), (87, 7753), (97, 7816), (105, 7843), (121, 7900), (122, 7903),

Gene: DobbysSock_9 Start: 6502, Stop: 6837, Start Num: 33
Candidate Starts for DobbysSock_9:
(Start: 33 @6502 has 15 MA's), (Start: 47 @6523 has 29 MA's), (57, 6559), (84, 6649), (88, 6682), (91, 6697),

Gene: Dolores_10 Start: 7004, Stop: 7339, Start Num: 33
Candidate Starts for Dolores_10:
(Start: 33 @7004 has 15 MA's), (Start: 47 @7025 has 29 MA's), (57, 7061), (84, 7151), (88, 7184), (91, 7199),

Gene: Dorito_9 Start: 6508, Stop: 6843, Start Num: 33
Candidate Starts for Dorito_9:
(Start: 33 @6508 has 15 MA's), (Start: 47 @6529 has 29 MA's), (57, 6565), (88, 6688), (91, 6703),

Gene: Dropshot_15 Start: 8845, Stop: 9168, Start Num: 44
Candidate Starts for Dropshot_15:
(Start: 44 @8845 has 11 MA's), (60, 8914), (69, 8947), (84, 8989), (87, 9016), (91, 9037), (97, 9076), (120, 9151), (121, 9154),

Gene: Easley_10 Start: 7004, Stop: 7339, Start Num: 33
Candidate Starts for Easley_10:
(Start: 33 @7004 has 15 MA's), (Start: 47 @7025 has 29 MA's), (57, 7061), (84, 7151), (88, 7184), (91, 7199),

Gene: Eastland_11 Start: 7673, Stop: 7969, Start Num: 52
Candidate Starts for Eastland_11:
(18, 7460), (25, 7520), (Start: 47 @7652 has 29 MA's), (Start: 52 @7673 has 1 MA's), (82, 7775), (84, 7784), (102, 7889), (121, 7955),

Gene: Ebert_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Ebert_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: EdnaMode_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for EdnaMode_9:
(Start: 49 @6508 has 24 MA's), (55, 6535), (73, 6598), (75, 6601), (80, 6616), (87, 6658), (97, 6718),

Gene: Eklok_11 Start: 7664, Stop: 7981, Start Num: 47
Candidate Starts for Eklok_11:

(18, 7472), (25, 7532), (Start: 47 @7664 has 29 MA's), (Start: 52 @7685 has 1 MA's), (82, 7787), (84, 7796), (102, 7901), (121, 7967),

Gene: Eudoria_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Eudoria_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Eviarto_9 Start: 7377, Stop: 7697, Start Num: 36
Candidate Starts for Eviarto_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Eyre_9 Start: 7136, Stop: 7498, Start Num: 45
Candidate Starts for Eyre_9:
(12, 6848), (15, 6884), (Start: 45 @7136 has 8 MA's), (64, 7217), (80, 7256), (98, 7364), (114, 7439),

Gene: Faith5x5_9 Start: 6467, Stop: 6802, Start Num: 45
Candidate Starts for Faith5x5_9:
(Start: 45 @6467 has 8 MA's), (55, 6503), (56, 6506), (57, 6509), (64, 6545), (75, 6569), (80, 6584), (84, 6599), (94, 6659),

Gene: Finkle_9 Start: 6638, Stop: 6967, Start Num: 46
Candidate Starts for Finkle_9:
(Start: 46 @6638 has 1 MA's), (57, 6677), (58, 6686), (84, 6776), (87, 6803), (91, 6824), (105, 6896),

Gene: FireCastle_13 Start: 10810, Stop: 11133, Start Num: 42
Candidate Starts for FireCastle_13:
(38, 10801), (Start: 42 @10810 has 17 MA's), (Start: 52 @10846 has 1 MA's), (70, 10912), (83, 10948), (97, 11041), (104, 11065), (107, 11074), (113, 11083), (121, 11119),

Gene: FroggyToad_9 Start: 6509, Stop: 6850, Start Num: 49
Candidate Starts for FroggyToad_9:
(10, 6164), (Start: 49 @6509 has 24 MA's), (55, 6536), (64, 6578), (73, 6599), (75, 6602), (80, 6617), (86, 6656), (98, 6725), (110, 6782),

Gene: FrumpyGal_11 Start: 7652, Stop: 7969, Start Num: 47
Candidate Starts for FrumpyGal_11:
(18, 7460), (25, 7520), (Start: 47 @7652 has 29 MA's), (Start: 52 @7673 has 1 MA's), (82, 7775), (84, 7784), (102, 7889), (121, 7955),

Gene: GMA1_9 Start: 6867, Stop: 7187, Start Num: 45
Candidate Starts for GMA1_9:
(17, 6651), (21, 6669), (Start: 45 @6867 has 8 MA's), (Start: 49 @6876 has 24 MA's), (50, 6885), (123, 7179),

Gene: Galactica_13 Start: 12489, Stop: 12806, Start Num: 47
Candidate Starts for Galactica_13:
(23, 12306), (24, 12309), (29, 12429), (31, 12438), (Start: 47 @12489 has 29 MA's), (51, 12510), (Start: 52 @12513 has 1 MA's), (55, 12525), (64, 12567), (83, 12618), (84, 12621), (97, 12705), (105, 12735), (108, 12744), (116, 12768), (123, 12798), (124, 12801),

Gene: GemG_9 Start: 6508, Stop: 6834, Start Num: 49

Candidate Starts for GemG_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: Gingerbug_12 Start: 8787, Stop: 9137, Start Num: 40
Candidate Starts for Gingerbug_12:
(Start: 40 @8787 has 5 MA's), (55, 8835), (67, 8892), (78, 8928), (79, 8931), (84, 8952), (87, 8979), (90, 8997), (91, 9000), (103, 9063), (105, 9069), (121, 9123), (122, 9126),

Gene: Gizermo_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Gizermo_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: Goodman_14 Start: 11061, Stop: 11384, Start Num: 42
Candidate Starts for Goodman_14:
(38, 11052), (Start: 42 @11061 has 17 MA's), (Start: 52 @11097 has 1 MA's), (113, 11334), (121, 11370),

Gene: Gudmit_10 Start: 7283, Stop: 7618, Start Num: 45
Candidate Starts for Gudmit_10:
(Start: 45 @7283 has 8 MA's), (55, 7319), (56, 7322), (57, 7325), (63, 7358), (64, 7361), (73, 7382), (75, 7385), (79, 7394), (80, 7400), (83, 7412), (84, 7415),

Gene: Guzman_17 Start: 9260, Stop: 9583, Start Num: 44
Candidate Starts for Guzman_17:
(Start: 44 @9260 has 11 MA's), (60, 9329), (69, 9362), (84, 9404), (87, 9431), (91, 9452), (97, 9491), (120, 9566), (121, 9569),

Gene: HFrancette_11 Start: 7660, Stop: 7977, Start Num: 47
Candidate Starts for HFrancette_11:
(9, 7315), (18, 7468), (25, 7528), (Start: 47 @7660 has 29 MA's), (Start: 52 @7681 has 1 MA's), (62, 7726), (74, 7759), (82, 7783), (97, 7876), (98, 7882), (117, 7945), (121, 7963),

Gene: Haley23_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Haley23_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: Herod_9 Start: 7329, Stop: 7697, Start Num: 27
Candidate Starts for Herod_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Hiyaa_15 Start: 13527, Stop: 13844, Start Num: 47
Candidate Starts for Hiyaa_15:
(Start: 47 @13527 has 29 MA's), (51, 13548), (Start: 52 @13551 has 1 MA's), (83, 13656), (84, 13659), (97, 13743), (105, 13773), (116, 13806), (121, 13830),

Gene: Hortense_9 Start: 6677, Stop: 7039, Start Num: 30
Candidate Starts for Hortense_9:
(14, 6473), (Start: 30 @6677 has 26 MA's), (Start: 43 @6719 has 2 MA's), (Start: 47 @6725 has 29 MA's), (65, 6800), (74, 6818), (87, 6878), (91, 6899), (96, 6935), (97, 6938),

Gene: Howe_9 Start: 6719, Stop: 7039, Start Num: 43
Candidate Starts for Howe_9:
(14, 6473), (Start: 30 @6677 has 26 MA's), (Start: 43 @6719 has 2 MA's), (Start: 47 @6725 has 29 MA's), (65, 6800), (74, 6818), (87, 6878), (91, 6899), (96, 6935), (97, 6938),

Gene: Htur_13 Start: 11064, Stop: 11387, Start Num: 42
Candidate Starts for Htur_13:
(38, 11055), (Start: 42 @11064 has 17 MA's), (Start: 52 @11100 has 1 MA's), (55, 11109), (59, 11127), (83, 11202), (97, 11295), (107, 11328), (121, 11373), (123, 11379),

Gene: Hugley_9 Start: 7377, Stop: 7697, Start Num: 36
Candidate Starts for Hugley_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Hyzer_9 Start: 7378, Stop: 7698, Start Num: 36
Candidate Starts for Hyzer_9:
(Start: 30 @7345 has 26 MA's), (Start: 36 @7378 has 4 MA's), (57, 7420), (71, 7471), (84, 7510), (86, 7534), (87, 7537), (91, 7558),

Gene: Ididsumtinwong_10 Start: 7552, Stop: 7872, Start Num: 47
Candidate Starts for Ididsumtinwong_10:
(9, 7198), (Start: 47 @7552 has 29 MA's), (56, 7591), (70, 7645), (78, 7663), (82, 7678), (121, 7858), (122, 7861),

Gene: Ignacio_11 Start: 7660, Stop: 7977, Start Num: 47
Candidate Starts for Ignacio_11:
(9, 7315), (18, 7468), (25, 7528), (Start: 47 @7660 has 29 MA's), (Start: 52 @7681 has 1 MA's), (62, 7726), (74, 7759), (82, 7783), (97, 7876), (98, 7882), (117, 7945), (121, 7963),

Gene: IndiRoo_13 Start: 9088, Stop: 9411, Start Num: 42
Candidate Starts for IndiRoo_13:
(38, 9079), (Start: 42 @9088 has 17 MA's), (Start: 52 @9124 has 1 MA's), (85, 9250), (91, 9277), (97, 9319), (107, 9352), (121, 9397),

Gene: Invectra_10 Start: 7004, Stop: 7339, Start Num: 33
Candidate Starts for Invectra_10:
(Start: 33 @7004 has 15 MA's), (Start: 47 @7025 has 29 MA's), (57, 7061), (84, 7151), (88, 7184), (91, 7199),

Gene: JCole_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for JCole_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: Jace_8 Start: 7053, Stop: 7382, Start Num: 40
Candidate Starts for Jace_8:
(Start: 40 @7053 has 5 MA's), (55, 7095), (71, 7152), (75, 7161), (83, 7188), (84, 7191), (91, 7239), (123, 7374),

Gene: Jakelyne_18 Start: 9001, Stop: 9324, Start Num: 44
Candidate Starts for Jakelyne_18:

(Start: 44 @9001 has 11 MA's), (53, 9037), (60, 9070), (69, 9103), (84, 9145), (87, 9172), (91, 9193), (97, 9232), (120, 9307), (121, 9310),

Gene: Jera_14 Start: 10142, Stop: 10465, Start Num: 42
Candidate Starts for Jera_14:
(32, 10097), (Start: 42 @10142 has 17 MA's), (Start: 52 @10178 has 1 MA's), (57, 10193), (64, 10229), (83, 10280), (87, 10310), (97, 10373), (121, 10451),

Gene: Johann_14 Start: 11061, Stop: 11384, Start Num: 42
Candidate Starts for Johann_14:
(38, 11052), (Start: 42 @11061 has 17 MA's), (Start: 52 @11097 has 1 MA's), (113, 11334), (121, 11370),

Gene: Keanu_15 Start: 13576, Stop: 13893, Start Num: 47
Candidate Starts for Keanu_15:
(18, 13378), (23, 13393), (24, 13396), (29, 13516), (31, 13525), (Start: 47 @13576 has 29 MA's), (51, 13597), (Start: 52 @13600 has 1 MA's), (56, 13615), (83, 13705), (84, 13708), (97, 13792), (101, 13810), (105, 13822), (108, 13831), (116, 13855), (121, 13879),

Gene: Kita_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Kita_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Kokushibo_16 Start: 13542, Stop: 13859, Start Num: 47
Candidate Starts for Kokushibo_16:
(6, 13074), (18, 13344), (23, 13359), (24, 13362), (29, 13482), (Start: 47 @13542 has 29 MA's), (51, 13563), (Start: 52 @13566 has 1 MA's), (83, 13671), (84, 13674), (97, 13758), (105, 13788), (116, 13821), (121, 13845),

Gene: Labella_15 Start: 11030, Stop: 11353, Start Num: 42
Candidate Starts for Labella_15:
(32, 10985), (Start: 42 @11030 has 17 MA's), (Start: 52 @11066 has 1 MA's), (55, 11075), (57, 11081), (64, 11117), (83, 11168), (87, 11198), (97, 11261), (121, 11339),

Gene: Lamberg_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Lamberg_9:
(Start: 49 @6508 has 24 MA's), (55, 6535), (73, 6598), (75, 6601), (80, 6616), (87, 6658), (97, 6718),

Gene: Lesiram_15 Start: 9580, Stop: 9930, Start Num: 40
Candidate Starts for Lesiram_15:
(Start: 40 @9580 has 5 MA's), (55, 9628), (68, 9691), (78, 9721), (79, 9724), (84, 9745), (87, 9772), (90, 9790), (91, 9793), (103, 9856), (105, 9862), (106, 9865), (112, 9880), (121, 9916), (122, 9919),

Gene: Linayshia_13 Start: 11056, Stop: 11379, Start Num: 42
Candidate Starts for Linayshia_13:
(38, 11047), (Start: 42 @11056 has 17 MA's), (Start: 52 @11092 has 1 MA's), (55, 11101), (83, 11194), (97, 11287), (107, 11320), (121, 11365),

Gene: Lishka_10 Start: 7516, Stop: 7836, Start Num: 47
Candidate Starts for Lishka_10:
(9, 7162), (Start: 47 @7516 has 29 MA's), (56, 7555), (70, 7609), (74, 7618), (78, 7627), (82, 7642), (117, 7804), (121, 7822), (122, 7825),

Gene: LordFarquaad_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for LordFarquaad_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718),

Gene: Losacky_17 Start: 9125, Stop: 9448, Start Num: 44
Candidate Starts for Losacky_17:
(Start: 44 @9125 has 11 MA's), (60, 9194), (69, 9227), (84, 9269), (87, 9296), (91, 9317), (97, 9356), (105, 9383), (120, 9431), (121, 9434),

Gene: Lton_9 Start: 6521, Stop: 6856, Start Num: 45
Candidate Starts for Lton_9:
(20, 6320), (Start: 45 @6521 has 8 MA's), (55, 6557), (56, 6560), (73, 6620), (75, 6623), (80, 6638), (86, 6677), (94, 6713), (99, 6758), (111, 6794), (115, 6809),

Gene: Madavieve_9 Start: 7377, Stop: 7697, Start Num: 36
Candidate Starts for Madavieve_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557), (105, 7626),

Gene: Madeline_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Madeline_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Manasvini_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Manasvini_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Maridalia_9 Start: 7377, Stop: 7697, Start Num: 36
Candidate Starts for Maridalia_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Mariel_19 Start: 9156, Stop: 9479, Start Num: 44
Candidate Starts for Mariel_19:
(Start: 44 @9156 has 11 MA's), (60, 9225), (69, 9258), (84, 9300), (87, 9327), (91, 9348), (97, 9387), (120, 9462), (121, 9465),

Gene: Matteo_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Matteo_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718),

Gene: Mbo4_9 Start: 7186, Stop: 7509, Start Num: 49
Candidate Starts for Mbo4_9:
(37, 7159), (48, 7180), (Start: 49 @7186 has 24 MA's), (66, 7264), (97, 7399),

Gene: Mcklovin_10 Start: 7803, Stop: 8156, Start Num: 30
Candidate Starts for Mcklovin_10:

(Start: 27 @7788 has 4 MA's), (Start: 30 @7803 has 26 MA's), (Start: 36 @7836 has 4 MA's), (57, 7878), (71, 7929), (86, 7992), (91, 8016),

Gene: MenE_16 Start: 9113, Stop: 9436, Start Num: 44
Candidate Starts for MenE_16:
(Start: 44 @9113 has 11 MA's), (60, 9182), (69, 9215), (84, 9257), (87, 9284), (91, 9305), (97, 9344), (120, 9419), (121, 9422),

Gene: MichaelScott_10 Start: 7004, Stop: 7339, Start Num: 33
Candidate Starts for MichaelScott_10:
(Start: 33 @7004 has 15 MA's), (Start: 47 @7025 has 29 MA's), (57, 7061), (84, 7151), (88, 7184), (91, 7199),

Gene: Milani_14 Start: 9739, Stop: 10062, Start Num: 42
Candidate Starts for Milani_14:
(4, 9241), (38, 9730), (Start: 42 @9739 has 17 MA's), (Start: 52 @9775 has 1 MA's), (85, 9901), (91, 9928), (97, 9970), (107, 10003), (121, 10048), (123, 10054),

Gene: Mocha12_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Mocha12_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: Mojorita_10 Start: 7832, Stop: 8146, Start Num: 47
Candidate Starts for Mojorita_10:
(5, 7376), (9, 7484), (13, 7562), (18, 7637), (25, 7697), (Start: 47 @7832 has 29 MA's), (121, 8132), (122, 8135),

Gene: Moosehead_9 Start: 6464, Stop: 6799, Start Num: 45
Candidate Starts for Moosehead_9:
(Start: 45 @6464 has 8 MA's), (55, 6500), (56, 6503), (57, 6506), (64, 6542), (73, 6563), (75, 6566), (79, 6575), (80, 6581), (81, 6584), (83, 6593), (87, 6623),

Gene: NCRodriguez_17 Start: 9114, Stop: 9437, Start Num: 44
Candidate Starts for NCRodriguez_17:
(Start: 44 @9114 has 11 MA's), (60, 9183), (69, 9216), (84, 9258), (87, 9285), (91, 9306), (97, 9345), (120, 9420), (121, 9423),

Gene: Neobush_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Neobush_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Nettuno_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Nettuno_9:
(Start: 49 @6508 has 24 MA's), (55, 6535), (73, 6598), (75, 6601), (80, 6616), (87, 6658), (97, 6718),

Gene: Nymphadora_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Nymphadora_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Ohgeesy_9 Start: 6680, Stop: 7045, Start Num: 30

Candidate Starts for Ohgeesy_9:
(11, 6434), (19, 6527), (Start: 30 @6680 has 26 MA's), (Start: 47 @6731 has 29 MA's), (91, 6905), (96, 6941),

Gene: Olympi_15 Start: 11052, Stop: 11375, Start Num: 42
Candidate Starts for Olympi_15:
(38, 11043), (Start: 42 @11052 has 17 MA's), (Start: 52 @11088 has 1 MA's), (107, 11316), (113, 11325), (121, 11361),

Gene: OneDirection_9 Start: 6465, Stop: 6800, Start Num: 45
Candidate Starts for OneDirection_9:
(Start: 45 @6465 has 8 MA's), (55, 6501), (73, 6564), (75, 6567), (79, 6576), (80, 6582), (81, 6585), (87, 6624), (97, 6684), (99, 6702),

Gene: Oregano_10 Start: 6675, Stop: 7010, Start Num: 33
Candidate Starts for Oregano_10:
(Start: 33 @6675 has 15 MA's), (Start: 47 @6696 has 29 MA's), (57, 6732), (84, 6822), (88, 6855), (91, 6870),

Gene: PantheRoc_9 Start: 6680, Stop: 7045, Start Num: 30
Candidate Starts for PantheRoc_9:
(11, 6434), (19, 6527), (Start: 30 @6680 has 26 MA's), (Start: 47 @6731 has 29 MA's), (91, 6905), (96, 6941),

Gene: PapayaSalad_10 Start: 7524, Stop: 7844, Start Num: 47
Candidate Starts for PapayaSalad_10:
(9, 7170), (Start: 47 @7524 has 29 MA's), (56, 7563), (70, 7617), (78, 7635), (82, 7650), (121, 7830), (122, 7833),

Gene: Pepperoni_9 Start: 6815, Stop: 7150, Start Num: 45
Candidate Starts for Pepperoni_9:
(20, 6614), (Start: 45 @6815 has 8 MA's), (55, 6851), (56, 6854), (73, 6914), (75, 6917), (80, 6932), (86, 6971), (94, 7007), (99, 7052), (111, 7088), (115, 7103),

Gene: PermaG_14 Start: 11124, Stop: 11447, Start Num: 42
Candidate Starts for PermaG_14:
(34, 11094), (38, 11115), (Start: 42 @11124 has 17 MA's), (Start: 52 @11160 has 1 MA's), (107, 11388), (109, 11391), (113, 11397), (121, 11433),

Gene: PhillyJawn_16 Start: 8845, Stop: 9168, Start Num: 44
Candidate Starts for PhillyJawn_16:
(Start: 44 @8845 has 11 MA's), (60, 8914), (69, 8947), (84, 8989), (87, 9016), (91, 9037), (97, 9076), (105, 9103), (120, 9151), (121, 9154),

Gene: Phingu_18 Start: 9004, Stop: 9327, Start Num: 44
Candidate Starts for Phingu_18:
(Start: 44 @9004 has 11 MA's), (60, 9073), (69, 9106), (84, 9148), (87, 9175), (91, 9196), (97, 9235), (120, 9310), (121, 9313),

Gene: Phonegingi_15 Start: 8845, Stop: 9168, Start Num: 44
Candidate Starts for Phonegingi_15:
(16, 8602), (Start: 44 @8845 has 11 MA's), (53, 8881), (60, 8914), (69, 8947), (87, 9016), (91, 9037), (97, 9076), (120, 9151), (121, 9154),

Gene: PhriskyACE_9 Start: 6508, Stop: 6843, Start Num: 33
Candidate Starts for PhriskyACE_9:
(Start: 33 @6508 has 15 MA's), (Start: 47 @6529 has 29 MA's), (57, 6565), (88, 6688), (91, 6703),

Gene: Picard_10 Start: 7832, Stop: 8146, Start Num: 47
Candidate Starts for Picard_10:
(5, 7376), (9, 7484), (13, 7562), (18, 7637), (25, 7697), (Start: 47 @7832 has 29 MA's), (121, 8132), (122, 8135),

Gene: Piccadilly_11 Start: 7651, Stop: 7968, Start Num: 47
Candidate Starts for Piccadilly_11:
(18, 7459), (25, 7519), (Start: 47 @7651 has 29 MA's), (Start: 52 @7672 has 1 MA's), (82, 7774), (84, 7783), (102, 7888), (121, 7954),

Gene: Pickett_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Pickett_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718),

Gene: Pickles13_15 Start: 9015, Stop: 9338, Start Num: 44
Candidate Starts for Pickles13_15:
(16, 8772), (41, 9009), (Start: 44 @9015 has 11 MA's), (56, 9063), (60, 9084), (69, 9117), (84, 9159), (87, 9186), (91, 9207), (100, 9261), (105, 9273), (120, 9321), (121, 9324),

Gene: Polly_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Polly_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Powerball_9 Start: 6508, Stop: 6843, Start Num: 33
Candidate Starts for Powerball_9:
(Start: 33 @6508 has 15 MA's), (Start: 47 @6529 has 29 MA's), (57, 6565), (91, 6703),

Gene: REQ3_43 Start: 23906, Stop: 24238, Start Num: 45
Candidate Starts for REQ3_43:
(28, 23846), (Start: 45 @23906 has 8 MA's), (55, 23942), (64, 23984), (86, 24065), (91, 24089), (97, 24128),

Gene: Raleigh_10 Start: 7951, Stop: 8271, Start Num: 47
Candidate Starts for Raleigh_10:
(8, 7558), (9, 7603), (22, 7765), (25, 7816), (Start: 47 @7951 has 29 MA's), (74, 8050), (89, 8128), (121, 8257),

Gene: Rasovi_13 Start: 11064, Stop: 11387, Start Num: 42
Candidate Starts for Rasovi_13:
(38, 11055), (Start: 42 @11064 has 17 MA's), (Start: 52 @11100 has 1 MA's), (55, 11109), (59, 11127), (83, 11202), (97, 11295), (107, 11328), (121, 11373), (123, 11379),

Gene: RavenCo17_9 Start: 7317, Stop: 7679, Start Num: 45
Candidate Starts for RavenCo17_9:
(Start: 45 @7317 has 8 MA's), (64, 7398), (80, 7437), (98, 7545), (114, 7620),

Gene: Rootkit7_13 Start: 10895, Stop: 11218, Start Num: 42
Candidate Starts for Rootkit7_13:
(32, 10850), (Start: 42 @10895 has 17 MA's), (Start: 52 @10931 has 1 MA's), (57, 10946), (64, 10982), (83, 11033), (87, 11063), (97, 11126), (121, 11204),

Gene: SBlackberry_13 Start: 10901, Stop: 11224, Start Num: 42
Candidate Starts for SBlackberry_13:
(32, 10856), (Start: 42 @10901 has 17 MA's), (Start: 52 @10937 has 1 MA's), (57, 10952), (64, 10988), (83, 11039), (87, 11069), (97, 11132), (121, 11210),

Gene: SV1_10 Start: 7724, Stop: 8044, Start Num: 47
Candidate Starts for SV1_10:
(1, 7172), (9, 7352), (18, 7505), (Start: 47 @7724 has 29 MA's), (95, 7922), (117, 8012), (121, 8030), (122, 8033),

Gene: Sahara_9 Start: 6524, Stop: 6850, Start Num: 49
Candidate Starts for Sahara_9:
(Start: 49 @6524 has 24 MA's), (55, 6551), (73, 6614), (75, 6617), (80, 6632), (87, 6674),

Gene: Samman98_10 Start: 7004, Stop: 7339, Start Num: 33
Candidate Starts for Samman98_10:
(Start: 33 @7004 has 15 MA's), (Start: 47 @7025 has 29 MA's), (57, 7061), (84, 7151), (88, 7184), (91, 7199),

Gene: Savage_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Savage_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: Schlegelian_11 Start: 7651, Stop: 7968, Start Num: 47
Candidate Starts for Schlegelian_11:
(18, 7459), (25, 7519), (Start: 47 @7651 has 29 MA's), (Start: 52 @7672 has 1 MA's), (82, 7774), (84, 7783), (102, 7888), (121, 7954),

Gene: ScoobySnack_14 Start: 8714, Stop: 9037, Start Num: 44
Candidate Starts for ScoobySnack_14:
(2, 8189), (3, 8216), (Start: 44 @8714 has 11 MA's), (55, 8759), (69, 8816), (84, 8858), (87, 8885), (91, 8906), (97, 8945), (105, 8972), (119, 9017), (120, 9020), (121, 9023),

Gene: Sekhmet_10 Start: 7025, Stop: 7339, Start Num: 47
Candidate Starts for Sekhmet_10:
(Start: 33 @7004 has 15 MA's), (Start: 47 @7025 has 29 MA's), (57, 7061), (84, 7151), (88, 7184), (91, 7199),

Gene: Shlim410_9 Start: 6677, Stop: 7039, Start Num: 30
Candidate Starts for Shlim410_9:
(14, 6473), (Start: 30 @6677 has 26 MA's), (Start: 43 @6719 has 2 MA's), (Start: 47 @6725 has 29 MA's), (65, 6800), (74, 6818), (87, 6878), (91, 6899), (96, 6935), (97, 6938),

Gene: Sidious_9 Start: 6674, Stop: 7039, Start Num: 30
Candidate Starts for Sidious_9:
(11, 6434), (Start: 30 @6674 has 26 MA's), (Start: 47 @6725 has 29 MA's), (91, 6899),

Gene: SoJo_10 Start: 7746, Stop: 8063, Start Num: 47
Candidate Starts for SoJo_10:
(25, 7611), (Start: 47 @7746 has 29 MA's), (74, 7845), (79, 7857), (89, 7920), (117, 8031), (121, 8049),
(122, 8052),

Gene: SoilAssassin_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for SoilAssassin_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616),
(87, 6658), (97, 6718),

Gene: Spocter_15 Start: 13515, Stop: 13832, Start Num: 47
Candidate Starts for Spocter_15:
(Start: 47 @13515 has 29 MA's), (51, 13536), (Start: 52 @13539 has 1 MA's), (83, 13644), (84, 13647),
(97, 13731), (105, 13761), (116, 13794),

Gene: Sproutie_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Sproutie_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616),
(87, 6658), (97, 6718), (98, 6724),

Gene: Suerte_9 Start: 6502, Stop: 6837, Start Num: 33
Candidate Starts for Suerte_9:
(Start: 33 @6502 has 15 MA's), (Start: 47 @6523 has 29 MA's), (57, 6559), (84, 6649), (88, 6682), (91,
6697),

Gene: Suscepit_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Suscepit_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91,
7557),

Gene: Sweetums_15 Start: 9678, Stop: 10028, Start Num: 40
Candidate Starts for Sweetums_15:
(26, 9561), (Start: 40 @9678 has 5 MA's), (55, 9726), (68, 9789), (78, 9819), (79, 9822), (84, 9843),
(87, 9870), (90, 9888), (91, 9891), (103, 9954), (105, 9960), (106, 9963), (112, 9978), (121, 10014),
(122, 10017),

Gene: Tayonia_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Tayonia_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91,
7557),

Gene: Teng_16 Start: 9601, Stop: 9951, Start Num: 40
Candidate Starts for Teng_16:
(Start: 40 @9601 has 5 MA's), (55, 9649), (68, 9712), (76, 9730), (78, 9742), (79, 9745), (84, 9766),
(87, 9793), (90, 9811), (91, 9814), (103, 9877), (105, 9883), (106, 9886), (112, 9901), (121, 9937),
(122, 9940),

Gene: ThankyouJordi_9 Start: 7327, Stop: 7695, Start Num: 27
Candidate Starts for ThankyouJordi_9:
(Start: 27 @7327 has 4 MA's), (Start: 30 @7342 has 26 MA's), (Start: 36 @7375 has 4 MA's), (57,
7417), (71, 7468), (86, 7531), (91, 7555), (97, 7594),

Gene: Thimann_10 Start: 7004, Stop: 7339, Start Num: 33

Candidate Starts for Thimann_10:
(Start: 33 @7004 has 15 MA's), (Start: 47 @7025 has 29 MA's), (57, 7061), (84, 7151), (88, 7184), (91, 7199),

Gene: TimTam_9 Start: 7377, Stop: 7697, Start Num: 36
Candidate Starts for TimTam_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: TinyDot_11 Start: 7635, Stop: 7961, Start Num: 45
Candidate Starts for TinyDot_11:
(Start: 45 @7635 has 8 MA's), (83, 7764), (115, 7920), (118, 7929),

Gene: Trumpet_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Trumpet_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Tubberson_10 Start: 7746, Stop: 8063, Start Num: 47
Candidate Starts for Tubberson_10:
(9, 7398), (13, 7476), (18, 7551), (25, 7611), (Start: 47 @7746 has 29 MA's), (74, 7845), (79, 7857), (89, 7920), (117, 8031), (121, 8049), (122, 8052),

Gene: TuertoX_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for TuertoX_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: TurboVicky_13 Start: 10895, Stop: 11218, Start Num: 42
Candidate Starts for TurboVicky_13:
(32, 10850), (Start: 42 @10895 has 17 MA's), (Start: 52 @10931 has 1 MA's), (57, 10946), (64, 10982), (83, 11033), (87, 11063), (97, 11126), (121, 11204),

Gene: Tuti_11 Start: 7004, Stop: 7339, Start Num: 33
Candidate Starts for Tuti_11:
(Start: 33 @7004 has 15 MA's), (Start: 47 @7025 has 29 MA's), (57, 7061), (88, 7184), (91, 7199),

Gene: Twinkle_9 Start: 6719, Stop: 7039, Start Num: 43
Candidate Starts for Twinkle_9:
(14, 6473), (Start: 30 @6677 has 26 MA's), (Start: 43 @6719 has 2 MA's), (Start: 47 @6725 has 29 MA's), (65, 6800), (74, 6818), (87, 6878), (91, 6899), (96, 6935), (97, 6938),

Gene: Typher_15 Start: 11029, Stop: 11352, Start Num: 42
Candidate Starts for Typher_15:
(32, 10984), (Start: 42 @11029 has 17 MA's), (Start: 52 @11065 has 1 MA's), (55, 11074), (57, 11080), (64, 11116), (83, 11167), (87, 11197), (121, 11338),

Gene: Vasanti_9 Start: 6512, Stop: 6853, Start Num: 49
Candidate Starts for Vasanti_9:
(7, 6038), (10, 6167), (Start: 49 @6512 has 24 MA's), (55, 6539), (64, 6581), (73, 6602), (75, 6605), (80, 6620), (86, 6659), (110, 6785),

Gene: Violeta_17 Start: 8943, Stop: 9266, Start Num: 44

Candidate Starts for Violeta_17:
(Start: 44 @8943 has 11 MA's), (60, 9012), (69, 9045), (84, 9087), (87, 9114), (91, 9135), (97, 9174), (120, 9249), (121, 9252),

Gene: Vondra_11 Start: 7660, Stop: 7977, Start Num: 47
Candidate Starts for Vondra_11:
(9, 7315), (18, 7468), (25, 7528), (Start: 47 @7660 has 29 MA's), (Start: 49 @7666 has 24 MA's), (62, 7726), (74, 7759), (82, 7783), (97, 7876), (98, 7882), (117, 7945), (121, 7963),

Gene: Warren_16 Start: 9042, Stop: 9365, Start Num: 44
Candidate Starts for Warren_16:
(Start: 44 @9042 has 11 MA's), (60, 9111), (69, 9144), (84, 9186), (87, 9213), (91, 9234), (97, 9273), (105, 9300), (120, 9348), (121, 9351),

Gene: WelcomeAyanna_9 Start: 7342, Stop: 7695, Start Num: 30
Candidate Starts for WelcomeAyanna_9:
(Start: 27 @7327 has 4 MA's), (Start: 30 @7342 has 26 MA's), (Start: 36 @7375 has 4 MA's), (57, 7417), (71, 7468), (86, 7531), (91, 7555), (97, 7594),

Gene: Whiteclaw_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Whiteclaw_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718), (98, 6724),

Gene: Winchester007_31 Start: 14962, Stop: 15285, Start Num: 44
Candidate Starts for Winchester007_31:
(Start: 44 @14962 has 11 MA's), (60, 15031), (69, 15064), (84, 15106), (87, 15133), (91, 15154), (97, 15193), (105, 15220), (120, 15268), (121, 15271),

Gene: WinkNick_10 Start: 7004, Stop: 7339, Start Num: 33
Candidate Starts for WinkNick_10:
(Start: 33 @7004 has 15 MA's), (Start: 47 @7025 has 29 MA's), (57, 7061), (84, 7151), (88, 7184), (91, 7199),

Gene: Wrackline_20 Start: 10284, Stop: 10616, Start Num: 40
Candidate Starts for Wrackline_20:
(39, 10281), (Start: 40 @10284 has 5 MA's), (53, 10323), (55, 10332), (57, 10338), (64, 10374), (72, 10395), (77, 10404), (78, 10407), (84, 10431), (87, 10458), (92, 10482), (106, 10551), (112, 10566), (119, 10596), (121, 10602),

Gene: Yeet412_9 Start: 6508, Stop: 6834, Start Num: 49
Candidate Starts for Yeet412_9:
(7, 6034), (10, 6163), (Start: 49 @6508 has 24 MA's), (55, 6535), (64, 6577), (75, 6601), (80, 6616), (87, 6658), (97, 6718),

Gene: Yeezy_9 Start: 6677, Stop: 7042, Start Num: 30
Candidate Starts for Yeezy_9:
(11, 6431), (19, 6524), (Start: 30 @6677 has 26 MA's), (Start: 47 @6728 has 29 MA's), (91, 6902),

Gene: Zameen_9 Start: 7344, Stop: 7697, Start Num: 30
Candidate Starts for Zameen_9:
(Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),

Gene: Zanella_13 Start: 10898, Stop: 11221, Start Num: 42
Candidate Starts for Zanella_13:
(Start: 42 @10898 has 17 MA's), (Start: 52 @10934 has 1 MA's), (57, 10949), (64, 10985), (83, 11036), (87, 11066), (97, 11129), (121, 11207),

Gene: Zirinka_9 Start: 7329, Stop: 7697, Start Num: 27
Candidate Starts for Zirinka_9:
(Start: 27 @7329 has 4 MA's), (Start: 30 @7344 has 26 MA's), (Start: 36 @7377 has 4 MA's), (57, 7419), (71, 7470), (86, 7533), (91, 7557),