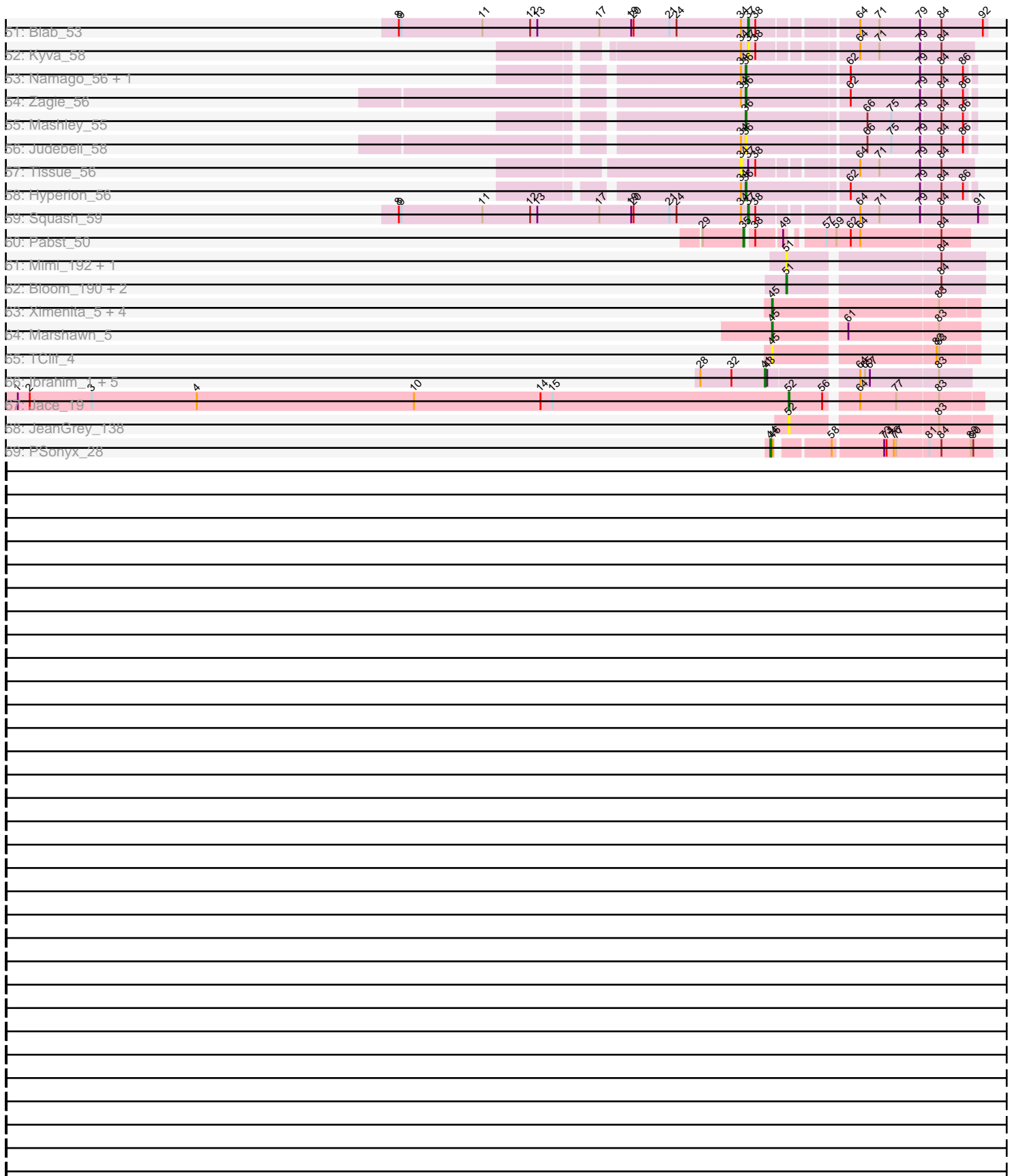


Pham 163407



Pham 163407



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 163407 Report

This analysis was run 05/04/24 on database version 560.

Pham number 163407 has 146 members, 26 are drafts.

Phages represented in each track:

- Track 1 : Pharaoh_43
- Track 2 : Switzerland_51, Rosalind_50, MinecraftSteve_52, Anon_46, Waits_51, Battleship_52, JSwag_50
- Track 3 : Remus_51, Strosahl_51
- Track 4 : CRB1_52, 20ES_51, AN3_51, VA6_49, First_0050, LadyBird_53
- Track 5 : Deloris_49, BengiVuitton_50
- Track 6 : Anthony_44
- Track 7 : Tiger_44, Midas2_45, PetterN_50, Jovo_45, UnionJack_47, Conspiracy_45, MarysWell_45, AgentM_44, Cuco_45, PickleBack_45, Lev2_45, Aragog_44, ForGetIt_45
- Track 8 : Dublin_45, Theia_44
- Track 9 : Jabiru_47, Scorpia_50, Chadwick_49
- Track 10 : Benedict_49
- Track 11 : Toaka_48
- Track 12 : Rahalelujah_48
- Track 13 : LoneWolf_49
- Track 14 : Vanisoa_48
- Track 15 : Darrell_49
- Track 16 : Sparky_92, Farewell_93
- Track 17 : Jaylociraptor_30, Hoshi_30, TaidaOne_30, Maya_30, Namo_30, CherryBlossom_30, FidgetOrca_30, Rima_30, Esketit_30, Spectropatronm_30, IceWarrior_30, TonyStarch_30, TieDye_29, Indigenous_30, OlympicHelado_30, Meibysrarus_30
- Track 18 : Bing_31
- Track 19 : BRock_64
- Track 20 : Alone3_74, LuckySocke_72
- Track 21 : GiJojo_63
- Track 22 : SpeedDemon_770, Bantam_75
- Track 23 : DatBoi_73
- Track 24 : Daredevil_66
- Track 25 : Mollymur_75
- Track 26 : Schomber_23
- Track 27 : Hanem_24, Aloki_23, Gray_24, Kabocha_25, Pakusa_23
- Track 28 : Oogie_23
- Track 29 : ChisanaKitsune_20
- Track 30 : FlyingTortilla_23, ScarletRaider_23
- Track 31 : Chidiebere_24

- Track 32 : UBSmoodge_25
- Track 33 : Kudefre_102
- Track 34 : Sephiroth_99
- Track 35 : Syleon_102
- Track 36 : Octobien14_100
- Track 37 : ModicumRichard_94
- Track 38 : Quhwah_29
- Track 39 : NoodlelyBoi_26
- Track 40 : Quammi_52, Wheelie_54, Llemily_54, Sillytadpoles_55, DonaldDuck_54, Viceroy_53, Casend_55, Jehoshaphat_56, Rudy_52, Wayne3_56, Zhafia_57, Teehee_55, Phabia_54
- Track 41 : RubyRalph_60, Fransoyer_58
- Track 42 : Rowlf_52
- Track 43 : Altheas_58
- Track 44 : BabyDotz_55
- Track 45 : StrawberryJamm_59
- Track 46 : Grassboy_58
- Track 47 : Nike_56
- Track 48 : Phinky_64
- Track 49 : SallyK_57
- Track 50 : Lonelysoil_54
- Track 51 : Blab_53
- Track 52 : Kyva_58
- Track 53 : Namago_56, Gazebo_55
- Track 54 : Zagie_56
- Track 55 : Mashley_55
- Track 56 : Judebell_58
- Track 57 : Tissue_56
- Track 58 : Hyperion_56
- Track 59 : Squash_59
- Track 60 : Pabst_50
- Track 61 : Mimi_192, Patbob_186
- Track 62 : Bloom_190, Racecar_187, Talia1610_189
- Track 63 : Ximenita_5, Shadow1_3, Krueger_4, Syra333_4, Sunflower1121_3
- Track 64 : Marshawn_5
- Track 65 : TClif_4
- Track 66 : Ibrahim_1, Bernal13_1, Nairb_1, ZenTime222_1, RonRayGun_1, Whitty_1
- Track 67 : Jace_19
- Track 68 : JeanGrey_138
- Track 69 : PSonyx_28

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

The start number called the most often in the published annotations is 50, it was called in 28 of the 120 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AgentM_44, Aloki_23, Alone3_74, Aragog_44, BRock_64, Benedict_49, Chadwick_49, ChisanaKitsune_20, Conspiracy_45, Cuco_45, Dublin_45,

FlyingTortilla_23, ForGetIt_45, GiJojo_63, Gray_24, Hanem_24, Jabiru_47, Jovo_45, Kabocha_25, Lev2_45, LuckySocks_72, MarysWell_45, Midas2_45, ModicumRichard_94, Oogie_23, Pakusa_23, PetterN_50, PickleBack_45, ScarletRaider_23, Schomber_23, Scorpio_50, Theia_44, Tiger_44, UBSmoodge_25, UnionJack_47,

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

- Chidiebere_24,

Genes that do not have the "Most Annotated" start:

- 20ES_51, AN3_51, Altheas_58, Anon_46, Anthony_44, BabyDotz_55, Bantam_75, Battleship_52, BengiVuitton_50, Bernal13_1, Bing_31, Blab_53, Bloom_190, CRB1_52, Casend_55, CherryBlossom_30, Daredevil_66, Darrell_49, DatBoi_73, Deloris_49, DonaldDuck_54, Esketit_30, Farewell_93, FidgetOrca_30, First_0050, Fransoyer_58, Gazebo_55, Grassboy_58, Hoshi_30, Hyperion_56, Ibrahim_1, IceWarrior_30, Indigenous_30, JSwag_50, Jace_19, Jaylociraptor_30, JeanGrey_138, Jehoshaphat_56, Judebell_58, Krueger_4, Kudefre_102, Kyva_58, LadyBird_53, Llemily_54, LoneWolf_49, Lonelysoil_54, Marshawn_5, Mashley_55, Maya_30, Meibysrarus_30, Mimi_192, MinecraftSteve_52, Mollymur_75, Nairb_1, Namago_56, Namo_30, Nike_56, NoodlelyBoi_26, Octobien14_100, OlympicHelado_30, PSonyx_28, Pabst_50, Patbob_186, Phabia_54, Pharaoh_43, Phinky_64, Quammi_52, Quhwah_29, Racecar_187, Rahalelujah_48, Remus_51, Rima_30, RonRayGun_1, Rosalind_50, Rowlf_52, RubyRalph_60, Rudy_52, SallyK_57, Sephiroth_99, Shadow1_3, Sillytadpoles_55, Sparky_92, Spectropatronm_30, SpeedDemon_770, Squash_59, StrawberryJamm_59, Strosahl_51, Sunflower1121_3, Switzerland_51, Syleon_102, Syra333_4, TClif_4, TaidaOne_30, Talia1610_189, Teehee_55, TieDye_29, Tissue_56, Toaka_48, TonyStarch_30, VA6_49, Vanisoa_48, Viceroy_53, Waits_51, Wayne3_56, Wheelie_54, Whitty_1, Ximenita_5, Zagie_56, ZenTime222_1, Zhafia_57,

Summary by start number:

Start 34:

- Found in 26 of 146 (17.8%) of genes in pham
- Manual Annotations of this start: 2 of 120
- Called 11.5% of time when present
- Phage (with cluster) where this start called: Grassboy_58 (EG), StrawberryJamm_59 (EG), Tissue_56 (EG),

Start 35:

- Found in 21 of 146 (14.4%) of genes in pham
- Manual Annotations of this start: 14 of 120
- Called 85.7% of time when present
- Phage (with cluster) where this start called: BabyDotz_55 (EG), Casend_55 (EG), DonaldDuck_54 (EG), Fransoyer_58 (EG), Jehoshaphat_56 (EG), Llemily_54 (EG), Nike_56 (EG), Pabst_50 (EK1), Phabia_54 (EG), Quammi_52 (EG), RubyRalph_60 (EG), Rudy_52 (EG), Sillytadpoles_55 (EG), Teehee_55 (EG), Viceroy_53 (EG), Wayne3_56 (EG), Wheelie_54 (EG), Zhafia_57 (EG),

Start 36:

- Found in 10 of 146 (6.8%) of genes in pham
- Manual Annotations of this start: 7 of 120
- Called 90.0% of time when present

- Phage (with cluster) where this start called: Altheas_58 (EG), Gazebo_55 (EG), Hyperion_56 (EG), Judebell_58 (EG), Lonelysoil_54 (EG), Mashley_55 (EG), Namago_56 (EG), SallyK_57 (EG), Zagie_56 (EG),

Start 37:

- Found in 7 of 146 (4.8%) of genes in pham
- Manual Annotations of this start: 3 of 120
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Blab_53 (EG), Kyva_58 (EG), Phinky_64 (EG), Rowlf_52 (EG), Squash_59 (EG),

Start 38:

- Found in 10 of 146 (6.8%) of genes in pham
- Manual Annotations of this start: 1 of 120
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Daredevil_66 (DL),

Start 39:

- Found in 2 of 146 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 120
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell_93 (AF), Sparky_92 (AF),

Start 40:

- Found in 12 of 146 (8.2%) of genes in pham
- Manual Annotations of this start: 8 of 120
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 20ES_51 (A2), AN3_51 (A2), BengiVuitton_50 (A2), CRB1_52 (A2), Darrell_49 (A9), Deloris_49 (A2), First_0050 (A2), LadyBird_53 (A2), Rahalelujah_48 (A9), Toaka_48 (A9), VA6_49 (A2), Vanisoa_48 (A9),

Start 41:

- Found in 6 of 146 (4.1%) of genes in pham
- Manual Annotations of this start: 6 of 120
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bernal13_1 (T), Ibrahim_1 (T), Nairb_1 (T), RonRayGun_1 (T), Whitty_1 (T), ZenTime222_1 (T),

Start 42:

- Found in 1 of 146 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 120
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LoneWolf_49 (A9),

Start 43:

- Found in 19 of 146 (13.0%) of genes in pham
- Manual Annotations of this start: 13 of 120
- Called 68.4% of time when present
- Phage (with cluster) where this start called: Anon_46 (A15), Bantam_75 (DL), Battleship_52 (A15), DatBoi_73 (DL), JSwag_50 (A15), MinecraftSteve_52 (A15), Mollymur_75 (DL), Remus_51 (A15), Rosalind_50 (A15), SpeedDemon_770 (DL), Strosahl_51 (A15), Switzerland_51 (A15), Waits_51 (A15),

Start 44:

- Found in 20 of 146 (13.7%) of genes in pham
- Manual Annotations of this start: 20 of 120
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bing_31 (BI5), CherryBlossom_30 (BI1), Esketit_30 (BI1), FidgetOrca_30 (BI1), Hoshi_30 (BI1), IceWarrior_30 (BI1), Indigenous_30 (BI1), Jaylociraptor_30 (BI1), Maya_30 (BI1), Meibysrarus_30 (BI1), Namo_30 (BI1), NoodlelyBoi_26 (EC), OlympicHelado_30 (BI1), PSonyx_28 (singleton), Quhwah_29 (EC), Rima_30 (BI1), Spectropatronm_30 (BI1), TaidaOne_30 (BI1), TieDye_29 (BI1), TonyStarch_30 (BI1),

Start 45:

- Found in 10 of 146 (6.8%) of genes in pham
- Manual Annotations of this start: 7 of 120
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Anthony_44 (A20), Krueger_4 (K6), Marshawn_5 (K6), Shadow1_3 (K6), Sunflower1121_3 (K6), Syra333_4 (K6), TClif_4 (K6), Ximenita_5 (K6),

Start 47:

- Found in 1 of 146 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 120
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pharaoh_43 (A12),

Start 48:

- Found in 12 of 146 (8.2%) of genes in pham
- Manual Annotations of this start: 1 of 120
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Chidiebere_24 (DQ),

Start 50:

- Found in 36 of 146 (24.7%) of genes in pham
- Manual Annotations of this start: 28 of 120
- Called 97.2% of time when present
- Phage (with cluster) where this start called: AgentM_44 (A5), Alok_23 (DQ), Alone3_74 (BS), Aragog_44 (A5), BRock_64 (BS), Benedict_49 (A5), Chadwick_49 (A5), ChisanaKitsune_20 (DQ), Conspiracy_45 (A5), Cuco_45 (A5), Dublin_45 (A5), FlyingTortilla_23 (DQ), ForGetIt_45 (A5), GiJojo_63 (BS), Gray_24 (DQ), Hanem_24 (DQ), Jabiru_47 (A5), Jovo_45 (A5), Kabocha_25 (DQ), Lev2_45 (A5), LuckySocks_72 (BS), MarysWell_45 (A5), Midas2_45 (A5), ModicumRichard_94 (DZ), Oogie_23 (DQ), Pakusa_23 (DQ), PetterN_50 (A5), PickleBack_45 (A5), ScarletRaider_23 (DQ), Schomber_23 (DQ), Scorpio_50 (A5), Theia_44 (A5), Tiger_44 (A5), UBSmoodge_25 (DQ), UnionJack_47 (A5),

Start 51:

- Found in 13 of 146 (8.9%) of genes in pham
- Manual Annotations of this start: 5 of 120
- Called 69.2% of time when present
- Phage (with cluster) where this start called: Bloom_190 (FC), Kudrefre_102 (DU1), Mimi_192 (FC), Octobien14_100 (DU1), Patbob_186 (FC), Racecar_187 (FC), Sephiroth_99 (DU1), Syleon_102 (DU1), Talia1610_189 (FC),

Start 52:

- Found in 2 of 146 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 120
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace_19 (singleton), JeanGrey_138 (singleton),

Summary by clusters:

There are 21 clusters represented in this pham: A15, A20, DL, BI5, AF, FC, EG, A12, EC, singleton, T, A2, A5, K6, BS, A9, DU1, DZ, BI1, EK1, DQ,

Info for manual annotations of cluster A12:

- Start number 47 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A15:

- Start number 43 was manually annotated 9 times for cluster A15.

Info for manual annotations of cluster A2:

- Start number 40 was manually annotated 5 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 45 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A5:

- Start number 50 was manually annotated 19 times for cluster A5.

Info for manual annotations of cluster A9:

- Start number 40 was manually annotated 3 times for cluster A9.
- Start number 42 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AF:

- Start number 39 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster BI1:

- Start number 44 was manually annotated 16 times for cluster BI1.

Info for manual annotations of cluster BI5:

- Start number 44 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BS:

- Start number 50 was manually annotated 4 times for cluster BS.

Info for manual annotations of cluster DL:

- Start number 38 was manually annotated 1 time for cluster DL.
- Start number 43 was manually annotated 4 times for cluster DL.

Info for manual annotations of cluster DQ:

- Start number 48 was manually annotated 1 time for cluster DQ.
- Start number 50 was manually annotated 5 times for cluster DQ.

Info for manual annotations of cluster DU1:

- Start number 51 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster EC:

- Start number 44 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster EG:

- Start number 34 was manually annotated 2 times for cluster EG.
- Start number 35 was manually annotated 13 times for cluster EG.
- Start number 36 was manually annotated 7 times for cluster EG.
- Start number 37 was manually annotated 3 times for cluster EG.

Info for manual annotations of cluster EK1:

- Start number 35 was manually annotated 1 time for cluster EK1.

Info for manual annotations of cluster FC:

- Start number 51 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster K6:

- Start number 45 was manually annotated 6 times for cluster K6.

Info for manual annotations of cluster T:

- Start number 41 was manually annotated 6 times for cluster T.

Gene Information:

Gene: 20ES_51 Start: 32882, Stop: 32634, Start Num: 40

Candidate Starts for 20ES_51:

(26, 32984), (27, 32972), (Start: 40 @32882 has 8 MA's), (61, 32792), (83, 32681),

Gene: AN3_51 Start: 33253, Stop: 33005, Start Num: 40

Candidate Starts for AN3_51:

(26, 33355), (27, 33343), (Start: 40 @33253 has 8 MA's), (61, 33163), (83, 33052),

Gene: AgentM_44 Start: 34563, Stop: 34327, Start Num: 50

Candidate Starts for AgentM_44:

(31, 34632), (Start: 50 @34563 has 28 MA's),

Gene: Alok1_23 Start: 11841, Stop: 12056, Start Num: 50

Candidate Starts for Alok1_23:

(33, 11784), (Start: 48 @11838 has 1 MA's), (Start: 50 @11841 has 28 MA's), (60, 11898), (68, 11931), (72, 11943), (73, 11946), (84, 12015),

Gene: Alone3_74 Start: 28535, Stop: 28747, Start Num: 50

Candidate Starts for Alone3_74:

(Start: 50 @28535 has 28 MA's), (68, 28625), (76, 28652), (80, 28694), (82, 28706), (83, 28709),

Gene: Altheas_58 Start: 42617, Stop: 42345, Start Num: 36

Candidate Starts for Altheas_58:

(Start: 34 @42623 has 2 MA's), (Start: 36 @42617 has 7 MA's), (62, 42494), (79, 42407), (84, 42383),

Gene: Anon_46 Start: 30067, Stop: 29819, Start Num: 43

Candidate Starts for Anon_46:

(Start: 43 @30067 has 13 MA's), (73, 29935), (83, 29869),

Gene: Anthony_44 Start: 30206, Stop: 29964, Start Num: 45

Candidate Starts for Anthony_44:

(Start: 45 @30206 has 7 MA's), (55, 30173), (64, 30113), (72, 30086), (83, 30017),

Gene: Aragog_44 Start: 34583, Stop: 34347, Start Num: 50

Candidate Starts for Aragog_44:

(31, 34652), (Start: 50 @34583 has 28 MA's),

Gene: BRock_64 Start: 24495, Stop: 24707, Start Num: 50

Candidate Starts for BRock_64:

(Start: 50 @24495 has 28 MA's), (68, 24585), (78, 24639), (82, 24666), (83, 24669),

Gene: BabyDotz_55 Start: 42840, Stop: 42568, Start Num: 35

Candidate Starts for BabyDotz_55:

(Start: 34 @42843 has 2 MA's), (Start: 35 @42840 has 14 MA's), (66, 42696), (75, 42666), (79, 42630), (84, 42606), (86, 42579),

Gene: Bantam_75 Start: 53471, Stop: 53229, Start Num: 43

Candidate Starts for Bantam_75:

(Start: 43 @53471 has 13 MA's), (Start: 51 @53450 has 5 MA's), (77, 53327), (83, 53276),

Gene: Battleship_52 Start: 31061, Stop: 30813, Start Num: 43

Candidate Starts for Battleship_52:

(Start: 43 @31061 has 13 MA's), (73, 30929), (83, 30863),

Gene: Benedict_49 Start: 34952, Stop: 34716, Start Num: 50

Candidate Starts for Benedict_49:

(Start: 50 @34952 has 28 MA's),

Gene: BengiVuitton_50 Start: 32835, Stop: 32587, Start Num: 40

Candidate Starts for BengiVuitton_50:

(26, 32937), (27, 32925), (Start: 40 @32835 has 8 MA's), (61, 32745), (64, 32730), (83, 32634),

Gene: Bernal13_1 Start: 89, Stop: 325, Start Num: 41

Candidate Starts for Bernal13_1:

(28, 8), (32, 47), (Start: 41 @89 has 6 MA's), (Start: 43 @92 has 13 MA's), (64, 191), (65, 197), (67, 203), (83, 287),

Gene: Bing_31 Start: 25537, Stop: 25779, Start Num: 44

Candidate Starts for Bing_31:

(Start: 44 @25537 has 20 MA's), (84, 25729), (85, 25747),

Gene: Blab_53 Start: 41667, Stop: 41395, Start Num: 37

Candidate Starts for Blab_53:

(8, 42102), (9, 42099), (11, 41997), (12, 41937), (13, 41928), (17, 41850), (19, 41811), (20, 41808), (21, 41763), (24, 41754), (Start: 34 @41673 has 2 MA's), (Start: 37 @41667 has 3 MA's), (Start: 38 @41658 has 1 MA's), (64, 41550), (71, 41526), (79, 41475), (84, 41451), (92, 41400),

Gene: Bloom_190 Start: 124505, Stop: 124735, Start Num: 51

Candidate Starts for Bloom_190:
(Start: 51 @124505 has 5 MA's), (84, 124682),

Gene: CRB1_52 Start: 33225, Stop: 32989, Start Num: 40
Candidate Starts for CRB1_52:
(26, 33327), (27, 33315), (Start: 40 @33225 has 8 MA's), (61, 33135), (83, 33024),

Gene: Casend_55 Start: 42251, Stop: 41979, Start Num: 35
Candidate Starts for Casend_55:
(Start: 34 @42254 has 2 MA's), (Start: 35 @42251 has 14 MA's), (62, 42128), (79, 42041), (84, 42017), (86, 41990),

Gene: Chadwick_49 Start: 34763, Stop: 34527, Start Num: 50
Candidate Starts for Chadwick_49:
(31, 34832), (Start: 50 @34763 has 28 MA's), (74, 34640),

Gene: CherryBlossom_30 Start: 25644, Stop: 25883, Start Num: 44
Candidate Starts for CherryBlossom_30:
(Start: 44 @25644 has 20 MA's), (78, 25803), (84, 25833),

Gene: Chidiebere_24 Start: 11838, Stop: 12056, Start Num: 48
Candidate Starts for Chidiebere_24:
(33, 11784), (Start: 48 @11838 has 1 MA's), (Start: 50 @11841 has 28 MA's), (60, 11898), (68, 11931), (73, 11946), (81, 12000), (84, 12015),

Gene: ChisanaKitsune_20 Start: 10536, Stop: 10751, Start Num: 50
Candidate Starts for ChisanaKitsune_20:
(Start: 48 @10533 has 1 MA's), (Start: 50 @10536 has 28 MA's), (60, 10593), (68, 10626), (73, 10641), (81, 10695), (84, 10710),

Gene: Conspiracy_45 Start: 34805, Stop: 34569, Start Num: 50
Candidate Starts for Conspiracy_45:
(31, 34874), (Start: 50 @34805 has 28 MA's),

Gene: Cuco_45 Start: 34838, Stop: 34602, Start Num: 50
Candidate Starts for Cuco_45:
(31, 34907), (Start: 50 @34838 has 28 MA's),

Gene: Daredevil_66 Start: 49516, Stop: 49250, Start Num: 38
Candidate Starts for Daredevil_66:
(Start: 35 @49531 has 14 MA's), (Start: 38 @49516 has 1 MA's), (63, 49402), (73, 49369), (74, 49366), (83, 49303), (84, 49300),

Gene: Darrell_49 Start: 32937, Stop: 32701, Start Num: 40
Candidate Starts for Darrell_49:
(26, 33039), (Start: 40 @32937 has 8 MA's), (53, 32913), (83, 32745),

Gene: DatBoi_73 Start: 53464, Stop: 53222, Start Num: 43
Candidate Starts for DatBoi_73:
(Start: 43 @53464 has 13 MA's), (Start: 51 @53443 has 5 MA's), (83, 53269),

Gene: Deloris_49 Start: 32504, Stop: 32256, Start Num: 40
Candidate Starts for Deloris_49:

(26, 32606), (27, 32594), (Start: 40 @32504 has 8 MA's), (61, 32414), (64, 32399), (83, 32303),

Gene: DonaldDuck_54 Start: 41600, Stop: 41328, Start Num: 35

Candidate Starts for DonaldDuck_54:

(Start: 34 @41603 has 2 MA's), (Start: 35 @41600 has 14 MA's), (62, 41477), (79, 41390), (84, 41366), (86, 41339),

Gene: Dublin_45 Start: 34974, Stop: 34738, Start Num: 50

Candidate Starts for Dublin_45:

(Start: 50 @34974 has 28 MA's),

Gene: Esketit_30 Start: 25627, Stop: 25866, Start Num: 44

Candidate Starts for Esketit_30:

(Start: 44 @25627 has 20 MA's), (78, 25786), (84, 25816),

Gene: Farewell_93 Start: 60714, Stop: 60971, Start Num: 39

Candidate Starts for Farewell_93:

(30, 60669), (Start: 39 @60714 has 2 MA's), (Start: 45 @60732 has 7 MA's), (82, 60921), (83, 60924),

Gene: FidgetOrca_30 Start: 25633, Stop: 25872, Start Num: 44

Candidate Starts for FidgetOrca_30:

(Start: 44 @25633 has 20 MA's), (78, 25792), (84, 25822),

Gene: First_0050 Start: 32758, Stop: 32510, Start Num: 40

Candidate Starts for First_0050:

(26, 32860), (27, 32848), (Start: 40 @32758 has 8 MA's), (61, 32668), (83, 32557),

Gene: FlyingTortilla_23 Start: 12855, Stop: 13073, Start Num: 50

Candidate Starts for FlyingTortilla_23:

(Start: 48 @12852 has 1 MA's), (Start: 50 @12855 has 28 MA's), (79, 13008), (82, 13026), (84, 13032),

Gene: ForGetIt_45 Start: 34830, Stop: 34594, Start Num: 50

Candidate Starts for ForGetIt_45:

(31, 34899), (Start: 50 @34830 has 28 MA's),

Gene: Fransoyer_58 Start: 44153, Stop: 43872, Start Num: 35

Candidate Starts for Fransoyer_58:

(Start: 35 @44153 has 14 MA's), (62, 44027),

Gene: Gazebo_55 Start: 42275, Stop: 42003, Start Num: 36

Candidate Starts for Gazebo_55:

(Start: 34 @42281 has 2 MA's), (Start: 36 @42275 has 7 MA's), (62, 42152), (79, 42065), (84, 42041), (86, 42014),

Gene: GiJojo_63 Start: 26714, Stop: 26926, Start Num: 50

Candidate Starts for GiJojo_63:

(Start: 50 @26714 has 28 MA's), (68, 26804), (78, 26858), (82, 26885), (83, 26888),

Gene: Grassboy_58 Start: 42646, Stop: 42386, Start Num: 34

Candidate Starts for Grassboy_58:

(Start: 34 @42646 has 2 MA's), (Start: 37 @42640 has 3 MA's), (Start: 38 @42631 has 1 MA's), (64, 42523), (71, 42499), (79, 42448), (84, 42424),

Gene: Gray_24 Start: 11841, Stop: 12056, Start Num: 50

Candidate Starts for Gray_24:

(33, 11784), (Start: 48 @11838 has 1 MA's), (Start: 50 @11841 has 28 MA's), (60, 11898), (68, 11931), (72, 11943), (73, 11946), (84, 12015),

Gene: Hanem_24 Start: 11841, Stop: 12056, Start Num: 50

Candidate Starts for Hanem_24:

(33, 11784), (Start: 48 @11838 has 1 MA's), (Start: 50 @11841 has 28 MA's), (60, 11898), (68, 11931), (72, 11943), (73, 11946), (84, 12015),

Gene: Hoshi_30 Start: 25627, Stop: 25866, Start Num: 44

Candidate Starts for Hoshi_30:

(Start: 44 @25627 has 20 MA's), (78, 25786), (84, 25816),

Gene: Hyperion_56 Start: 42456, Stop: 42184, Start Num: 36

Candidate Starts for Hyperion_56:

(Start: 34 @42459 has 2 MA's), (Start: 36 @42456 has 7 MA's), (62, 42333), (79, 42246), (84, 42222), (86, 42195),

Gene: Ibrahim_1 Start: 89, Stop: 325, Start Num: 41

Candidate Starts for Ibrahim_1:

(28, 8), (32, 47), (Start: 41 @89 has 6 MA's), (Start: 43 @92 has 13 MA's), (64, 191), (65, 197), (67, 203), (83, 287),

Gene: IceWarrior_30 Start: 25627, Stop: 25866, Start Num: 44

Candidate Starts for IceWarrior_30:

(Start: 44 @25627 has 20 MA's), (78, 25786), (84, 25816),

Gene: Indigenous_30 Start: 25627, Stop: 25866, Start Num: 44

Candidate Starts for Indigenous_30:

(Start: 44 @25627 has 20 MA's), (78, 25786), (84, 25816),

Gene: JSwag_50 Start: 30801, Stop: 30553, Start Num: 43

Candidate Starts for JSwag_50:

(Start: 43 @30801 has 13 MA's), (73, 30669), (83, 30603),

Gene: Jabiru_47 Start: 34807, Stop: 34571, Start Num: 50

Candidate Starts for Jabiru_47:

(31, 34876), (Start: 50 @34807 has 28 MA's), (74, 34684),

Gene: Jace_19 Start: 17315, Stop: 17536, Start Num: 52

Candidate Starts for Jace_19:

(1, 16346), (2, 16361), (3, 16439), (4, 16571), (10, 16844), (14, 17003), (15, 17018), (Start: 52 @17315 has 1 MA's), (56, 17357), (64, 17390), (77, 17435), (83, 17486),

Gene: Jaylociraptor_30 Start: 25627, Stop: 25866, Start Num: 44

Candidate Starts for Jaylociraptor_30:

(Start: 44 @25627 has 20 MA's), (78, 25786), (84, 25816),

Gene: JeanGrey_138 Start: 105656, Stop: 105889, Start Num: 52

Candidate Starts for JeanGrey_138:

(Start: 52 @105656 has 1 MA's), (83, 105827),

Gene: Jehoshaphat_56 Start: 42519, Stop: 42247, Start Num: 35
Candidate Starts for Jehoshaphat_56:
(Start: 34 @42522 has 2 MA's), (Start: 35 @42519 has 14 MA's), (62, 42396), (79, 42309), (84, 42285), (86, 42258),

Gene: Jovo_45 Start: 35086, Stop: 34850, Start Num: 50
Candidate Starts for Jovo_45:
(31, 35155), (Start: 50 @35086 has 28 MA's),

Gene: Judebell_58 Start: 42165, Stop: 41893, Start Num: 36
Candidate Starts for Judebell_58:
(Start: 34 @42168 has 2 MA's), (Start: 36 @42165 has 7 MA's), (66, 42021), (75, 41991), (79, 41955), (84, 41931), (86, 41904),

Gene: Kabocha_25 Start: 12654, Stop: 12869, Start Num: 50
Candidate Starts for Kabocha_25:
(33, 12597), (Start: 48 @12651 has 1 MA's), (Start: 50 @12654 has 28 MA's), (60, 12711), (68, 12744), (72, 12756), (73, 12759), (84, 12828),

Gene: Krueger_4 Start: 823, Stop: 1062, Start Num: 45
Candidate Starts for Krueger_4:
(Start: 45 @823 has 7 MA's), (83, 1015),

Gene: Kudfre_102 Start: 58639, Stop: 58851, Start Num: 51
Candidate Starts for Kudfre_102:
(Start: 51 @58639 has 5 MA's), (67, 58729), (74, 58750), (83, 58813), (87, 58843),

Gene: Kyva_58 Start: 42697, Stop: 42443, Start Num: 37
Candidate Starts for Kyva_58:
(Start: 34 @42703 has 2 MA's), (Start: 37 @42697 has 3 MA's), (Start: 38 @42688 has 1 MA's), (64, 42580), (71, 42556), (79, 42505), (84, 42481),

Gene: LadyBird_53 Start: 33193, Stop: 32945, Start Num: 40
Candidate Starts for LadyBird_53:
(26, 33295), (27, 33283), (Start: 40 @33193 has 8 MA's), (61, 33103), (83, 32992),

Gene: Lev2_45 Start: 34718, Stop: 34482, Start Num: 50
Candidate Starts for Lev2_45:
(31, 34787), (Start: 50 @34718 has 28 MA's),

Gene: Llemily_54 Start: 41295, Stop: 41023, Start Num: 35
Candidate Starts for Llemily_54:
(Start: 34 @41298 has 2 MA's), (Start: 35 @41295 has 14 MA's), (62, 41172), (79, 41085), (84, 41061), (86, 41034),

Gene: LoneWolf_49 Start: 32307, Stop: 32071, Start Num: 42
Candidate Starts for LoneWolf_49:
(22, 32427), (26, 32415), (Start: 42 @32307 has 1 MA's), (73, 32184), (83, 32118),

Gene: Lonelysoil_54 Start: 41648, Stop: 41376, Start Num: 36
Candidate Starts for Lonelysoil_54:
(Start: 36 @41648 has 7 MA's), (62, 41525), (79, 41438), (84, 41414), (86, 41387),

Gene: LuckySocke_72 Start: 27277, Stop: 27489, Start Num: 50

Candidate Starts for LuckySocke_72:

(Start: 50 @27277 has 28 MA's), (68, 27367), (76, 27394), (80, 27436), (82, 27448), (83, 27451),

Gene: Marshawn_5 Start: 936, Stop: 1178, Start Num: 45

Candidate Starts for Marshawn_5:

(Start: 45 @936 has 7 MA's), (61, 1017), (83, 1128),

Gene: MarysWell_45 Start: 35217, Stop: 34981, Start Num: 50

Candidate Starts for MarysWell_45:

(31, 35286), (Start: 50 @35217 has 28 MA's),

Gene: Mashley_55 Start: 42232, Stop: 41960, Start Num: 36

Candidate Starts for Mashley_55:

(Start: 36 @42232 has 7 MA's), (66, 42088), (75, 42058), (79, 42022), (84, 41998), (86, 41971),

Gene: Maya_30 Start: 25641, Stop: 25880, Start Num: 44

Candidate Starts for Maya_30:

(Start: 44 @25641 has 20 MA's), (78, 25800), (84, 25830),

Gene: Meibysrarus_30 Start: 25627, Stop: 25866, Start Num: 44

Candidate Starts for Meibysrarus_30:

(Start: 44 @25627 has 20 MA's), (78, 25786), (84, 25816),

Gene: Midas2_45 Start: 34966, Stop: 34730, Start Num: 50

Candidate Starts for Midas2_45:

(31, 35035), (Start: 50 @34966 has 28 MA's),

Gene: Mimi_192 Start: 124218, Stop: 124448, Start Num: 51

Candidate Starts for Mimi_192:

(Start: 51 @124218 has 5 MA's), (84, 124395),

Gene: MinecraftSteve_52 Start: 31065, Stop: 30817, Start Num: 43

Candidate Starts for MinecraftSteve_52:

(Start: 43 @31065 has 13 MA's), (73, 30933), (83, 30867),

Gene: ModicumRichard_94 Start: 55434, Stop: 55703, Start Num: 50

Candidate Starts for ModicumRichard_94:

(Start: 50 @55434 has 28 MA's), (75, 55554), (77, 55560), (83, 55611), (84, 55614), (91, 55659),

Gene: Mollymur_75 Start: 54003, Stop: 53758, Start Num: 43

Candidate Starts for Mollymur_75:

(Start: 43 @54003 has 13 MA's), (Start: 51 @53982 has 5 MA's), (83, 53808),

Gene: Nairb_1 Start: 89, Stop: 325, Start Num: 41

Candidate Starts for Nairb_1:

(28, 8), (32, 47), (Start: 41 @89 has 6 MA's), (Start: 43 @92 has 13 MA's), (64, 191), (65, 197), (67, 203), (83, 287),

Gene: Namago_56 Start: 41635, Stop: 41363, Start Num: 36

Candidate Starts for Namago_56:

(Start: 34 @41641 has 2 MA's), (Start: 36 @41635 has 7 MA's), (62, 41512), (79, 41425), (84, 41401), (86, 41374),

Gene: Namo_30 Start: 25633, Stop: 25872, Start Num: 44

Candidate Starts for Namo_30:

(Start: 44 @25633 has 20 MA's), (78, 25792), (84, 25822),

Gene: Nike_56 Start: 42603, Stop: 42349, Start Num: 35

Candidate Starts for Nike_56:

(23, 42684), (Start: 35 @42603 has 14 MA's), (Start: 38 @42594 has 1 MA's), (64, 42486), (71, 42462), (79, 42411), (84, 42387), (86, 42360),

Gene: NoodlelyBoi_26 Start: 13691, Stop: 13933, Start Num: 44

Candidate Starts for NoodlelyBoi_26:

(Start: 44 @13691 has 20 MA's), (62, 13772), (79, 13859), (84, 13883),

Gene: Octobien14_100 Start: 58045, Stop: 58257, Start Num: 51

Candidate Starts for Octobien14_100:

(Start: 51 @58045 has 5 MA's), (67, 58135), (74, 58156), (83, 58219), (88, 58252),

Gene: OlympicHelado_30 Start: 25633, Stop: 25872, Start Num: 44

Candidate Starts for OlympicHelado_30:

(Start: 44 @25633 has 20 MA's), (78, 25792), (84, 25822),

Gene: Oogie_23 Start: 11493, Stop: 11708, Start Num: 50

Candidate Starts for Oogie_23:

(Start: 48 @11490 has 1 MA's), (Start: 50 @11493 has 28 MA's), (60, 11550), (68, 11583), (73, 11598), (84, 11667),

Gene: PSonyx_28 Start: 27311, Stop: 27562, Start Num: 44

Candidate Starts for PSonyx_28:

(Start: 44 @27311 has 20 MA's), (46, 27314), (58, 27371), (73, 27431), (74, 27434), (76, 27443), (77, 27446), (81, 27485), (84, 27500), (89, 27536), (90, 27539),

Gene: Pabst_50 Start: 50450, Stop: 50701, Start Num: 35

Candidate Starts for Pabst_50:

(29, 50399), (Start: 35 @50450 has 14 MA's), (Start: 38 @50459 has 1 MA's), (49, 50489), (57, 50525), (59, 50537), (62, 50555), (64, 50567), (84, 50666),

Gene: Pakusa_23 Start: 11583, Stop: 11798, Start Num: 50

Candidate Starts for Pakusa_23:

(33, 11526), (Start: 48 @11580 has 1 MA's), (Start: 50 @11583 has 28 MA's), (60, 11640), (68, 11673), (72, 11685), (73, 11688), (84, 11757),

Gene: Patbob_186 Start: 125330, Stop: 125560, Start Num: 51

Candidate Starts for Patbob_186:

(Start: 51 @125330 has 5 MA's), (84, 125507),

Gene: PetterN_50 Start: 34931, Stop: 34695, Start Num: 50

Candidate Starts for PetterN_50:

(31, 35000), (Start: 50 @34931 has 28 MA's),

Gene: Phabia_54 Start: 41710, Stop: 41438, Start Num: 35

Candidate Starts for Phabia_54:

(Start: 34 @41713 has 2 MA's), (Start: 35 @41710 has 14 MA's), (62, 41587), (79, 41500), (84, 41476), (86, 41449),

Gene: Pharaoh_43 Start: 32085, Stop: 31876, Start Num: 47

Candidate Starts for Pharaoh_43:

(26, 32193), (27, 32181), (Start: 47 @32085 has 1 MA's), (64, 32010), (74, 31977), (83, 31914),

Gene: Phinky_64 Start: 44342, Stop: 44070, Start Num: 37

Candidate Starts for Phinky_64:

(25, 44396), (Start: 35 @44345 has 14 MA's), (Start: 37 @44342 has 3 MA's), (Start: 38 @44333 has 1 MA's), (64, 44225), (71, 44201), (79, 44150), (84, 44126), (91, 44081),

Gene: PickleBack_45 Start: 34710, Stop: 34474, Start Num: 50

Candidate Starts for PickleBack_45:

(31, 34779), (Start: 50 @34710 has 28 MA's),

Gene: Quammi_52 Start: 41410, Stop: 41138, Start Num: 35

Candidate Starts for Quammi_52:

(Start: 34 @41413 has 2 MA's), (Start: 35 @41410 has 14 MA's), (62, 41287), (79, 41200), (84, 41176), (86, 41149),

Gene: Quhwah_29 Start: 14012, Stop: 14254, Start Num: 44

Candidate Starts for Quhwah_29:

(16, 13787), (Start: 44 @14012 has 20 MA's), (77, 14150), (79, 14180), (84, 14204),

Gene: Racecar_187 Start: 125098, Stop: 125328, Start Num: 51

Candidate Starts for Racecar_187:

(Start: 51 @125098 has 5 MA's), (84, 125275),

Gene: Rahalelujah_48 Start: 31854, Stop: 31618, Start Num: 40

Candidate Starts for Rahalelujah_48:

(18, 32055), (26, 31956), (Start: 40 @31854 has 8 MA's), (53, 31830), (83, 31662),

Gene: Remus_51 Start: 30778, Stop: 30533, Start Num: 43

Candidate Starts for Remus_51:

(Start: 43 @30778 has 13 MA's), (54, 30751), (69, 30661), (83, 30583),

Gene: Rima_30 Start: 25633, Stop: 25872, Start Num: 44

Candidate Starts for Rima_30:

(Start: 44 @25633 has 20 MA's), (78, 25792), (84, 25822),

Gene: RonRayGun_1 Start: 89, Stop: 325, Start Num: 41

Candidate Starts for RonRayGun_1:

(28, 8), (32, 47), (Start: 41 @89 has 6 MA's), (Start: 43 @92 has 13 MA's), (64, 191), (65, 197), (67, 203), (83, 287),

Gene: Rosalind_50 Start: 30984, Stop: 30736, Start Num: 43

Candidate Starts for Rosalind_50:

(Start: 43 @30984 has 13 MA's), (73, 30852), (83, 30786),

Gene: Rowlf_52 Start: 41508, Stop: 41236, Start Num: 37

Candidate Starts for Rowlf_52:

(Start: 35 @41511 has 14 MA's), (Start: 37 @41508 has 3 MA's), (Start: 38 @41499 has 1 MA's), (62, 41403), (64, 41391), (70, 41370), (71, 41367), (79, 41316), (84, 41292), (91, 41247),

Gene: RubyRalph_60 Start: 44491, Stop: 44210, Start Num: 35

Candidate Starts for RubyRalph_60:

(Start: 35 @44491 has 14 MA's), (62, 44365),

Gene: Rudy_52 Start: 41446, Stop: 41174, Start Num: 35

Candidate Starts for Rudy_52:

(Start: 34 @41449 has 2 MA's), (Start: 35 @41446 has 14 MA's), (62, 41323), (79, 41236), (84, 41212), (86, 41185),

Gene: SallyK_57 Start: 42760, Stop: 42488, Start Num: 36

Candidate Starts for SallyK_57:

(5, 43315), (6, 43294), (7, 43264), (Start: 36 @42760 has 7 MA's), (66, 42616), (75, 42586), (79, 42550), (84, 42526), (86, 42499),

Gene: ScarletRaider_23 Start: 12882, Stop: 13100, Start Num: 50

Candidate Starts for ScarletRaider_23:

(Start: 48 @12879 has 1 MA's), (Start: 50 @12882 has 28 MA's), (79, 13035), (82, 13053), (84, 13059),

Gene: Schomber_23 Start: 11591, Stop: 11806, Start Num: 50

Candidate Starts for Schomber_23:

(33, 11534), (Start: 48 @11588 has 1 MA's), (Start: 50 @11591 has 28 MA's), (60, 11648), (68, 11681), (73, 11696), (81, 11750), (84, 11765),

Gene: Scorpia_50 Start: 35017, Stop: 34781, Start Num: 50

Candidate Starts for Scorpia_50:

(31, 35086), (Start: 50 @35017 has 28 MA's), (74, 34894),

Gene: Sephiroth_99 Start: 58611, Stop: 58823, Start Num: 51

Candidate Starts for Sephiroth_99:

(Start: 51 @58611 has 5 MA's), (67, 58701), (68, 58704), (74, 58722), (83, 58785),

Gene: Shadow1_3 Start: 728, Stop: 967, Start Num: 45

Candidate Starts for Shadow1_3:

(Start: 45 @728 has 7 MA's), (83, 920),

Gene: Sillytadpoles_55 Start: 41283, Stop: 41011, Start Num: 35

Candidate Starts for Sillytadpoles_55:

(Start: 34 @41286 has 2 MA's), (Start: 35 @41283 has 14 MA's), (62, 41160), (79, 41073), (84, 41049), (86, 41022),

Gene: Sparky_92 Start: 62308, Stop: 62565, Start Num: 39

Candidate Starts for Sparky_92:

(30, 62263), (Start: 39 @62308 has 2 MA's), (Start: 45 @62326 has 7 MA's), (82, 62515), (83, 62518),

Gene: Spectropatronm_30 Start: 25627, Stop: 25866, Start Num: 44

Candidate Starts for Spectropatronm_30:

(Start: 44 @25627 has 20 MA's), (78, 25786), (84, 25816),

Gene: SpeedDemon_770 Start: 55702, Stop: 55460, Start Num: 43

Candidate Starts for SpeedDemon_770:

(Start: 43 @55702 has 13 MA's), (Start: 51 @55681 has 5 MA's), (77, 55558), (83, 55507),

Gene: Squash_59 Start: 42626, Stop: 42354, Start Num: 37

Candidate Starts for Squash_59:

(8, 43061), (9, 43058), (11, 42956), (12, 42896), (13, 42887), (17, 42809), (19, 42770), (20, 42767), (21, 42722), (24, 42713), (Start: 34 @42632 has 2 MA's), (Start: 37 @42626 has 3 MA's), (Start: 38 @42617 has 1 MA's), (64, 42509), (71, 42485), (79, 42434), (84, 42410), (91, 42365),

Gene: StrawberryJamm_59 Start: 41944, Stop: 41666, Start Num: 34

Candidate Starts for StrawberryJamm_59:

(Start: 34 @41944 has 2 MA's), (Start: 36 @41938 has 7 MA's), (62, 41815), (79, 41728), (84, 41704), (86, 41677),

Gene: Strosahl_51 Start: 30778, Stop: 30533, Start Num: 43

Candidate Starts for Strosahl_51:

(Start: 43 @30778 has 13 MA's), (54, 30751), (69, 30661), (83, 30583),

Gene: Sunflower1121_3 Start: 727, Stop: 966, Start Num: 45

Candidate Starts for Sunflower1121_3:

(Start: 45 @727 has 7 MA's), (83, 919),

Gene: Switzerland_51 Start: 31164, Stop: 30916, Start Num: 43

Candidate Starts for Switzerland_51:

(Start: 43 @31164 has 13 MA's), (73, 31032), (83, 30966),

Gene: Syleon_102 Start: 58815, Stop: 59036, Start Num: 51

Candidate Starts for Syleon_102:

(Start: 51 @58815 has 5 MA's), (67, 58905), (74, 58926), (83, 58989),

Gene: Syra333_4 Start: 832, Stop: 1071, Start Num: 45

Candidate Starts for Syra333_4:

(Start: 45 @832 has 7 MA's), (83, 1024),

Gene: TClif_4 Start: 786, Stop: 1025, Start Num: 45

Candidate Starts for TClif_4:

(Start: 45 @786 has 7 MA's), (82, 975), (83, 978),

Gene: TaidaOne_30 Start: 26275, Stop: 26514, Start Num: 44

Candidate Starts for TaidaOne_30:

(Start: 44 @26275 has 20 MA's), (78, 26434), (84, 26464),

Gene: Talia1610_189 Start: 124515, Stop: 124745, Start Num: 51

Candidate Starts for Talia1610_189:

(Start: 51 @124515 has 5 MA's), (84, 124692),

Gene: Teehee_55 Start: 42516, Stop: 42244, Start Num: 35

Candidate Starts for Teehee_55:

(Start: 34 @42519 has 2 MA's), (Start: 35 @42516 has 14 MA's), (62, 42393), (79, 42306), (84, 42282), (86, 42255),

Gene: Theia_44 Start: 35195, Stop: 34959, Start Num: 50

Candidate Starts for Theia_44:

(Start: 50 @35195 has 28 MA's),

Gene: TieDye_29 Start: 25319, Stop: 25558, Start Num: 44

Candidate Starts for TieDye_29:

(Start: 44 @25319 has 20 MA's), (78, 25478), (84, 25508),

Gene: Tiger_44 Start: 34384, Stop: 34148, Start Num: 50

Candidate Starts for Tiger_44:

(31, 34453), (Start: 50 @34384 has 28 MA's),

Gene: Tissue_56 Start: 42542, Stop: 42282, Start Num: 34

Candidate Starts for Tissue_56:

(Start: 34 @42542 has 2 MA's), (Start: 37 @42536 has 3 MA's), (Start: 38 @42527 has 1 MA's), (64, 42419), (71, 42395), (79, 42344), (84, 42320),

Gene: Toaka_48 Start: 32116, Stop: 31880, Start Num: 40

Candidate Starts for Toaka_48:

(26, 32218), (Start: 40 @32116 has 8 MA's), (64, 32017), (83, 31921),

Gene: TonyStarch_30 Start: 25633, Stop: 25872, Start Num: 44

Candidate Starts for TonyStarch_30:

(Start: 44 @25633 has 20 MA's), (78, 25792), (84, 25822),

Gene: UBSmoodge_25 Start: 13351, Stop: 13569, Start Num: 50

Candidate Starts for UBSmoodge_25:

(Start: 48 @13348 has 1 MA's), (Start: 50 @13351 has 28 MA's), (60, 13411), (79, 13504), (82, 13522), (84, 13528),

Gene: UnionJack_47 Start: 34507, Stop: 34271, Start Num: 50

Candidate Starts for UnionJack_47:

(31, 34576), (Start: 50 @34507 has 28 MA's),

Gene: VA6_49 Start: 32727, Stop: 32479, Start Num: 40

Candidate Starts for VA6_49:

(26, 32829), (27, 32817), (Start: 40 @32727 has 8 MA's), (61, 32637), (83, 32526),

Gene: Vanisoa_48 Start: 33142, Stop: 32909, Start Num: 40

Candidate Starts for Vanisoa_48:

(18, 33343), (27, 33232), (Start: 40 @33142 has 8 MA's), (64, 33043), (76, 33001), (83, 32947),

Gene: Viceroy_53 Start: 41416, Stop: 41144, Start Num: 35

Candidate Starts for Viceroy_53:

(Start: 34 @41419 has 2 MA's), (Start: 35 @41416 has 14 MA's), (62, 41293), (79, 41206), (84, 41182), (86, 41155),

Gene: Waits_51 Start: 30953, Stop: 30705, Start Num: 43

Candidate Starts for Waits_51:

(Start: 43 @30953 has 13 MA's), (73, 30821), (83, 30755),

Gene: Wayne3_56 Start: 42279, Stop: 42007, Start Num: 35

Candidate Starts for Wayne3_56:

(Start: 34 @42282 has 2 MA's), (Start: 35 @42279 has 14 MA's), (62, 42156), (79, 42069), (84, 42045), (86, 42018),

Gene: Wheelie_54 Start: 41600, Stop: 41328, Start Num: 35

Candidate Starts for Wheelie_54:

(Start: 34 @41603 has 2 MA's), (Start: 35 @41600 has 14 MA's), (62, 41477), (79, 41390), (84, 41366), (86, 41339),

Gene: Whitty_1 Start: 89, Stop: 325, Start Num: 41

Candidate Starts for Whitty_1:

(28, 8), (32, 47), (Start: 41 @89 has 6 MA's), (Start: 43 @92 has 13 MA's), (64, 191), (65, 197), (67, 203), (83, 287),

Gene: Ximenita_5 Start: 995, Stop: 1234, Start Num: 45

Candidate Starts for Ximenita_5:

(Start: 45 @995 has 7 MA's), (83, 1187),

Gene: Zagie_56 Start: 42135, Stop: 41863, Start Num: 36

Candidate Starts for Zagie_56:

(Start: 34 @42141 has 2 MA's), (Start: 36 @42135 has 7 MA's), (62, 42012), (79, 41925), (84, 41901), (86, 41874),

Gene: ZenTime222_1 Start: 89, Stop: 325, Start Num: 41

Candidate Starts for ZenTime222_1:

(28, 8), (32, 47), (Start: 41 @89 has 6 MA's), (Start: 43 @92 has 13 MA's), (64, 191), (65, 197), (67, 203), (83, 287),

Gene: Zhafia_57 Start: 42080, Stop: 41808, Start Num: 35

Candidate Starts for Zhafia_57:

(Start: 34 @42083 has 2 MA's), (Start: 35 @42080 has 14 MA's), (62, 41957), (79, 41870), (84, 41846), (86, 41819),