

Pham 193857



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 193857 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193857 has 116 members, 16 are drafts.

Phages represented in each track:

- Track 1 : Pharaoh_43
- Track 2 : Switzerland_51, Rosalind_50, Anon_46, Waits_51, MinecraftSteve_52, 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, MarysWell_45, PetterN_50, Jovo_45, Aragog_44, UnionJack_47, Conspiracy_45, AgentM_44, Cuco_45, PickleBack_45, Lev2_45, ForGetIt_45
- Track 8 : Dublin_45, Theia_44
- Track 9 : Jabiru_47, Chadwick_49, Scorpia_50
- Track 10 : Benedict_49
- Track 11 : Toaka_48
- Track 12 : Rahalelujah_48
- Track 13 : LoneWolf_49
- Track 14 : Vanisoa_48
- Track 15 : Darrell_50
- Track 16 : Sparky_92, Farewell_93
- Track 17 : Jaylociraptor_30, Hoshi_30, TaidaOne_30, Maya_30, Meibysrarus_30, Namu_30, FidgetOrca_30, Rima_30, Esketit_30, Spectropatronm_30, IceWarrior_30, TonyStarch_30, CherryBlossom_30, TieDye_29, Indigenous_30, OlympicHelado_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 : Beted_23, Lenoshki_23, Oogie_23
- Track 27 : Alok_23, Hanem_24, Gray_24, Kabocha_25, Twin_23, Pakusa_23, MintFritos_23
- Track 28 : Schomber_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 : Talia1610_187, Bloom_190, Racecar_187
- Track 41 : Phrampa_179, Mimi_192, Patbob_186
- Track 42 : Marshawn_5
- Track 43 : Shadow1_3, Krueger_4, Ximenita_5, Syra333_4, Sunflower1121_3
- Track 44 : TClif_4
- Track 45 : Bernal13_1, Nairb_1, ZenTime222_1, Ibrahim_1, RonRayGun_1, Whitty_1
- Track 46 : Jace_19
- Track 47 : JeanGrey_138
- Track 48 : 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 27, it was called in 40 of the 100 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AgentM_44, Aragog_44, Benedict_49, Bing_31, Chadwick_49, CherryBlossom_30, Chidiebere_24, Conspiracy_45, Cuco_45, Dublin_45, Esketit_30, FidgetOrca_30, ForGetIt_45, Hoshi_30, IceWarrior_30, Indigenous_30, Jabiru_47, Jaylociraptor_30, Jovo_45, Lev2_45, MarysWell_45, Maya_30, Meibysrarus_30, Midas2_45, Namu_30, NoodlelyBoi_26, OlympicHelado_30, PSonyx_28, PetterN_50, PickleBack_45, Quhwah_29, Rima_30, Scorpia_50, Spectropatronm_30, TaidaOne_30, Theia_44, TieDye_29, Tiger_44, TonyStarch_30, UnionJack_47,

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

- Alok_23, Beted_23, ChisanaKitsune_20, FlyingTortilla_23, Gray_24, Hanem_24, Kabocha_25, Lenoshki_23, MintFritos_23, Oogie_23, Pakusa_23, ScarletRaider_23, Schomber_23, Twin_23, UBSmoodge_25,

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

- 20ES_51, AN3_51, Alone3_74, Anon_46, Anthony_44, BRock_64, Bantam_75, Battleship_52, BengiVuitton_50, Bernal13_1, Bloom_190, CRB1_52, Daredevil_66, Darrell_50, DatBoi_73, Deloris_49, Farewell_93, First_0050, GiJojo_63, Ibrahim_1, JSwag_50, Jace_19, JeanGrey_138, Krueger_4, Kudefre_102, LadyBird_53, LoneWolf_49, LuckySocke_72, Marshawn_5, Mimi_192, MinecraftSteve_52, ModicumRichard_94, Mollymur_75, Nairb_1, Octobien14_100, Patbob_186, Pharaoh_43, Phrampa_179, Racecar_187, Rahalelujah_48, Remus_51, RonRayGun_1, Rosalind_50, Sephiroth_99, Shadow1_3, Sparky_92, SpeedDemon_770, Strosahl_51, Sunflower1121_3, Switzerland_51, Syleon_102, Syra333_4, TClif_4, Talia1610_187, Toaka_48, VA6_49, Vanisoa_48, Waits_51, Whitty_1, Ximenita_5, ZenTime222_1,

Summary by start number:

Start 19:

- Found in 1 of 116 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 100
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daredevil_66 (DL),

Start 20:

- Found in 2 of 116 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 100
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell_93 (AF), Sparky_92 (AF),

Start 21:

- Found in 12 of 116 (10.3%) of genes in pham
- Manual Annotations of this start: 9 of 100
- 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_50 (A9), Deloris_49 (A2), First_0050 (A2), LadyBird_53 (A2), Rahalelujah_48 (A9), Toaka_48 (A9), VA6_49 (A2), Vanisoa_48 (A9),

Start 22:

- Found in 6 of 116 (5.2%) of genes in pham
- Manual Annotations of this start: 6 of 100
- 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 23:

- Found in 1 of 116 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 100
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LoneWolf_49 (A9),

Start 24:

- Found in 19 of 116 (16.4%) of genes in pham
- Manual Annotations of this start: 13 of 100
- 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 25:

- Found in 10 of 116 (8.6%) of genes in pham
- Manual Annotations of this start: 8 of 100
- 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 26:

- Found in 1 of 116 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 100
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pharaoh_43 (A12),

Start 27:

- Found in 55 of 116 (47.4%) of genes in pham
- Manual Annotations of this start: 40 of 100
- Called 72.7% of time when present
- Phage (with cluster) where this start called: AgentM_44 (A5), Aragog_44 (A5), Benedict_49 (A5), Bing_31 (BI5), Chadwick_49 (A5), CherryBlossom_30 (BI1), Chidiebere_24 (DQ), Conspiracy_45 (A5), Cuco_45 (A5), Dublin_45 (A5), Esketit_30 (BI1), FidgetOrca_30 (BI1), ForGetIt_45 (A5), Hoshi_30 (BI1), IceWarrior_30 (BI1), Indigenous_30 (BI1), Jabiru_47 (A5), Jaylociraptor_30 (BI1), Jovo_45 (A5), Lev2_45 (A5), MarysWell_45 (A5), Maya_30 (BI1), Meibysrarus_30 (BI1), Midas2_45 (A5), Namu_30 (BI1), NoodlelyBoi_26 (EC), OlympicHelado_30 (BI1), PSonyx_28 (singleton), PetterN_50 (A5), PickleBack_45 (A5), Quhwah_29 (EC), Rima_30 (BI1), Scorpia_50 (A5), Spectropatronm_30 (BI1), TaidaOne_30 (BI1), Theia_44 (A5), TieDye_29 (BI1), Tiger_44 (A5), TonyStarch_30 (BI1), UnionJack_47 (A5),

Start 28:

- Found in 26 of 116 (22.4%) of genes in pham
- Manual Annotations of this start: 16 of 100
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Alok_i_23 (DQ), Alone3_74 (BS), BRock_64 (BS), Beted_23 (DQ), ChisanaKitsune_20 (DQ), FlyingTortilla_23 (DQ), GiJojo_63 (BS), Gray_24 (DQ), Hanem_24 (DQ), Kabocha_25 (DQ), Kudrefre_102 (DU1), Lenoshki_23 (DQ), LuckySocke_72 (BS), MintFritos_23 (DQ), ModicumRichard_94 (DZ), Octobien14_100 (DU1), Oogie_23 (DQ), Pakusa_23 (DQ), ScarletRaider_23 (DQ), Schomber_23 (DQ), Sephiroth_99 (DU1), Syleon_102 (DU1), Twin_23 (DQ), UBSmoodge_25 (DQ),

Start 29:

- Found in 6 of 116 (5.2%) of genes in pham
- Manual Annotations of this start: 2 of 100
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bloom_190 (FC), Mimi_192 (FC), Patbob_186 (FC), Phrampa_179 (FC), Racecar_187 (FC), Talia1610_187 (FC),

Start 30:

- Found in 6 of 116 (5.2%) of genes in pham
- Manual Annotations of this start: 1 of 100
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Jace_19 (singleton), JeanGrey_138 (singleton),

Summary by clusters:

There are 19 clusters represented in this pham: A15, A20, DL, BI5, AF, FC, A12, EC, singleton, T, A2, A5, K6, BS, A9, DU1, DZ, DQ, BI1,

Info for manual annotations of cluster A12:

- Start number 26 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A15:

- Start number 24 was manually annotated 9 times for cluster A15.

Info for manual annotations of cluster A2:

- Start number 21 was manually annotated 5 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 25 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A5:

- Start number 27 was manually annotated 19 times for cluster A5.

Info for manual annotations of cluster A9:

- Start number 21 was manually annotated 4 times for cluster A9.
- Start number 23 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AF:

- Start number 20 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster B11:

- Start number 27 was manually annotated 16 times for cluster B11.

Info for manual annotations of cluster B15:

- Start number 27 was manually annotated 1 time for cluster B15.

Info for manual annotations of cluster BS:

- Start number 28 was manually annotated 4 times for cluster BS.

Info for manual annotations of cluster DL:

- Start number 19 was manually annotated 1 time for cluster DL.
- Start number 24 was manually annotated 4 times for cluster DL.

Info for manual annotations of cluster DQ:

- Start number 27 was manually annotated 1 time for cluster DQ.
- Start number 28 was manually annotated 8 times for cluster DQ.

Info for manual annotations of cluster DU1:

- Start number 28 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster EC:

- Start number 27 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster FC:

- Start number 29 was manually annotated 2 times for cluster FC.

Info for manual annotations of cluster K6:

- Start number 25 was manually annotated 7 times for cluster K6.

Info for manual annotations of cluster T:

- Start number 22 was manually annotated 6 times for cluster T.

Gene Information:

Gene: 20ES_51 Start: 32882, Stop: 32634, Start Num: 21

Candidate Starts for 20ES_51:

(11, 32984), (12, 32972), (Start: 21 @32882 has 9 MA's), (37, 32792), (56, 32681),

Gene: AN3_51 Start: 33253, Stop: 33005, Start Num: 21

Candidate Starts for AN3_51:

(11, 33355), (12, 33343), (Start: 21 @33253 has 9 MA's), (37, 33163), (56, 33052),

Gene: AgentM_44 Start: 34563, Stop: 34327, Start Num: 27

Candidate Starts for AgentM_44:

(15, 34632), (Start: 27 @34563 has 40 MA's),

Gene: Alok_i_23 Start: 11841, Stop: 12056, Start Num: 28

Candidate Starts for Alok_i_23:

(17, 11784), (Start: 27 @11838 has 40 MA's), (Start: 28 @11841 has 16 MA's), (36, 11898), (43, 11931), (45, 11943), (46, 11946), (57, 12015),

Gene: Alone3_74 Start: 28535, Stop: 28747, Start Num: 28

Candidate Starts for Alone3_74:

(Start: 28 @28535 has 16 MA's), (43, 28625), (49, 28652), (53, 28694), (55, 28706), (56, 28709),

Gene: Anon_46 Start: 30067, Stop: 29819, Start Num: 24

Candidate Starts for Anon_46:

(Start: 24 @30067 has 13 MA's), (46, 29935), (56, 29869),

Gene: Anthony_44 Start: 30206, Stop: 29964, Start Num: 25

Candidate Starts for Anthony_44:

(Start: 25 @30206 has 8 MA's), (33, 30173), (40, 30113), (45, 30086), (56, 30017),

Gene: Aragog_44 Start: 34583, Stop: 34347, Start Num: 27

Candidate Starts for Aragog_44:

(15, 34652), (Start: 27 @34583 has 40 MA's),

Gene: BRock_64 Start: 24495, Stop: 24707, Start Num: 28

Candidate Starts for BRock_64:

(Start: 28 @24495 has 16 MA's), (43, 24585), (51, 24639), (55, 24666), (56, 24669),

Gene: Bantam_75 Start: 53471, Stop: 53229, Start Num: 24

Candidate Starts for Bantam_75:

(Start: 24 @53471 has 13 MA's), (Start: 30 @53450 has 1 MA's), (50, 53327), (56, 53276),

Gene: Battleship_52 Start: 31061, Stop: 30813, Start Num: 24

Candidate Starts for Battleship_52:

(Start: 24 @31061 has 13 MA's), (46, 30929), (56, 30863),

Gene: Benedict_49 Start: 34952, Stop: 34716, Start Num: 27

Candidate Starts for Benedict_49:

(Start: 27 @34952 has 40 MA's),

Gene: BengiVuitton_50 Start: 32835, Stop: 32587, Start Num: 21

Candidate Starts for BengiVuitton_50:

(11, 32937), (12, 32925), (Start: 21 @32835 has 9 MA's), (37, 32745), (40, 32730), (56, 32634),

Gene: Bernal13_1 Start: 89, Stop: 325, Start Num: 22

Candidate Starts for Bernal13_1:

(13, 8), (16, 47), (Start: 22 @89 has 6 MA's), (Start: 24 @92 has 13 MA's), (40, 191), (41, 197), (42, 203), (56, 287),

Gene: Beted_23 Start: 11467, Stop: 11682, Start Num: 28

Candidate Starts for Beted_23:

(Start: 27 @11464 has 40 MA's), (Start: 28 @11467 has 16 MA's), (36, 11524), (43, 11557), (46, 11572), (57, 11641),

Gene: Bing_31 Start: 25537, Stop: 25779, Start Num: 27

Candidate Starts for Bing_31:

(Start: 27 @25537 has 40 MA's), (57, 25729), (58, 25747),

Gene: Bloom_190 Start: 124505, Stop: 124735, Start Num: 29

Candidate Starts for Bloom_190:

(Start: 29 @124505 has 2 MA's), (57, 124682),

Gene: CRB1_52 Start: 33225, Stop: 32989, Start Num: 21

Candidate Starts for CRB1_52:

(11, 33327), (12, 33315), (Start: 21 @33225 has 9 MA's), (37, 33135), (56, 33024),

Gene: Chadwick_49 Start: 34763, Stop: 34527, Start Num: 27

Candidate Starts for Chadwick_49:

(15, 34832), (Start: 27 @34763 has 40 MA's), (47, 34640),

Gene: CherryBlossom_30 Start: 25644, Stop: 25883, Start Num: 27

Candidate Starts for CherryBlossom_30:

(Start: 27 @25644 has 40 MA's), (51, 25803), (57, 25833),

Gene: Chidiebere_24 Start: 11838, Stop: 12056, Start Num: 27

Candidate Starts for Chidiebere_24:

(17, 11784), (Start: 27 @11838 has 40 MA's), (Start: 28 @11841 has 16 MA's), (36, 11898), (43, 11931), (46, 11946), (54, 12000), (57, 12015),

Gene: ChisanaKitsune_20 Start: 10536, Stop: 10751, Start Num: 28

Candidate Starts for ChisanaKitsune_20:

(Start: 27 @10533 has 40 MA's), (Start: 28 @10536 has 16 MA's), (36, 10593), (43, 10626), (46, 10641), (54, 10695), (57, 10710),

Gene: Conspiracy_45 Start: 34805, Stop: 34569, Start Num: 27

Candidate Starts for Conspiracy_45:

(15, 34874), (Start: 27 @34805 has 40 MA's),

Gene: Cuco_45 Start: 34838, Stop: 34602, Start Num: 27

Candidate Starts for Cuco_45:

(15, 34907), (Start: 27 @34838 has 40 MA's),

Gene: Daredevil_66 Start: 49516, Stop: 49250, Start Num: 19
Candidate Starts for Daredevil_66:
(18, 49531), (Start: 19 @49516 has 1 MA's), (39, 49402), (46, 49369), (47, 49366), (56, 49303), (57, 49300),

Gene: Darrell_50 Start: 32937, Stop: 32701, Start Num: 21
Candidate Starts for Darrell_50:
(11, 33039), (Start: 21 @32937 has 9 MA's), (31, 32913), (56, 32745),

Gene: DatBoi_73 Start: 53464, Stop: 53222, Start Num: 24
Candidate Starts for DatBoi_73:
(Start: 24 @53464 has 13 MA's), (Start: 30 @53443 has 1 MA's), (56, 53269),

Gene: Deloris_49 Start: 32504, Stop: 32256, Start Num: 21
Candidate Starts for Deloris_49:
(11, 32606), (12, 32594), (Start: 21 @32504 has 9 MA's), (37, 32414), (40, 32399), (56, 32303),

Gene: Dublin_45 Start: 34974, Stop: 34738, Start Num: 27
Candidate Starts for Dublin_45:
(Start: 27 @34974 has 40 MA's),

Gene: Esketit_30 Start: 25627, Stop: 25866, Start Num: 27
Candidate Starts for Esketit_30:
(Start: 27 @25627 has 40 MA's), (51, 25786), (57, 25816),

Gene: Farewell_93 Start: 60714, Stop: 60971, Start Num: 20
Candidate Starts for Farewell_93:
(14, 60669), (Start: 20 @60714 has 2 MA's), (Start: 25 @60732 has 8 MA's), (55, 60921), (56, 60924),

Gene: FidgetOrca_30 Start: 25633, Stop: 25872, Start Num: 27
Candidate Starts for FidgetOrca_30:
(Start: 27 @25633 has 40 MA's), (51, 25792), (57, 25822),

Gene: First_0050 Start: 32758, Stop: 32510, Start Num: 21
Candidate Starts for First_0050:
(11, 32860), (12, 32848), (Start: 21 @32758 has 9 MA's), (37, 32668), (56, 32557),

Gene: FlyingTortilla_23 Start: 12855, Stop: 13073, Start Num: 28
Candidate Starts for FlyingTortilla_23:
(Start: 27 @12852 has 40 MA's), (Start: 28 @12855 has 16 MA's), (52, 13008), (55, 13026), (57, 13032),

Gene: ForGetIt_45 Start: 34830, Stop: 34594, Start Num: 27
Candidate Starts for ForGetIt_45:
(15, 34899), (Start: 27 @34830 has 40 MA's),

Gene: GiJojo_63 Start: 26714, Stop: 26926, Start Num: 28
Candidate Starts for GiJojo_63:
(Start: 28 @26714 has 16 MA's), (43, 26804), (51, 26858), (55, 26885), (56, 26888),

Gene: Gray_24 Start: 11841, Stop: 12056, Start Num: 28
Candidate Starts for Gray_24:

(17, 11784), (Start: 27 @11838 has 40 MA's), (Start: 28 @11841 has 16 MA's), (36, 11898), (43, 11931), (45, 11943), (46, 11946), (57, 12015),

Gene: Hanem_24 Start: 11841, Stop: 12056, Start Num: 28

Candidate Starts for Hanem_24:

(17, 11784), (Start: 27 @11838 has 40 MA's), (Start: 28 @11841 has 16 MA's), (36, 11898), (43, 11931), (45, 11943), (46, 11946), (57, 12015),

Gene: Hoshi_30 Start: 25627, Stop: 25866, Start Num: 27

Candidate Starts for Hoshi_30:

(Start: 27 @25627 has 40 MA's), (51, 25786), (57, 25816),

Gene: Ibrahim_1 Start: 89, Stop: 325, Start Num: 22

Candidate Starts for Ibrahim_1:

(13, 8), (16, 47), (Start: 22 @89 has 6 MA's), (Start: 24 @92 has 13 MA's), (40, 191), (41, 197), (42, 203), (56, 287),

Gene: IceWarrior_30 Start: 25627, Stop: 25866, Start Num: 27

Candidate Starts for IceWarrior_30:

(Start: 27 @25627 has 40 MA's), (51, 25786), (57, 25816),

Gene: Indigenous_30 Start: 25627, Stop: 25866, Start Num: 27

Candidate Starts for Indigenous_30:

(Start: 27 @25627 has 40 MA's), (51, 25786), (57, 25816),

Gene: JSwag_50 Start: 30801, Stop: 30553, Start Num: 24

Candidate Starts for JSwag_50:

(Start: 24 @30801 has 13 MA's), (46, 30669), (56, 30603),

Gene: Jabiru_47 Start: 34807, Stop: 34571, Start Num: 27

Candidate Starts for Jabiru_47:

(15, 34876), (Start: 27 @34807 has 40 MA's), (47, 34684),

Gene: Jace_19 Start: 17315, Stop: 17536, Start Num: 30

Candidate Starts for Jace_19:

(1, 16346), (2, 16361), (3, 16439), (4, 16571), (5, 16844), (6, 17003), (7, 17018), (Start: 30 @17315 has 1 MA's), (34, 17357), (40, 17390), (50, 17435), (56, 17486),

Gene: Jaylociraptor_30 Start: 25627, Stop: 25866, Start Num: 27

Candidate Starts for Jaylociraptor_30:

(Start: 27 @25627 has 40 MA's), (51, 25786), (57, 25816),

Gene: JeanGrey_138 Start: 105656, Stop: 105889, Start Num: 30

Candidate Starts for JeanGrey_138:

(Start: 30 @105656 has 1 MA's), (56, 105827),

Gene: Jovo_45 Start: 35086, Stop: 34850, Start Num: 27

Candidate Starts for Jovo_45:

(15, 35155), (Start: 27 @35086 has 40 MA's),

Gene: Kabocha_25 Start: 12654, Stop: 12869, Start Num: 28

Candidate Starts for Kabocha_25:

(17, 12597), (Start: 27 @12651 has 40 MA's), (Start: 28 @12654 has 16 MA's), (36, 12711), (43, 12744), (45, 12756), (46, 12759), (57, 12828),

Gene: Krueger_4 Start: 823, Stop: 1062, Start Num: 25

Candidate Starts for Krueger_4:

(Start: 25 @823 has 8 MA's), (56, 1015),

Gene: Kudrefre_102 Start: 58639, Stop: 58851, Start Num: 28

Candidate Starts for Kudrefre_102:

(Start: 28 @58639 has 16 MA's), (42, 58729), (47, 58750), (56, 58813), (59, 58843),

Gene: LadyBird_53 Start: 33193, Stop: 32945, Start Num: 21

Candidate Starts for LadyBird_53:

(11, 33295), (12, 33283), (Start: 21 @33193 has 9 MA's), (37, 33103), (56, 32992),

Gene: Lenoshki_23 Start: 11467, Stop: 11682, Start Num: 28

Candidate Starts for Lenoshki_23:

(Start: 27 @11464 has 40 MA's), (Start: 28 @11467 has 16 MA's), (36, 11524), (43, 11557), (46, 11572), (57, 11641),

Gene: Lev2_45 Start: 34718, Stop: 34482, Start Num: 27

Candidate Starts for Lev2_45:

(15, 34787), (Start: 27 @34718 has 40 MA's),

Gene: LoneWolf_49 Start: 32307, Stop: 32071, Start Num: 23

Candidate Starts for LoneWolf_49:

(10, 32427), (11, 32415), (Start: 23 @32307 has 1 MA's), (46, 32184), (56, 32118),

Gene: LuckySocke_72 Start: 27277, Stop: 27489, Start Num: 28

Candidate Starts for LuckySocke_72:

(Start: 28 @27277 has 16 MA's), (43, 27367), (49, 27394), (53, 27436), (55, 27448), (56, 27451),

Gene: Marshawn_5 Start: 936, Stop: 1178, Start Num: 25

Candidate Starts for Marshawn_5:

(Start: 25 @936 has 8 MA's), (37, 1017), (56, 1128),

Gene: MarysWell_45 Start: 35217, Stop: 34981, Start Num: 27

Candidate Starts for MarysWell_45:

(15, 35286), (Start: 27 @35217 has 40 MA's),

Gene: Maya_30 Start: 25641, Stop: 25880, Start Num: 27

Candidate Starts for Maya_30:

(Start: 27 @25641 has 40 MA's), (51, 25800), (57, 25830),

Gene: Meibysrarus_30 Start: 25627, Stop: 25866, Start Num: 27

Candidate Starts for Meibysrarus_30:

(Start: 27 @25627 has 40 MA's), (51, 25786), (57, 25816),

Gene: Midas2_45 Start: 34966, Stop: 34730, Start Num: 27

Candidate Starts for Midas2_45:

(15, 35035), (Start: 27 @34966 has 40 MA's),

Gene: Mimi_192 Start: 124218, Stop: 124448, Start Num: 29

Candidate Starts for Mimi_192:
(Start: 29 @124218 has 2 MA's), (57, 124395),

Gene: MinecraftSteve_52 Start: 31065, Stop: 30817, Start Num: 24
Candidate Starts for MinecraftSteve_52:
(Start: 24 @31065 has 13 MA's), (46, 30933), (56, 30867),

Gene: MintFritos_23 Start: 11841, Stop: 12056, Start Num: 28
Candidate Starts for MintFritos_23:
(17, 11784), (Start: 27 @11838 has 40 MA's), (Start: 28 @11841 has 16 MA's), (36, 11898), (43, 11931), (45, 11943), (46, 11946), (57, 12015),

Gene: ModicumRichard_94 Start: 55434, Stop: 55703, Start Num: 28
Candidate Starts for ModicumRichard_94:
(Start: 28 @55434 has 16 MA's), (48, 55554), (50, 55560), (56, 55611), (57, 55614), (63, 55659),

Gene: Mollymur_75 Start: 54003, Stop: 53758, Start Num: 24
Candidate Starts for Mollymur_75:
(Start: 24 @54003 has 13 MA's), (Start: 30 @53982 has 1 MA's), (56, 53808),

Gene: Nairb_1 Start: 89, Stop: 325, Start Num: 22
Candidate Starts for Nairb_1:
(13, 8), (16, 47), (Start: 22 @89 has 6 MA's), (Start: 24 @92 has 13 MA's), (40, 191), (41, 197), (42, 203), (56, 287),

Gene: Namo_30 Start: 25633, Stop: 25872, Start Num: 27
Candidate Starts for Namo_30:
(Start: 27 @25633 has 40 MA's), (51, 25792), (57, 25822),

Gene: NoodlelyBoi_26 Start: 13691, Stop: 13933, Start Num: 27
Candidate Starts for NoodlelyBoi_26:
(Start: 27 @13691 has 40 MA's), (38, 13772), (52, 13859), (57, 13883),

Gene: Octobien14_100 Start: 58045, Stop: 58257, Start Num: 28
Candidate Starts for Octobien14_100:
(Start: 28 @58045 has 16 MA's), (42, 58135), (47, 58156), (56, 58219), (60, 58252),

Gene: OlympicHelado_30 Start: 25633, Stop: 25872, Start Num: 27
Candidate Starts for OlympicHelado_30:
(Start: 27 @25633 has 40 MA's), (51, 25792), (57, 25822),

Gene: Oogie_23 Start: 11493, Stop: 11708, Start Num: 28
Candidate Starts for Oogie_23:
(Start: 27 @11490 has 40 MA's), (Start: 28 @11493 has 16 MA's), (36, 11550), (43, 11583), (46, 11598), (57, 11667),

Gene: PSonyx_28 Start: 27311, Stop: 27562, Start Num: 27
Candidate Starts for PSonyx_28:
(Start: 27 @27311 has 40 MA's), (Start: 28 @27314 has 16 MA's), (35, 27371), (46, 27431), (47, 27434), (49, 27443), (50, 27446), (54, 27485), (57, 27500), (61, 27536), (62, 27539),

Gene: Pakusa_23 Start: 11583, Stop: 11798, Start Num: 28
Candidate Starts for Pakusa_23:

(17, 11526), (Start: 27 @11580 has 40 MA's), (Start: 28 @11583 has 16 MA's), (36, 11640), (43, 11673), (45, 11685), (46, 11688), (57, 11757),

Gene: Patbob_186 Start: 125330, Stop: 125560, Start Num: 29
Candidate Starts for Patbob_186:
(Start: 29 @125330 has 2 MA's), (57, 125507),

Gene: PetterN_50 Start: 34931, Stop: 34695, Start Num: 27
Candidate Starts for PetterN_50:
(15, 35000), (Start: 27 @34931 has 40 MA's),

Gene: Pharaoh_43 Start: 32085, Stop: 31876, Start Num: 26
Candidate Starts for Pharaoh_43:
(11, 32193), (12, 32181), (Start: 26 @32085 has 1 MA's), (40, 32010), (47, 31977), (56, 31914),

Gene: Phrampa_179 Start: 126373, Stop: 126600, Start Num: 29
Candidate Starts for Phrampa_179:
(Start: 29 @126373 has 2 MA's), (57, 126550),

Gene: PickleBack_45 Start: 34710, Stop: 34474, Start Num: 27
Candidate Starts for PickleBack_45:
(15, 34779), (Start: 27 @34710 has 40 MA's),

Gene: Quhwah_29 Start: 14012, Stop: 14254, Start Num: 27
Candidate Starts for Quhwah_29:
(8, 13787), (Start: 27 @14012 has 40 MA's), (50, 14150), (52, 14180), (57, 14204),

Gene: Racecar_187 Start: 125098, Stop: 125328, Start Num: 29
Candidate Starts for Racecar_187:
(Start: 29 @125098 has 2 MA's), (57, 125275),

Gene: Rahalelujah_48 Start: 31854, Stop: 31618, Start Num: 21
Candidate Starts for Rahalelujah_48:
(9, 32055), (11, 31956), (Start: 21 @31854 has 9 MA's), (31, 31830), (56, 31662),

Gene: Remus_51 Start: 30778, Stop: 30533, Start Num: 24
Candidate Starts for Remus_51:
(Start: 24 @30778 has 13 MA's), (32, 30751), (44, 30661), (56, 30583),

Gene: Rima_30 Start: 25633, Stop: 25872, Start Num: 27
Candidate Starts for Rima_30:
(Start: 27 @25633 has 40 MA's), (51, 25792), (57, 25822),

Gene: RonRayGun_1 Start: 89, Stop: 325, Start Num: 22
Candidate Starts for RonRayGun_1:
(13, 8), (16, 47), (Start: 22 @89 has 6 MA's), (Start: 24 @92 has 13 MA's), (40, 191), (41, 197), (42, 203), (56, 287),

Gene: Rosalind_50 Start: 30984, Stop: 30736, Start Num: 24
Candidate Starts for Rosalind_50:
(Start: 24 @30984 has 13 MA's), (46, 30852), (56, 30786),

Gene: ScarletRaider_23 Start: 12882, Stop: 13100, Start Num: 28

Candidate Starts for ScarletRaider_23:

(Start: 27 @12879 has 40 MA's), (Start: 28 @12882 has 16 MA's), (52, 13035), (55, 13053), (57, 13059),

Gene: Schomber_23 Start: 11591, Stop: 11806, Start Num: 28

Candidate Starts for Schomber_23:

(17, 11534), (Start: 27 @11588 has 40 MA's), (Start: 28 @11591 has 16 MA's), (36, 11648), (43, 11681), (46, 11696), (54, 11750), (57, 11765),

Gene: Scorpia_50 Start: 35017, Stop: 34781, Start Num: 27

Candidate Starts for Scorpia_50:

(15, 35086), (Start: 27 @35017 has 40 MA's), (47, 34894),

Gene: Sephiroth_99 Start: 58611, Stop: 58823, Start Num: 28

Candidate Starts for Sephiroth_99:

(Start: 28 @58611 has 16 MA's), (42, 58701), (43, 58704), (47, 58722), (56, 58785),

Gene: Shadow1_3 Start: 728, Stop: 967, Start Num: 25

Candidate Starts for Shadow1_3:

(Start: 25 @728 has 8 MA's), (56, 920),

Gene: Sparky_92 Start: 62308, Stop: 62565, Start Num: 20

Candidate Starts for Sparky_92:

(14, 62263), (Start: 20 @62308 has 2 MA's), (Start: 25 @62326 has 8 MA's), (55, 62515), (56, 62518),

Gene: Spectropatronm_30 Start: 25627, Stop: 25866, Start Num: 27

Candidate Starts for Spectropatronm_30:

(Start: 27 @25627 has 40 MA's), (51, 25786), (57, 25816),

Gene: SpeedDemon_770 Start: 55702, Stop: 55460, Start Num: 24

Candidate Starts for SpeedDemon_770:

(Start: 24 @55702 has 13 MA's), (Start: 30 @55681 has 1 MA's), (50, 55558), (56, 55507),

Gene: Strosahl_51 Start: 30778, Stop: 30533, Start Num: 24

Candidate Starts for Strosahl_51:

(Start: 24 @30778 has 13 MA's), (32, 30751), (44, 30661), (56, 30583),

Gene: Sunflower1121_3 Start: 727, Stop: 966, Start Num: 25

Candidate Starts for Sunflower1121_3:

(Start: 25 @727 has 8 MA's), (56, 919),

Gene: Switzerland_51 Start: 31164, Stop: 30916, Start Num: 24

Candidate Starts for Switzerland_51:

(Start: 24 @31164 has 13 MA's), (46, 31032), (56, 30966),

Gene: Syleon_102 Start: 58815, Stop: 59036, Start Num: 28

Candidate Starts for Syleon_102:

(Start: 28 @58815 has 16 MA's), (42, 58905), (47, 58926), (56, 58989),

Gene: Syra333_4 Start: 832, Stop: 1071, Start Num: 25

Candidate Starts for Syra333_4:

(Start: 25 @832 has 8 MA's), (56, 1024),

Gene: TClif_4 Start: 786, Stop: 1025, Start Num: 25
Candidate Starts for TClif_4:
(Start: 25 @786 has 8 MA's), (55, 975), (56, 978),

Gene: TaidaOne_30 Start: 26275, Stop: 26514, Start Num: 27
Candidate Starts for TaidaOne_30:
(Start: 27 @26275 has 40 MA's), (51, 26434), (57, 26464),

Gene: Talia1610_187 Start: 124515, Stop: 124745, Start Num: 29
Candidate Starts for Talia1610_187:
(Start: 29 @124515 has 2 MA's), (57, 124692),

Gene: Theia_44 Start: 35195, Stop: 34959, Start Num: 27
Candidate Starts for Theia_44:
(Start: 27 @35195 has 40 MA's),

Gene: TieDye_29 Start: 25319, Stop: 25558, Start Num: 27
Candidate Starts for TieDye_29:
(Start: 27 @25319 has 40 MA's), (51, 25478), (57, 25508),

Gene: Tiger_44 Start: 34384, Stop: 34148, Start Num: 27
Candidate Starts for Tiger_44:
(15, 34453), (Start: 27 @34384 has 40 MA's),

Gene: Toaka_48 Start: 32116, Stop: 31880, Start Num: 21
Candidate Starts for Toaka_48:
(11, 32218), (Start: 21 @32116 has 9 MA's), (40, 32017), (56, 31921),

Gene: TonyStarch_30 Start: 25633, Stop: 25872, Start Num: 27
Candidate Starts for TonyStarch_30:
(Start: 27 @25633 has 40 MA's), (51, 25792), (57, 25822),

Gene: Twin_23 Start: 11841, Stop: 12056, Start Num: 28
Candidate Starts for Twin_23:
(17, 11784), (Start: 27 @11838 has 40 MA's), (Start: 28 @11841 has 16 MA's), (36, 11898), (43, 11931), (45, 11943), (46, 11946), (57, 12015),

Gene: UBSmoodge_25 Start: 13351, Stop: 13569, Start Num: 28
Candidate Starts for UBSmoodge_25:
(Start: 27 @13348 has 40 MA's), (Start: 28 @13351 has 16 MA's), (36, 13411), (52, 13504), (55, 13522), (57, 13528),

Gene: UnionJack_47 Start: 34507, Stop: 34271, Start Num: 27
Candidate Starts for UnionJack_47:
(15, 34576), (Start: 27 @34507 has 40 MA's),

Gene: VA6_49 Start: 32727, Stop: 32479, Start Num: 21
Candidate Starts for VA6_49:
(11, 32829), (12, 32817), (Start: 21 @32727 has 9 MA's), (37, 32637), (56, 32526),

Gene: Vanisoa_48 Start: 33142, Stop: 32909, Start Num: 21
Candidate Starts for Vanisoa_48:
(9, 33343), (12, 33232), (Start: 21 @33142 has 9 MA's), (40, 33043), (49, 33001), (56, 32947),

Gene: Waits_51 Start: 30953, Stop: 30705, Start Num: 24
Candidate Starts for Waits_51:
(Start: 24 @30953 has 13 MA's), (46, 30821), (56, 30755),

Gene: Whitty_1 Start: 89, Stop: 325, Start Num: 22
Candidate Starts for Whitty_1:
(13, 8), (16, 47), (Start: 22 @89 has 6 MA's), (Start: 24 @92 has 13 MA's), (40, 191), (41, 197), (42, 203), (56, 287),

Gene: Ximenita_5 Start: 995, Stop: 1234, Start Num: 25
Candidate Starts for Ximenita_5:
(Start: 25 @995 has 8 MA's), (56, 1187),

Gene: ZenTime222_1 Start: 89, Stop: 325, Start Num: 22
Candidate Starts for ZenTime222_1:
(13, 8), (16, 47), (Start: 22 @89 has 6 MA's), (Start: 24 @92 has 13 MA's), (40, 191), (41, 197), (42, 203), (56, 287),