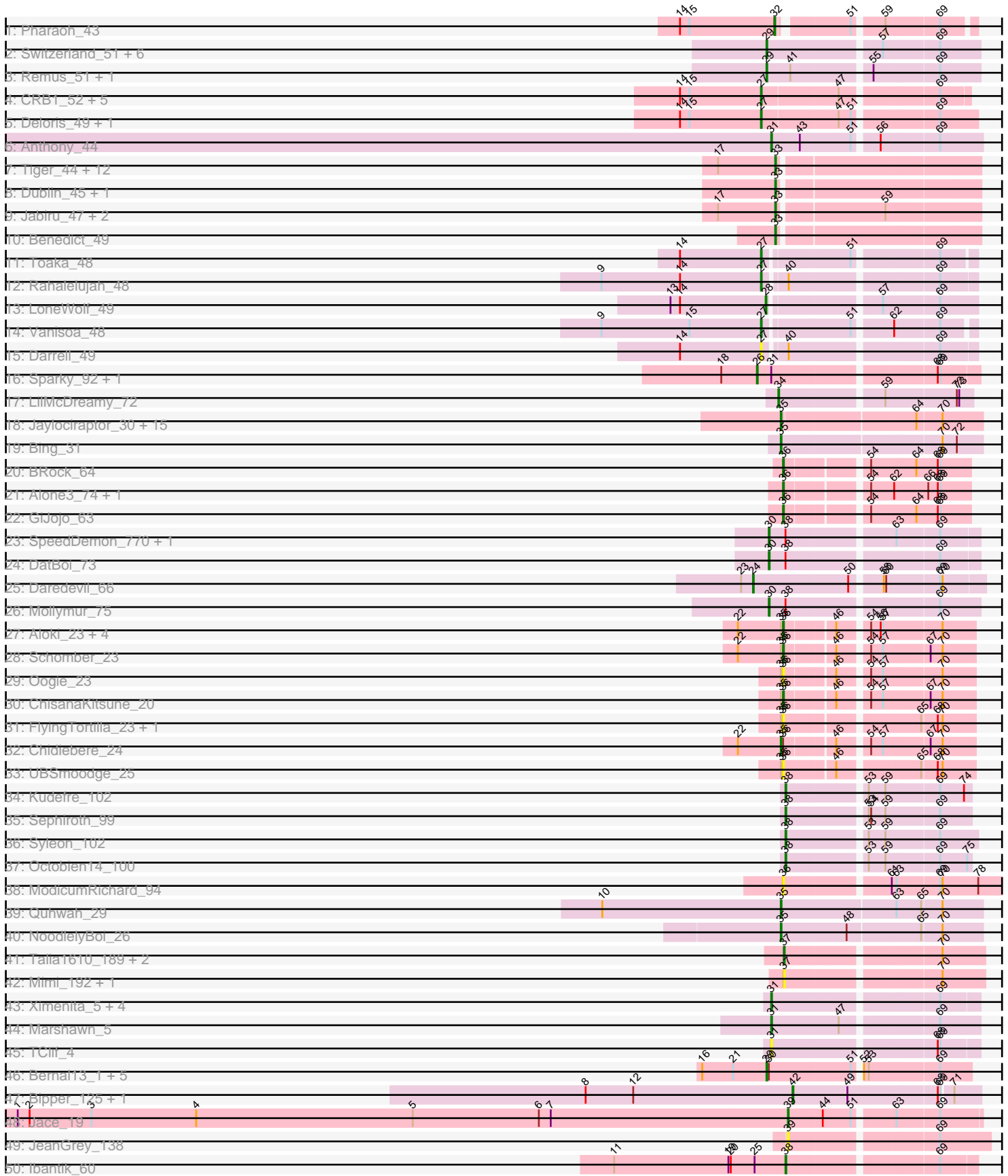
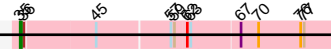


Pham 171316



51: PSONYX_28



A series of horizontal lines for writing, spanning the width of the page below the header and track.

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 171316 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171316 has 115 members, 17 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_49
- Track 16 : Sparky_92, Farewell_93
- Track 17 : LilMcDreamy_72
- Track 18 : Jaylociraptor_30, Hoshi_30, TaidaOne_30, Maya_30, Meibysrarus_30, Namu_30, Rima_30, Esketit_30, Spectropatronm_30, IceWarrior_30, FidgetOrca_30, TonyStarch_30, CherryBlossom_30, TieDye_29, Indigenous_30, OlympicHelado_30
- Track 19 : Bing_31
- Track 20 : BRock_64
- Track 21 : Alone3_74, LuckySocke_72
- Track 22 : GiJojo_63
- Track 23 : SpeedDemon_770, Bantam_75
- Track 24 : DatBoi_73
- Track 25 : Daredevil_66
- Track 26 : Mollymur_75
- Track 27 : Alok_23, Hanem_24, Gray_24, Kabocha_25, Pakusa_23
- Track 28 : Schomber_23
- Track 29 : Oogie_23
- Track 30 : ChisanaKitsune_20
- Track 31 : FlyingTortilla_23, ScarletRaider_23
- Track 32 : Chidiebere_24

- Track 33 : UBSmoodge_25
- Track 34 : Kudrefre_102
- Track 35 : Sephiroth_99
- Track 36 : Syleon_102
- Track 37 : Octobien14_100
- Track 38 : ModicumRichard_94
- Track 39 : Quhwah_29
- Track 40 : NoodlelyBoi_26
- Track 41 : Talia1610_189, Bloom_190, Racecar_187
- Track 42 : Mimi_192, Patbob_186
- Track 43 : Ximenita_5, Shadow1_3, Krueger_4, Syra333_4, Sunflower1121_3
- Track 44 : Marshawn_5
- Track 45 : TClif_4
- Track 46 : Bernal13_1, Nairb_1, ZenTime222_1, Ibrahim_1, RonRayGun_1, Whitty_1
- Track 47 : Bipper_125, Cracklewink_126
- Track 48 : Jace_19
- Track 49 : JeanGrey_138
- Track 50 : Ibantik_60
- Track 51 : 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 35, it was called in 21 of the 98 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bing_31, CherryBlossom_30, Chidiebere_24, Esketit_30, FidgetOrca_30, Hoshi_30, IceWarrior_30, Indigenous_30, Jaylociraptor_30, Maya_30, Meibysrurus_30, Namu_30, NoodlelyBoi_26, OlympicHelado_30, PSonyx_28, Quhwah_29, Rima_30, Spectropatronm_30, TaidaOne_30, TieDye_29, TonyStarch_30,

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

- Alok_23, ChisanaKitsune_20, FlyingTortilla_23, Gray_24, Hanem_24, Kabocha_25, Oogie_23, Pakusa_23, ScarletRaider_23, Schomber_23, UBSmoodge_25,

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

- 20ES_51, AN3_51, AgentM_44, Alone3_74, Anon_46, Anthony_44, Aragog_44, BRock_64, Bantam_75, Battleship_52, Benedict_49, BengiVuitton_50, Bernal13_1, Bipper_125, Bloom_190, CRB1_52, Chadwick_49, Conspiracy_45, Cracklewink_126, Cuco_45, Daredevil_66, Darrell_49, DatBoi_73, Deloris_49, Dublin_45, Farewell_93, First_0050, ForGetIt_45, GiJojo_63, Ibantik_60, Ibrahim_1, JSwag_50, Jabiru_47, Jace_19, JeanGrey_138, Jovo_45, Krueger_4, Kudrefre_102, LadyBird_53, Lev2_45, LilMcDreamy_72, LoneWolf_49, LuckySocke_72, Marshawn_5, MarysWell_45, Midas2_45, Mimi_192, MinecraftSteve_52, ModicumRichard_94, Mollymur_75, Nairb_1, Octobien14_100, Patbob_186, PetterN_50, Pharaoh_43, PickleBack_45, Racecar_187, Rahalelujah_48, Remus_51, RonRayGun_1, Rosalind_50, Scorpia_50, Sephiroth_99, Shadow1_3, Sparky_92, SpeedDemon_770, Strosahl_51, Sunflower1121_3, Switzerland_51, Syleon_102, Syra333_4, TClif_4, Talia1610_189, Theia_44, Tiger_44, Toaka_48, UnionJack_47, VA6_49, Vanisoa_48, Waits_51,

Whitty_1, Ximenita_5, ZenTime222_1,

Summary by start number:

Start 24:

- Found in 1 of 115 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daredevil_66 (DL),

Start 26:

- Found in 2 of 115 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell_93 (AF), Sparky_92 (AF),

Start 27:

- Found in 12 of 115 (10.4%) of genes in pham
- Manual Annotations of this start: 8 of 98
- 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 28:

- Found in 1 of 115 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LoneWolf_49 (A9),

Start 29:

- Found in 15 of 115 (13.0%) of genes in pham
- Manual Annotations of this start: 15 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anon_46 (A15), Battleship_52 (A15), Bernal13_1 (T), Ibrahim_1 (T), JSwag_50 (A15), MinecraftSteve_52 (A15), Nairb_1 (T), Remus_51 (A15), RonRayGun_1 (T), Rosalind_50 (A15), Strosahl_51 (A15), Switzerland_51 (A15), Waits_51 (A15), Whitty_1 (T), ZenTime222_1 (T),

Start 30:

- Found in 10 of 115 (8.7%) of genes in pham
- Manual Annotations of this start: 4 of 98
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Bantam_75 (DL), DatBoi_73 (DL), Mollymur_75 (DL), SpeedDemon_770 (DL),

Start 31:

- Found in 10 of 115 (8.7%) of genes in pham
- Manual Annotations of this start: 7 of 98
- 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 32:

- Found in 1 of 115 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pharaoh_43 (A12),

Start 33:

- Found in 19 of 115 (16.5%) of genes in pham
- Manual Annotations of this start: 19 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AgentM_44 (A5), Aragog_44 (A5), Benedict_49 (A5), Chadwick_49 (A5), Conspiracy_45 (A5), Cuco_45 (A5), Dublin_45 (A5), ForGetIt_45 (A5), Jabiru_47 (A5), Jovo_45 (A5), Lev2_45 (A5), MarysWell_45 (A5), Midas2_45 (A5), PetterN_50 (A5), PickleBack_45 (A5), Scorpia_50 (A5), Theia_44 (A5), Tiger_44 (A5), UnionJack_47 (A5),

Start 34:

- Found in 1 of 115 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilMcDreamy_72 (B12),

Start 35:

- Found in 32 of 115 (27.8%) of genes in pham
- Manual Annotations of this start: 21 of 98
- Called 65.6% of time when present
- Phage (with cluster) where this start called: Bing_31 (BI5), CherryBlossom_30 (BI1), Chidiebere_24 (DQ), Esketit_30 (BI1), FidgetOrca_30 (BI1), Hoshi_30 (BI1), IceWarrior_30 (BI1), Indigenous_30 (BI1), Jaylociraptor_30 (BI1), Maya_30 (BI1), Meibysrarus_30 (BI1), Namu_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 36:

- Found in 18 of 115 (15.7%) of genes in pham
- Manual Annotations of this start: 9 of 98
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Alok_23 (DQ), Alone3_74 (BS), BRock_64 (BS), ChisanaKitsune_20 (DQ), FlyingTortilla_23 (DQ), GiJojo_63 (BS), Gray_24 (DQ), Hanem_24 (DQ), Kabocha_25 (DQ), LuckySocke_72 (BS), ModicumRichard_94 (DZ), Oogie_23 (DQ), Pakusa_23 (DQ), ScarletRaider_23 (DQ), Schomber_23 (DQ), UBSmoodge_25 (DQ),

Start 37:

- Found in 5 of 115 (4.3%) of genes in pham
- Manual Annotations of this start: 1 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bloom_190 (FC), Mimi_192 (FC), Patbob_186 (FC), Racecar_187 (FC), Talia1610_189 (FC),

Start 38:

- Found in 9 of 115 (7.8%) of genes in pham
- Manual Annotations of this start: 5 of 98
- Called 55.6% of time when present
- Phage (with cluster) where this start called: Ibantik_60 (singleton), Kudrefre_102 (DU1), Octobien14_100 (DU1), Sephiroth_99 (DU1), Syleon_102 (DU1),

Start 39:

- Found in 2 of 115 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace_19 (singleton), JeanGrey_138 (singleton),

Start 42:

- Found in 2 of 115 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bipper_125 (Y), Cracklewink_126 (Y),

Summary by clusters:

There are 21 clusters represented in this pham: A15, A20, DL, BI5, AF, FC, A12, EC, singleton, T, Y, A2, A5, K6, B12, BS, A9, DU1, DZ, DQ, BI1,

Info for manual annotations of cluster A12:

- Start number 32 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A15:

- Start number 29 was manually annotated 9 times for cluster A15.

Info for manual annotations of cluster A2:

- Start number 27 was manually annotated 5 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 31 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A5:

- Start number 33 was manually annotated 19 times for cluster A5.

Info for manual annotations of cluster A9:

- Start number 27 was manually annotated 3 times for cluster A9.
- Start number 28 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AF:

- Start number 26 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster B12:

- Start number 34 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster BI1:

- Start number 35 was manually annotated 16 times for cluster BI1.

Info for manual annotations of cluster BI5:

- Start number 35 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BS:

- Start number 36 was manually annotated 4 times for cluster BS.

Info for manual annotations of cluster DL:

- Start number 24 was manually annotated 1 time for cluster DL.
- Start number 30 was manually annotated 4 times for cluster DL.

Info for manual annotations of cluster DQ:

- Start number 35 was manually annotated 1 time for cluster DQ.
- Start number 36 was manually annotated 5 times for cluster DQ.

Info for manual annotations of cluster DU1:

- Start number 38 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster EC:

- Start number 35 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster FC:

- Start number 37 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster K6:

- Start number 31 was manually annotated 6 times for cluster K6.

Info for manual annotations of cluster T:

- Start number 29 was manually annotated 6 times for cluster T.

Info for manual annotations of cluster Y:

- Start number 42 was manually annotated 2 times for cluster Y.

Gene Information:

Gene: 20ES_51 Start: 32882, Stop: 32634, Start Num: 27

Candidate Starts for 20ES_51:

(14, 32984), (15, 32972), (Start: 27 @32882 has 8 MA's), (47, 32792), (69, 32681),

Gene: AN3_51 Start: 33253, Stop: 33005, Start Num: 27

Candidate Starts for AN3_51:

(14, 33355), (15, 33343), (Start: 27 @33253 has 8 MA's), (47, 33163), (69, 33052),

Gene: AgentM_44 Start: 34563, Stop: 34327, Start Num: 33

Candidate Starts for AgentM_44:

(17, 34632), (Start: 33 @34563 has 19 MA's),

Gene: Alok_i_23 Start: 11841, Stop: 12056, Start Num: 36

Candidate Starts for Alok_i_23:

(22, 11784), (Start: 35 @11838 has 21 MA's), (Start: 36 @11841 has 9 MA's), (46, 11898), (54, 11931), (56, 11943), (57, 11946), (70, 12015),

Gene: Alone3_74 Start: 28535, Stop: 28747, Start Num: 36
Candidate Starts for Alone3_74:
(Start: 36 @28535 has 9 MA's), (54, 28625), (62, 28652), (66, 28694), (68, 28706), (69, 28709),

Gene: Anon_46 Start: 30067, Stop: 29819, Start Num: 29
Candidate Starts for Anon_46:
(Start: 29 @30067 has 15 MA's), (57, 29935), (69, 29869),

Gene: Anthony_44 Start: 30206, Stop: 29964, Start Num: 31
Candidate Starts for Anthony_44:
(Start: 31 @30206 has 7 MA's), (43, 30173), (51, 30113), (56, 30086), (69, 30017),

Gene: Aragog_44 Start: 34583, Stop: 34347, Start Num: 33
Candidate Starts for Aragog_44:
(17, 34652), (Start: 33 @34583 has 19 MA's),

Gene: BRock_64 Start: 24495, Stop: 24707, Start Num: 36
Candidate Starts for BRock_64:
(Start: 36 @24495 has 9 MA's), (54, 24585), (64, 24639), (68, 24666), (69, 24669),

Gene: Bantam_75 Start: 53471, Stop: 53229, Start Num: 30
Candidate Starts for Bantam_75:
(Start: 30 @53471 has 4 MA's), (Start: 38 @53450 has 5 MA's), (63, 53327), (69, 53276),

Gene: Battleship_52 Start: 31061, Stop: 30813, Start Num: 29
Candidate Starts for Battleship_52:
(Start: 29 @31061 has 15 MA's), (57, 30929), (69, 30863),

Gene: Benedict_49 Start: 34952, Stop: 34716, Start Num: 33
Candidate Starts for Benedict_49:
(Start: 33 @34952 has 19 MA's),

Gene: BengiVuitton_50 Start: 32835, Stop: 32587, Start Num: 27
Candidate Starts for BengiVuitton_50:
(14, 32937), (15, 32925), (Start: 27 @32835 has 8 MA's), (47, 32745), (51, 32730), (69, 32634),

Gene: Bernal13_1 Start: 89, Stop: 325, Start Num: 29
Candidate Starts for Bernal13_1:
(16, 8), (21, 47), (Start: 29 @89 has 15 MA's), (Start: 30 @92 has 4 MA's), (51, 191), (52, 197), (53, 203), (69, 287),

Gene: Bing_31 Start: 25537, Stop: 25779, Start Num: 35
Candidate Starts for Bing_31:
(Start: 35 @25537 has 21 MA's), (70, 25729), (72, 25747),

Gene: Bipper_125 Start: 73005, Stop: 73226, Start Num: 42
Candidate Starts for Bipper_125:
(8, 72744), (12, 72804), (Start: 42 @73005 has 2 MA's), (49, 73074), (68, 73182), (69, 73185), (71, 73197),

Gene: Bloom_190 Start: 124505, Stop: 124735, Start Num: 37
Candidate Starts for Bloom_190:
(Start: 37 @124505 has 1 MA's), (70, 124682),

Gene: CRB1_52 Start: 33225, Stop: 32989, Start Num: 27

Candidate Starts for CRB1_52:

(14, 33327), (15, 33315), (Start: 27 @33225 has 8 MA's), (47, 33135), (69, 33024),

Gene: Chadwick_49 Start: 34763, Stop: 34527, Start Num: 33

Candidate Starts for Chadwick_49:

(17, 34832), (Start: 33 @34763 has 19 MA's), (59, 34640),

Gene: CherryBlossom_30 Start: 25644, Stop: 25883, Start Num: 35

Candidate Starts for CherryBlossom_30:

(Start: 35 @25644 has 21 MA's), (64, 25803), (70, 25833),

Gene: Chidiebere_24 Start: 11838, Stop: 12056, Start Num: 35

Candidate Starts for Chidiebere_24:

(22, 11784), (Start: 35 @11838 has 21 MA's), (Start: 36 @11841 has 9 MA's), (46, 11898), (54, 11931), (57, 11946), (67, 12000), (70, 12015),

Gene: ChisanaKitsune_20 Start: 10536, Stop: 10751, Start Num: 36

Candidate Starts for ChisanaKitsune_20:

(Start: 35 @10533 has 21 MA's), (Start: 36 @10536 has 9 MA's), (46, 10593), (54, 10626), (57, 10641), (67, 10695), (70, 10710),

Gene: Conspiracy_45 Start: 34805, Stop: 34569, Start Num: 33

Candidate Starts for Conspiracy_45:

(17, 34874), (Start: 33 @34805 has 19 MA's),

Gene: Cracklewink_126 Start: 72157, Stop: 72378, Start Num: 42

Candidate Starts for Cracklewink_126:

(8, 71896), (12, 71956), (Start: 42 @72157 has 2 MA's), (49, 72226), (68, 72334), (69, 72337), (71, 72349),

Gene: Cuco_45 Start: 34838, Stop: 34602, Start Num: 33

Candidate Starts for Cuco_45:

(17, 34907), (Start: 33 @34838 has 19 MA's),

Gene: Daredevil_66 Start: 49516, Stop: 49250, Start Num: 24

Candidate Starts for Daredevil_66:

(23, 49531), (Start: 24 @49516 has 1 MA's), (50, 49402), (58, 49369), (60, 49366), (69, 49303), (70, 49300),

Gene: Darrell_49 Start: 32937, Stop: 32701, Start Num: 27

Candidate Starts for Darrell_49:

(14, 33039), (Start: 27 @32937 has 8 MA's), (40, 32913), (69, 32745),

Gene: DatBoi_73 Start: 53464, Stop: 53222, Start Num: 30

Candidate Starts for DatBoi_73:

(Start: 30 @53464 has 4 MA's), (Start: 38 @53443 has 5 MA's), (69, 53269),

Gene: Deloris_49 Start: 32504, Stop: 32256, Start Num: 27

Candidate Starts for Deloris_49:

(14, 32606), (15, 32594), (Start: 27 @32504 has 8 MA's), (47, 32414), (51, 32399), (69, 32303),

Gene: Dublin_45 Start: 34974, Stop: 34738, Start Num: 33

Candidate Starts for Dublin_45:

(Start: 33 @34974 has 19 MA's),

Gene: Esketit_30 Start: 25627, Stop: 25866, Start Num: 35

Candidate Starts for Esketit_30:

(Start: 35 @25627 has 21 MA's), (64, 25786), (70, 25816),

Gene: Farewell_93 Start: 60714, Stop: 60971, Start Num: 26

Candidate Starts for Farewell_93:

(18, 60669), (Start: 26 @60714 has 2 MA's), (Start: 31 @60732 has 7 MA's), (68, 60921), (69, 60924),

Gene: FidgetOrca_30 Start: 25633, Stop: 25872, Start Num: 35

Candidate Starts for FidgetOrca_30:

(Start: 35 @25633 has 21 MA's), (64, 25792), (70, 25822),

Gene: First_0050 Start: 32758, Stop: 32510, Start Num: 27

Candidate Starts for First_0050:

(14, 32860), (15, 32848), (Start: 27 @32758 has 8 MA's), (47, 32668), (69, 32557),

Gene: FlyingTortilla_23 Start: 12855, Stop: 13073, Start Num: 36

Candidate Starts for FlyingTortilla_23:

(Start: 35 @12852 has 21 MA's), (Start: 36 @12855 has 9 MA's), (65, 13008), (68, 13026), (70, 13032),

Gene: ForGetIt_45 Start: 34830, Stop: 34594, Start Num: 33

Candidate Starts for ForGetIt_45:

(17, 34899), (Start: 33 @34830 has 19 MA's),

Gene: GiJojo_63 Start: 26714, Stop: 26926, Start Num: 36

Candidate Starts for GiJojo_63:

(Start: 36 @26714 has 9 MA's), (54, 26804), (64, 26858), (68, 26885), (69, 26888),

Gene: Gray_24 Start: 11841, Stop: 12056, Start Num: 36

Candidate Starts for Gray_24:

(22, 11784), (Start: 35 @11838 has 21 MA's), (Start: 36 @11841 has 9 MA's), (46, 11898), (54, 11931), (56, 11943), (57, 11946), (70, 12015),

Gene: Hanem_24 Start: 11841, Stop: 12056, Start Num: 36

Candidate Starts for Hanem_24:

(22, 11784), (Start: 35 @11838 has 21 MA's), (Start: 36 @11841 has 9 MA's), (46, 11898), (54, 11931), (56, 11943), (57, 11946), (70, 12015),

Gene: Hoshi_30 Start: 25627, Stop: 25866, Start Num: 35

Candidate Starts for Hoshi_30:

(Start: 35 @25627 has 21 MA's), (64, 25786), (70, 25816),

Gene: Ibantik_60 Start: 25970, Stop: 26188, Start Num: 38

Candidate Starts for Ibantik_60:

(11, 25754), (19, 25898), (20, 25901), (25, 25931), (Start: 38 @25970 has 5 MA's), (69, 26144),

Gene: Ibrahim_1 Start: 89, Stop: 325, Start Num: 29

Candidate Starts for Ibrahim_1:

(16, 8), (21, 47), (Start: 29 @89 has 15 MA's), (Start: 30 @92 has 4 MA's), (51, 191), (52, 197), (53, 203), (69, 287),

Gene: IceWarrior_30 Start: 25627, Stop: 25866, Start Num: 35
Candidate Starts for IceWarrior_30:
(Start: 35 @25627 has 21 MA's), (64, 25786), (70, 25816),

Gene: Indigenous_30 Start: 25627, Stop: 25866, Start Num: 35
Candidate Starts for Indigenous_30:
(Start: 35 @25627 has 21 MA's), (64, 25786), (70, 25816),

Gene: JSwag_50 Start: 30801, Stop: 30553, Start Num: 29
Candidate Starts for JSwag_50:
(Start: 29 @30801 has 15 MA's), (57, 30669), (69, 30603),

Gene: Jabiru_47 Start: 34807, Stop: 34571, Start Num: 33
Candidate Starts for Jabiru_47:
(17, 34876), (Start: 33 @34807 has 19 MA's), (59, 34684),

Gene: Jace_19 Start: 17315, Stop: 17536, Start Num: 39
Candidate Starts for Jace_19:
(1, 16346), (2, 16361), (3, 16439), (4, 16571), (5, 16844), (6, 17003), (7, 17018), (Start: 39 @17315 has 1 MA's), (44, 17357), (51, 17390), (63, 17435), (69, 17486),

Gene: Jaylociraptor_30 Start: 25627, Stop: 25866, Start Num: 35
Candidate Starts for Jaylociraptor_30:
(Start: 35 @25627 has 21 MA's), (64, 25786), (70, 25816),

Gene: JeanGrey_138 Start: 105656, Stop: 105889, Start Num: 39
Candidate Starts for JeanGrey_138:
(Start: 39 @105656 has 1 MA's), (69, 105827),

Gene: Jovo_45 Start: 35086, Stop: 34850, Start Num: 33
Candidate Starts for Jovo_45:
(17, 35155), (Start: 33 @35086 has 19 MA's),

Gene: Kabocha_25 Start: 12654, Stop: 12869, Start Num: 36
Candidate Starts for Kabocha_25:
(22, 12597), (Start: 35 @12651 has 21 MA's), (Start: 36 @12654 has 9 MA's), (46, 12711), (54, 12744), (56, 12756), (57, 12759), (70, 12828),

Gene: Krueger_4 Start: 823, Stop: 1062, Start Num: 31
Candidate Starts for Krueger_4:
(Start: 31 @823 has 7 MA's), (69, 1015),

Gene: Kudrefre_102 Start: 58639, Stop: 58851, Start Num: 38
Candidate Starts for Kudrefre_102:
(Start: 38 @58639 has 5 MA's), (53, 58729), (59, 58750), (69, 58813), (74, 58843),

Gene: LadyBird_53 Start: 33193, Stop: 32945, Start Num: 27
Candidate Starts for LadyBird_53:
(14, 33295), (15, 33283), (Start: 27 @33193 has 8 MA's), (47, 33103), (69, 32992),

Gene: Lev2_45 Start: 34718, Stop: 34482, Start Num: 33

Candidate Starts for Lev2_45:

(17, 34787), (Start: 33 @34718 has 19 MA's),

Gene: LilMcDreamy_72 Start: 60756, Stop: 60983, Start Num: 34

Candidate Starts for LilMcDreamy_72:

(Start: 34 @60756 has 1 MA's), (59, 60876), (72, 60963), (73, 60966),

Gene: LoneWolf_49 Start: 32307, Stop: 32071, Start Num: 28

Candidate Starts for LoneWolf_49:

(13, 32427), (14, 32415), (Start: 28 @32307 has 1 MA's), (57, 32184), (69, 32118),

Gene: LuckySocke_72 Start: 27277, Stop: 27489, Start Num: 36

Candidate Starts for LuckySocke_72:

(Start: 36 @27277 has 9 MA's), (54, 27367), (62, 27394), (66, 27436), (68, 27448), (69, 27451),

Gene: Marshawn_5 Start: 936, Stop: 1178, Start Num: 31

Candidate Starts for Marshawn_5:

(Start: 31 @936 has 7 MA's), (47, 1017), (69, 1128),

Gene: MarysWell_45 Start: 35217, Stop: 34981, Start Num: 33

Candidate Starts for MarysWell_45:

(17, 35286), (Start: 33 @35217 has 19 MA's),

Gene: Maya_30 Start: 25641, Stop: 25880, Start Num: 35

Candidate Starts for Maya_30:

(Start: 35 @25641 has 21 MA's), (64, 25800), (70, 25830),

Gene: Meibysrarus_30 Start: 25627, Stop: 25866, Start Num: 35

Candidate Starts for Meibysrarus_30:

(Start: 35 @25627 has 21 MA's), (64, 25786), (70, 25816),

Gene: Midas2_45 Start: 34966, Stop: 34730, Start Num: 33

Candidate Starts for Midas2_45:

(17, 35035), (Start: 33 @34966 has 19 MA's),

Gene: Mimi_192 Start: 124218, Stop: 124448, Start Num: 37

Candidate Starts for Mimi_192:

(Start: 37 @124218 has 1 MA's), (70, 124395),

Gene: MinecraftSteve_52 Start: 31065, Stop: 30817, Start Num: 29

Candidate Starts for MinecraftSteve_52:

(Start: 29 @31065 has 15 MA's), (57, 30933), (69, 30867),

Gene: ModicumRichard_94 Start: 55434, Stop: 55703, Start Num: 36

Candidate Starts for ModicumRichard_94:

(Start: 36 @55434 has 9 MA's), (61, 55554), (63, 55560), (69, 55611), (70, 55614), (78, 55659),

Gene: Mollymur_75 Start: 54003, Stop: 53758, Start Num: 30

Candidate Starts for Mollymur_75:

(Start: 30 @54003 has 4 MA's), (Start: 38 @53982 has 5 MA's), (69, 53808),

Gene: Nairb_1 Start: 89, Stop: 325, Start Num: 29

Candidate Starts for Nairb_1:

(16, 8), (21, 47), (Start: 29 @89 has 15 MA's), (Start: 30 @92 has 4 MA's), (51, 191), (52, 197), (53, 203), (69, 287),

Gene: Namo_30 Start: 25633, Stop: 25872, Start Num: 35

Candidate Starts for Namo_30:

(Start: 35 @25633 has 21 MA's), (64, 25792), (70, 25822),

Gene: NoodlelyBoi_26 Start: 13691, Stop: 13933, Start Num: 35

Candidate Starts for NoodlelyBoi_26:

(Start: 35 @13691 has 21 MA's), (48, 13772), (65, 13859), (70, 13883),

Gene: Octobien14_100 Start: 58045, Stop: 58257, Start Num: 38

Candidate Starts for Octobien14_100:

(Start: 38 @58045 has 5 MA's), (53, 58135), (59, 58156), (69, 58219), (75, 58252),

Gene: OlympicHelado_30 Start: 25633, Stop: 25872, Start Num: 35

Candidate Starts for OlympicHelado_30:

(Start: 35 @25633 has 21 MA's), (64, 25792), (70, 25822),

Gene: Oogie_23 Start: 11493, Stop: 11708, Start Num: 36

Candidate Starts for Oogie_23:

(Start: 35 @11490 has 21 MA's), (Start: 36 @11493 has 9 MA's), (46, 11550), (54, 11583), (57, 11598), (70, 11667),

Gene: PSonyx_28 Start: 27311, Stop: 27562, Start Num: 35

Candidate Starts for PSonyx_28:

(Start: 35 @27311 has 21 MA's), (Start: 36 @27314 has 9 MA's), (45, 27371), (57, 27431), (59, 27434), (62, 27443), (63, 27446), (67, 27485), (70, 27500), (76, 27536), (77, 27539),

Gene: Pakusa_23 Start: 11583, Stop: 11798, Start Num: 36

Candidate Starts for Pakusa_23:

(22, 11526), (Start: 35 @11580 has 21 MA's), (Start: 36 @11583 has 9 MA's), (46, 11640), (54, 11673), (56, 11685), (57, 11688), (70, 11757),

Gene: Patbob_186 Start: 125330, Stop: 125560, Start Num: 37

Candidate Starts for Patbob_186:

(Start: 37 @125330 has 1 MA's), (70, 125507),

Gene: PetterN_50 Start: 34931, Stop: 34695, Start Num: 33

Candidate Starts for PetterN_50:

(17, 35000), (Start: 33 @34931 has 19 MA's),

Gene: Pharaoh_43 Start: 32085, Stop: 31876, Start Num: 32

Candidate Starts for Pharaoh_43:

(14, 32193), (15, 32181), (Start: 32 @32085 has 1 MA's), (51, 32010), (59, 31977), (69, 31914),

Gene: PickleBack_45 Start: 34710, Stop: 34474, Start Num: 33

Candidate Starts for PickleBack_45:

(17, 34779), (Start: 33 @34710 has 19 MA's),

Gene: Quhwah_29 Start: 14012, Stop: 14254, Start Num: 35

Candidate Starts for Quhwah_29:

(10, 13787), (Start: 35 @14012 has 21 MA's), (63, 14150), (65, 14180), (70, 14204),

Gene: Racecar_187 Start: 125098, Stop: 125328, Start Num: 37

Candidate Starts for Racecar_187:

(Start: 37 @125098 has 1 MA's), (70, 125275),

Gene: Rahalelujah_48 Start: 31854, Stop: 31618, Start Num: 27

Candidate Starts for Rahalelujah_48:

(9, 32055), (14, 31956), (Start: 27 @31854 has 8 MA's), (40, 31830), (69, 31662),

Gene: Remus_51 Start: 30778, Stop: 30533, Start Num: 29

Candidate Starts for Remus_51:

(Start: 29 @30778 has 15 MA's), (41, 30751), (55, 30661), (69, 30583),

Gene: Rima_30 Start: 25633, Stop: 25872, Start Num: 35

Candidate Starts for Rima_30:

(Start: 35 @25633 has 21 MA's), (64, 25792), (70, 25822),

Gene: RonRayGun_1 Start: 89, Stop: 325, Start Num: 29

Candidate Starts for RonRayGun_1:

(16, 8), (21, 47), (Start: 29 @89 has 15 MA's), (Start: 30 @92 has 4 MA's), (51, 191), (52, 197), (53, 203), (69, 287),

Gene: Rosalind_50 Start: 30984, Stop: 30736, Start Num: 29

Candidate Starts for Rosalind_50:

(Start: 29 @30984 has 15 MA's), (57, 30852), (69, 30786),

Gene: ScarletRaider_23 Start: 12882, Stop: 13100, Start Num: 36

Candidate Starts for ScarletRaider_23:

(Start: 35 @12879 has 21 MA's), (Start: 36 @12882 has 9 MA's), (65, 13035), (68, 13053), (70, 13059),

Gene: Schomber_23 Start: 11591, Stop: 11806, Start Num: 36

Candidate Starts for Schomber_23:

(22, 11534), (Start: 35 @11588 has 21 MA's), (Start: 36 @11591 has 9 MA's), (46, 11648), (54, 11681), (57, 11696), (67, 11750), (70, 11765),

Gene: Scorpia_50 Start: 35017, Stop: 34781, Start Num: 33

Candidate Starts for Scorpia_50:

(17, 35086), (Start: 33 @35017 has 19 MA's), (59, 34894),

Gene: Sephiroth_99 Start: 58611, Stop: 58823, Start Num: 38

Candidate Starts for Sephiroth_99:

(Start: 38 @58611 has 5 MA's), (53, 58701), (54, 58704), (59, 58722), (69, 58785),

Gene: Shadow1_3 Start: 728, Stop: 967, Start Num: 31

Candidate Starts for Shadow1_3:

(Start: 31 @728 has 7 MA's), (69, 920),

Gene: Sparky_92 Start: 62308, Stop: 62565, Start Num: 26

Candidate Starts for Sparky_92:

(18, 62263), (Start: 26 @62308 has 2 MA's), (Start: 31 @62326 has 7 MA's), (68, 62515), (69, 62518),

Gene: Spectropatronm_30 Start: 25627, Stop: 25866, Start Num: 35
Candidate Starts for Spectropatronm_30:
(Start: 35 @25627 has 21 MA's), (64, 25786), (70, 25816),

Gene: SpeedDemon_770 Start: 55702, Stop: 55460, Start Num: 30
Candidate Starts for SpeedDemon_770:
(Start: 30 @55702 has 4 MA's), (Start: 38 @55681 has 5 MA's), (63, 55558), (69, 55507),

Gene: Strosahl_51 Start: 30778, Stop: 30533, Start Num: 29
Candidate Starts for Strosahl_51:
(Start: 29 @30778 has 15 MA's), (41, 30751), (55, 30661), (69, 30583),

Gene: Sunflower1121_3 Start: 727, Stop: 966, Start Num: 31
Candidate Starts for Sunflower1121_3:
(Start: 31 @727 has 7 MA's), (69, 919),

Gene: Switzerland_51 Start: 31164, Stop: 30916, Start Num: 29
Candidate Starts for Switzerland_51:
(Start: 29 @31164 has 15 MA's), (57, 31032), (69, 30966),

Gene: Syleon_102 Start: 58815, Stop: 59036, Start Num: 38
Candidate Starts for Syleon_102:
(Start: 38 @58815 has 5 MA's), (53, 58905), (59, 58926), (69, 58989),

Gene: Syra333_4 Start: 832, Stop: 1071, Start Num: 31
Candidate Starts for Syra333_4:
(Start: 31 @832 has 7 MA's), (69, 1024),

Gene: TClif_4 Start: 786, Stop: 1025, Start Num: 31
Candidate Starts for TClif_4:
(Start: 31 @786 has 7 MA's), (68, 975), (69, 978),

Gene: TaidaOne_30 Start: 26275, Stop: 26514, Start Num: 35
Candidate Starts for TaidaOne_30:
(Start: 35 @26275 has 21 MA's), (64, 26434), (70, 26464),

Gene: Talia1610_189 Start: 124515, Stop: 124745, Start Num: 37
Candidate Starts for Talia1610_189:
(Start: 37 @124515 has 1 MA's), (70, 124692),

Gene: Theia_44 Start: 35195, Stop: 34959, Start Num: 33
Candidate Starts for Theia_44:
(Start: 33 @35195 has 19 MA's),

Gene: TieDye_29 Start: 25319, Stop: 25558, Start Num: 35
Candidate Starts for TieDye_29:
(Start: 35 @25319 has 21 MA's), (64, 25478), (70, 25508),

Gene: Tiger_44 Start: 34384, Stop: 34148, Start Num: 33
Candidate Starts for Tiger_44:
(17, 34453), (Start: 33 @34384 has 19 MA's),

Gene: Toaka_48 Start: 32116, Stop: 31880, Start Num: 27

Candidate Starts for Toaka_48:

(14, 32218), (Start: 27 @32116 has 8 MA's), (51, 32017), (69, 31921),

Gene: TonyStarch_30 Start: 25633, Stop: 25872, Start Num: 35

Candidate Starts for TonyStarch_30:

(Start: 35 @25633 has 21 MA's), (64, 25792), (70, 25822),

Gene: UBSmoodge_25 Start: 13351, Stop: 13569, Start Num: 36

Candidate Starts for UBSmoodge_25:

(Start: 35 @13348 has 21 MA's), (Start: 36 @13351 has 9 MA's), (46, 13411), (65, 13504), (68, 13522), (70, 13528),

Gene: UnionJack_47 Start: 34507, Stop: 34271, Start Num: 33

Candidate Starts for UnionJack_47:

(17, 34576), (Start: 33 @34507 has 19 MA's),

Gene: VA6_49 Start: 32727, Stop: 32479, Start Num: 27

Candidate Starts for VA6_49:

(14, 32829), (15, 32817), (Start: 27 @32727 has 8 MA's), (47, 32637), (69, 32526),

Gene: Vanisoa_48 Start: 33142, Stop: 32909, Start Num: 27

Candidate Starts for Vanisoa_48:

(9, 33343), (15, 33232), (Start: 27 @33142 has 8 MA's), (51, 33043), (62, 33001), (69, 32947),

Gene: Waits_51 Start: 30953, Stop: 30705, Start Num: 29

Candidate Starts for Waits_51:

(Start: 29 @30953 has 15 MA's), (57, 30821), (69, 30755),

Gene: Whitty_1 Start: 89, Stop: 325, Start Num: 29

Candidate Starts for Whitty_1:

(16, 8), (21, 47), (Start: 29 @89 has 15 MA's), (Start: 30 @92 has 4 MA's), (51, 191), (52, 197), (53, 203), (69, 287),

Gene: Ximenita_5 Start: 995, Stop: 1234, Start Num: 31

Candidate Starts for Ximenita_5:

(Start: 31 @995 has 7 MA's), (69, 1187),

Gene: ZenTime222_1 Start: 89, Stop: 325, Start Num: 29

Candidate Starts for ZenTime222_1:

(16, 8), (21, 47), (Start: 29 @89 has 15 MA's), (Start: 30 @92 has 4 MA's), (51, 191), (52, 197), (53, 203), (69, 287),