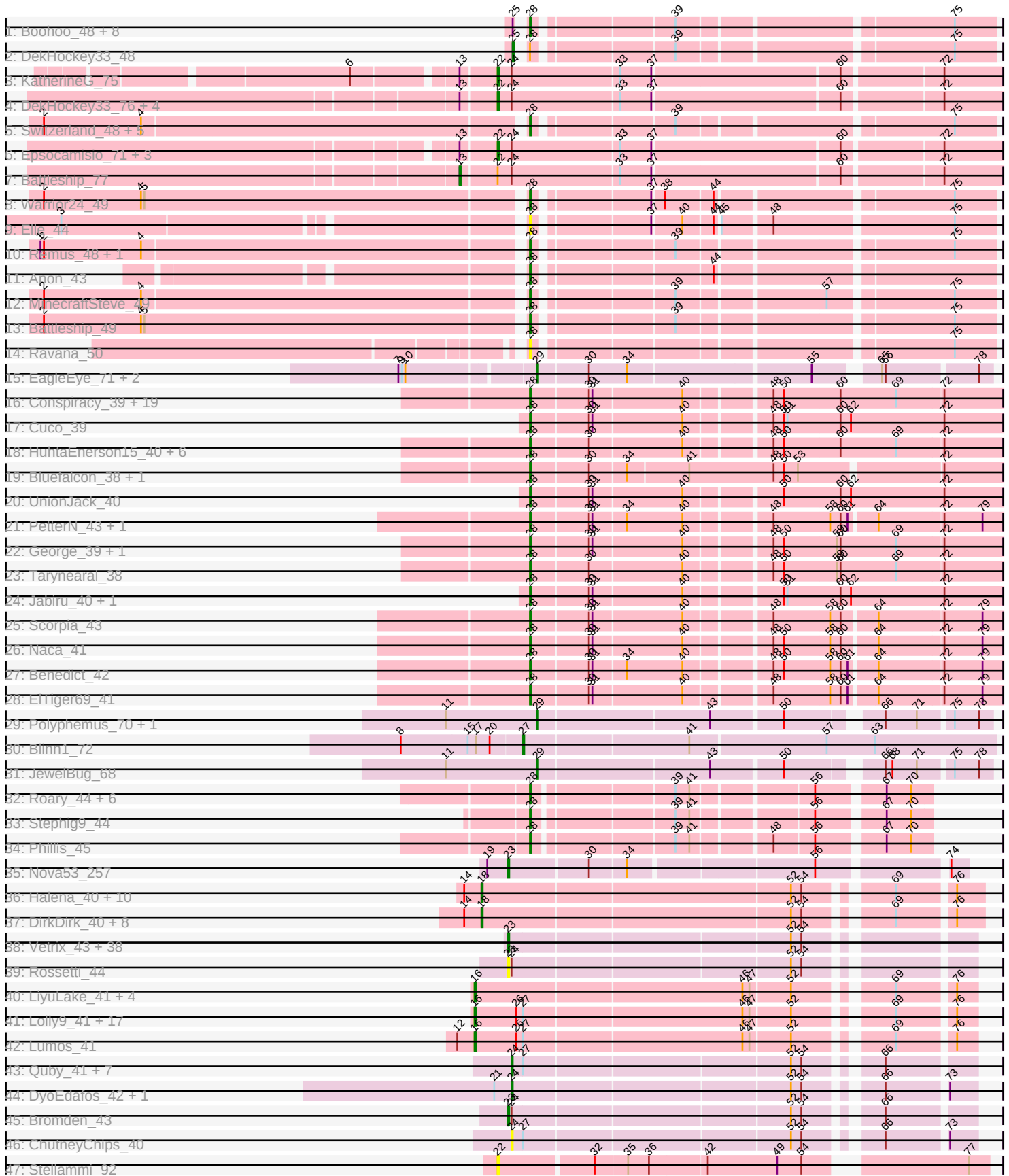




Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 280113 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280113 has 191 members, 33 are drafts.

Phages represented in each track:

- Track 1 : Boohoo_48, Anaysia_48, LastResort_47, Soups_48, ShayRa_49, Nebulosus_47, KatherineG_49, Looper_48, ReMo_47
- Track 2 : DekHockey33_48
- Track 3 : KatherineG_75
- Track 4 : DekHockey33_76, Rosalind_73, ShayRa_75, Soups_75, Switzerland_74
- Track 5 : Switzerland_48, Oofda_48, Epsocamisio_47, Waits_48, JSwag_47, Rosalind_47
- Track 6 : Epsocamisio_71, JSwag_74, Nebulosus_72, MinecraftSteve_75
- Track 7 : Battleship_77
- Track 8 : Warrior24_49
- Track 9 : Elle_44
- Track 10 : Remus_48, Strosahl_48
- Track 11 : Anon_43
- Track 12 : MinecraftSteve_49
- Track 13 : Battleship_49
- Track 14 : Ravana_50
- Track 15 : EagleEye_71, Lucyedi_70, PainterBoy_69
- Track 16 : Conspiracy_39, Jovo_39, Phlorence_38, Milcery_40, Discoknowium_38, Midas2_39, Lev2_39, Twigg_40, AgentM_38, Aragog_38, Dublin_38, Zolita_40, Coog_39, Tiger_38, Ghoulboy_41, PickleBack_39, Theia_37, ForGetIt_39, Archetta_39, SydNat_41
- Track 17 : Cuco_39
- Track 18 : HuhtaEnerson15_40, Florence4_39, LittleCherry_40, Florence1_38, Bonamassa_40, Swirley_42, Micasa_41
- Track 19 : Bluefalcon_38, MarysWell_38
- Track 20 : UnionJack_40
- Track 21 : PetterN_43, Chadwick_43
- Track 22 : George_39, Prinashel1_40
- Track 23 : Tarynearal_38
- Track 24 : Jabiru_40, Airmid_40
- Track 25 : Scorpia_43
- Track 26 : Naca_41
- Track 27 : Benedict_42
- Track 28 : ElTiger69_41
- Track 29 : Polyphemus_70, SuperAwesome_68
- Track 30 : Blinn1_72
- Track 31 : JewelBug_68

- Track 32 : Roary_44, Smeadley_44, Groundhog_42, Caitlin_42, Astro_43, Danforth_43, Expelliarmus_43
- Track 33 : Stephig9_44
- Track 34 : Phillis_45
- Track 35 : Nova53_257
- Track 36 : Halena_40, CicholasNage_41, Calm_41, Wyatt2_41, Rose5_40, Silverleaf_40, Zaria_41, AvadaKedavra_41, Acquire49_41, Tyson_40, MAckerman_41
- Track 37 : DirkDirk_40, Wamburggrxpress_41, JoeDirt_40, OhShagHennessy_40, Appletree2_40, LeBron_41, Poochiewood_40, Enceladus_40, UPIE_41
- Track 38 : Vetrix_43, GuuelaD_43, Sarshaun_43, Lewan_43, Kahlid_43, Hafay_43, Winky_43, Crossroads_43, Loadrie_43, FinemLucis_43, Breezona_43, Claus_43, Baoshan_41, BobsGarage_43, SoJulia_44, Bazzle_43, Nicholasp3_43, Gabriela_43, Itos_42, Lynnae_43, DHan_44, ZhongYanYuan_41, Gardann_43, Netyap_43, Wilder_43, MkaliMitinis3_43, Rumpelstiltskin_43, Archie_43, OverPar_44, Underpass_43, Soap141_43, BigCheese_43, Faith1_43, Wigglewiggle_43, Miley16_43, Zakai_43, LilDestine_43, DanBing_42, DrSeegs_43
- Track 39 : Rossetti_44
- Track 40 : LiyuLake_41, Krypton555_41, Whirlwind_42, Ellson_41, BourbonZero_40
- Track 41 : Lolly9_41, MsGreen_41, Jobypre_41, MiniLon_41, Clautastrophe_41, Kingsolomon_41, Bellis_41, Red305_41, Snenia_41, Finnry_41, Samty_41, TriFive_41, DuncansLeg_41, MiniMac_41, KirDoubleO7_39, Jubie_41, Nicholas_41, Moostard_41
- Track 42 : Lumos_41
- Track 43 : Quby_41, Douzhi_40, Chaser_40, PYPDinur_40, FarmResident_41, BrainDrainer_41, Sheng711_41, Douge_40
- Track 44 : DyoEdafos_42, Kropertea_40
- Track 45 : Bromden_43
- Track 46 : ChutneyChips_40
- Track 47 : Stellammi_92

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

The start number called the most often in the published annotations is 28, it was called in 67 of the 158 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AgentM_38, Airmid_40, Anaysia_48, Anon_43, Aragog_38, Archetta_39, Astro_43, Battleship_49, Benedict_42, Bluefalcon_38, Bonamassa_40, Boohoo_48, Caitlin_42, Chadwick_43, Conspiracy_39, Coog_39, Cuco_39, Danforth_43, Discoknowium_38, Dublin_38, ElTiger69_41, Elle_44, Epsocamisio_47, Expelliarmus_43, Florence1_38, Florence4_39, ForGetIt_39, George_39, Ghoulboy_41, Groundhog_42, HuhtaEnerson15_40, JSwag_47, Jabiru_40, Jovo_39, KatherineG_49, LastResort_47, Lev2_39, LittleCherry_40, Looper_48, MarysWell_38, Micasa_41, Midas2_39, Milcery_40, MinecraftSteve_49, Naca_41, Nebulosus_47, Oofda_48, PetterN_43, Phillis_45, Phlorence_38, PickleBack_39, Prinashe11_40, Ravana_50, ReMo_47, Remus_48, Roary_44, Rosalind_47, Scorpio_43, ShayRa_49, Smeadley_44, Soups_48, Stephig9_44, Strosahl_48, Swirley_42, Switzerland_48, SydNat_41, Tarynearal_38, Theia_37, Tiger_38, Twigg_40, UnionJack_40, Waits_48, Warrior24_49, Zolita_40,

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

- DekHockey33_48,

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

- Acquire49_41, Appletree2_40, Archie_43, AvadaKedavra_41, Baoshan_41, Battleship_77, Bazzle_43, Bellis_41, BigCheese_43, Blinn1_72, BobsGarage_43, BourbonZero_40, BrainDrainer_41, Breezona_43, Bromden_43, Calm_41, Chaser_40, ChutneyChips_40, CicholasNage_41, Claus_43, Clautastrophe_41, Crossroads_43, DHan_44, DanBing_42, DekHockey33_76, DirkDirk_40, Douge_40, Douzhi_40, DrSeegs_43, DuncansLeg_41, DyoEdafos_42, EagleEye_71, Ellson_41, Enceladus_40, Epsocamisio_71, Faith1_43, FarmResident_41, FinemLucis_43, Finnry_41, Gabriela_43, Gardann_43, GuuelaD_43, Hafay_43, Halena_40, Itos_42, JSwag_74, JewelBug_68, Jobypre_41, JoeDirt_40, Jubie_41, Kahlid_43, KatherineG_75, Kingsolomon_41, KirDoubleO7_39, Kropertea_40, Krypton555_41, LeBron_41, Lewan_43, LilDestine_43, LiyuLake_41, Loadrie_43, Lolly9_41, Lucyedi_70, Lumos_41, Lynnae_43, MAckerman_41, Miley16_43, MinecraftSteve_75, MiniLon_41, MiniMac_41, MkaliMitinis3_43, Moostard_41, MsGreen_41, Nebulosus_72, Netyap_43, Nicholas_41, Nicholasp3_43, Nova53_257, OhShagHennessy_40, OverPar_44, PYPDinur_40, PainterBoy_69, Polyphemos_70, Poochiewood_40, Quby_41, Red305_41, Rosalind_73, Rose5_40, Rossetti_44, Rumpelstiltskin_43, Samty_41, Sarshaun_43, ShayRa_75, Sheng711_41, Silverleaf_40, Snenia_41, SoJulia_44, Soap141_43, Soups_75, Stellammi_92, SuperAwesome_68, Switzerland_74, TriFive_41, Tyson_40, UPIE_41, Underpass_43, Vetrix_43, Wamburggrxpress_41, Whirlwind_42, Wigglewiggle_43, Wilder_43, Winky_43, Wyatt2_41, Zakai_43, Zaria_41, ZhongYanYuan_41,

Summary by start number:

Start 13:

- Found in 11 of 191 (5.8%) of genes in pham
- Manual Annotations of this start: 1 of 158
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Battleship_77 (A15),

Start 16:

- Found in 24 of 191 (12.6%) of genes in pham
- Manual Annotations of this start: 19 of 158
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bellis_41 (L3), BourbonZero_40 (L3), Clautastrophe_41 (L3), DuncansLeg_41 (L3), Ellson_41 (L3), Finnry_41 (L3), Jobypre_41 (L3), Jubie_41 (L3), Kingsolomon_41 (L3), KirDoubleO7_39 (L3), Krypton555_41 (L3), LiyuLake_41 (L3), Lolly9_41 (L3), Lumos_41 (L3), MiniLon_41 (L3), MiniMac_41 (L3), Moostard_41 (L3), MsGreen_41 (L3), Nicholas_41 (L3), Red305_41 (L3), Samty_41 (L3), Snenia_41 (L3), TriFive_41 (L3), Whirlwind_42 (L3),

Start 18:

- Found in 20 of 191 (10.5%) of genes in pham
- Manual Annotations of this start: 19 of 158
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49_41 (L1), Appletree2_40 (L1), AvadaKedavra_41 (L1), Calm_41 (L1), CicholasNage_41 (L1), DirkDirk_40 (L1), Enceladus_40 (L1), Halena_40 (L1), JoeDirt_40 (L1), LeBron_41 (L1),

MAckerman_41 (L1), OhShagHennessy_40 (L1), Poochiewood_40 (L1), Rose5_40 (L1), Silverleaf_40 (L1), Tyson_40 (L1), UPIE_41 (L1), Wamburggrxpress_41 (L1), Wyatt2_41 (L1), Zaria_41 (L1),

Start 22:

- Found in 12 of 191 (6.3%) of genes in pham
- Manual Annotations of this start: 10 of 158
- Called 91.7% of time when present
- Phage (with cluster) where this start called: DekHockey33_76 (A15), Epsocamisio_71 (A15), JSwag_74 (A15), KatherineG_75 (A15), MinecraftSteve_75 (A15), Nebulosus_72 (A15), Rosalind_73 (A15), ShayRa_75 (A15), Soups_75 (A15), Stellammi_92 (UNK), Switzerland_74 (A15),

Start 23:

- Found in 42 of 191 (22.0%) of genes in pham
- Manual Annotations of this start: 31 of 158
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archie_43 (L2), Baoshan_41 (L2), Bazzle_43 (L2), BigCheese_43 (L2), BobsGarage_43 (L2), Breezona_43 (L2), Bromden_43 (L4), Claus_43 (L2), Crossroads_43 (L2), DHan_44 (L2), DanBing_42 (L2), DrSeegs_43 (L2), Faith1_43 (L2), FinemLucis_43 (L2), Gabriela_43 (L2), Gardann_43 (L2), GuuelaD_43 (L2), Hafay_43 (L2), Itos_42 (L2), Kahlid_43 (L2), Lewan_43 (L2), LilDestine_43 (L2), Loadrie_43 (L2), Lynnae_43 (L2), Miley16_43 (L2), MkaliMitinis3_43 (L2), Netyap_43 (L2), Nicholasp3_43 (L2), Nova53_257 (CG), OverPar_44 (L2), Rossetti_44 (L2), Rumpelstiltskin_43 (L2), Sarshaun_43 (L2), SoJulia_44 (L2), Soap141_43 (L2), Underpass_43 (L2), Vetrix_43 (L2), Wigglewiggles_43 (L2), Wilder_43 (L2), Winky_43 (L2), Zakai_43 (L2), ZhongYanYuan_41 (L2),

Start 24:

- Found in 24 of 191 (12.6%) of genes in pham
- Manual Annotations of this start: 3 of 158
- Called 45.8% of time when present
- Phage (with cluster) where this start called: BrainDrainer_41 (L4), Chaser_40 (L4), ChutneyChips_40 (L4), Douge_40 (L4), Douzhi_40 (L4), DyoEdafos_42 (L4), FarmResident_41 (L4), Kropertea_40 (L4), PYPDinur_40 (L4), Quby_41 (L4), Sheng711_41 (L4),

Start 25:

- Found in 10 of 191 (5.2%) of genes in pham
- Manual Annotations of this start: 1 of 158
- Called 10.0% of time when present
- Phage (with cluster) where this start called: DekHockey33_48 (A15),

Start 27:

- Found in 29 of 191 (15.2%) of genes in pham
- Manual Annotations of this start: 1 of 158
- Called 3.4% of time when present
- Phage (with cluster) where this start called: Blinn1_72 (A6),

Start 28:

- Found in 75 of 191 (39.3%) of genes in pham
- Manual Annotations of this start: 67 of 158

- Called 98.7% of time when present
- Phage (with cluster) where this start called: AgentM_38 (A5), Airmid_40 (A5), Anaysia_48 (A15), Anon_43 (A15), Aragog_38 (A5), Archetta_39 (A5), Astro_43 (A8), Battleship_49 (A15), Benedict_42 (A5), Bluefalcon_38 (A5), Bonamassa_40 (A5), Boohoo_48 (A15), Caitlin_42 (A8), Chadwick_43 (A5), Conspiracy_39 (A5), Coog_39 (A5), Cuco_39 (A5), Danforth_43 (A8), Discoknowium_38 (A5), Dublin_38 (A5), ElTiger69_41 (A5), Elle_44 (A15), Epsocamisio_47 (A15), Expelliarmus_43 (A8), Florence1_38 (A5), Florence4_39 (A5), ForGetIt_39 (A5), George_39 (A5), Ghouboy_41 (A5), Groundhog_42 (A8), HuhtaEnerson15_40 (A5), JSwag_47 (A15), Jabiru_40 (A5), Jovo_39 (A5), KatherineG_49 (A15), LastResort_47 (A15), Lev2_39 (A5), LittleCherry_40 (A5), Looper_48 (A15), MarysWell_38 (A5), Micasa_41 (A5), Midas2_39 (A5), Milcery_40 (A5), MinecraftSteve_49 (A15), Naca_41 (A5), Nebulosus_47 (A15), Oofda_48 (A15), PetterN_43 (A5), Phillis_45 (A8), Phlorence_38 (A5), PickleBack_39 (A5), Prinashe11_40 (A5), Ravana_50 (A15), ReMo_47 (A15), Remus_48 (A15), Roary_44 (A8), Rosalind_47 (A15), Scorpia_43 (A5), ShayRa_49 (A15), Smeadley_44 (A8), Soups_48 (A15), Stephig9_44 (A8), Strosahl_48 (A15), Swirley_42 (A5), Switzerland_48 (A15), SydNat_41 (A5), Tarynearal_38 (A5), Theia_37 (A5), Tiger_38 (A5), Twigg_40 (A5), UnionJack_40 (A5), Waits_48 (A15), Warrior24_49 (A15), Zolita_40 (A5),

Start 29:

- Found in 6 of 191 (3.1%) of genes in pham
- Manual Annotations of this start: 6 of 158
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EagleEye_71 (A16), JewelBug_68 (A6), Lucyedi_70 (A16), PainterBoy_69 (A16), Polyphemus_70 (A6), SuperAwesome_68 (A6),

Summary by clusters:

There are 11 clusters represented in this pham: A15, A16, L1, CG, L4, A6, A5, L3, A8, L2, UNK,

Info for manual annotations of cluster A15:

- Start number 13 was manually annotated 1 time for cluster A15.
- Start number 22 was manually annotated 10 times for cluster A15.
- Start number 25 was manually annotated 1 time for cluster A15.
- Start number 28 was manually annotated 21 times for cluster A15.

Info for manual annotations of cluster A16:

- Start number 29 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A5:

- Start number 28 was manually annotated 38 times for cluster A5.

Info for manual annotations of cluster A6:

- Start number 27 was manually annotated 1 time for cluster A6.
- Start number 29 was manually annotated 3 times for cluster A6.

Info for manual annotations of cluster A8:

- Start number 28 was manually annotated 8 times for cluster A8.

Info for manual annotations of cluster CG:

- Start number 23 was manually annotated 1 time for cluster CG.

Info for manual annotations of cluster L1:

- Start number 18 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 23 was manually annotated 29 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 16 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 23 was manually annotated 1 time for cluster L4.
- Start number 24 was manually annotated 3 times for cluster L4.

Gene Information:

Gene: Acquire49_41 Start: 33548, Stop: 33943, Start Num: 18

Candidate Starts for Acquire49_41:

(14, 33533), (Start: 18 @33548 has 19 MA's), (52, 33806), (54, 33815), (69, 33875), (76, 33920),

Gene: AgentM_38 Start: 30504, Stop: 30118, Start Num: 28

Candidate Starts for AgentM_38:

(Start: 28 @30504 has 67 MA's), (30, 30456), (31, 30453), (40, 30378), (48, 30312), (50, 30303), (60, 30255), (69, 30207), (72, 30168),

Gene: Airmid_40 Start: 30562, Stop: 30173, Start Num: 28

Candidate Starts for Airmid_40:

(Start: 28 @30562 has 67 MA's), (30, 30514), (31, 30511), (40, 30436), (50, 30361), (51, 30358), (60, 30313), (62, 30304), (72, 30223),

Gene: Anaysia_48 Start: 30327, Stop: 29968, Start Num: 28

Candidate Starts for Anaysia_48:

(Start: 25 @30330 has 1 MA's), (Start: 28 @30327 has 67 MA's), (39, 30219), (75, 30003),

Gene: Anon_43 Start: 29368, Stop: 29009, Start Num: 28

Candidate Starts for Anon_43:

(Start: 28 @29368 has 67 MA's), (44, 29230),

Gene: Appletree2_40 Start: 33475, Stop: 33870, Start Num: 18

Candidate Starts for Appletree2_40:

(14, 33460), (Start: 18 @33475 has 19 MA's), (52, 33733), (54, 33742), (69, 33802), (76, 33847),

Gene: Aragog_38 Start: 30534, Stop: 30148, Start Num: 28

Candidate Starts for Aragog_38:

(Start: 28 @30534 has 67 MA's), (30, 30486), (31, 30483), (40, 30408), (48, 30342), (50, 30333), (60, 30285), (69, 30237), (72, 30198),

Gene: Archetta_39 Start: 31064, Stop: 30678, Start Num: 28

Candidate Starts for Archetta_39:

(Start: 28 @31064 has 67 MA's), (30, 31016), (31, 31013), (40, 30938), (48, 30872), (50, 30863), (60, 30815), (69, 30767), (72, 30728),

Gene: Archie_43 Start: 35110, Stop: 35472, Start Num: 23

Candidate Starts for Archie_43:

(Start: 23 @35110 has 31 MA's), (52, 35341), (54, 35350),

Gene: Astro_43 Start: 30852, Stop: 30550, Start Num: 28

Candidate Starts for Astro_43:

(Start: 28 @30852 has 67 MA's), (39, 30741), (41, 30732), (56, 30639), (67, 30588), (70, 30567),

Gene: AvadaKedavra_41 Start: 33557, Stop: 33952, Start Num: 18

Candidate Starts for AvadaKedavra_41:

(14, 33542), (Start: 18 @33557 has 19 MA's), (52, 33815), (54, 33824), (69, 33884), (76, 33929),

Gene: Baoshan_41 Start: 34767, Stop: 35129, Start Num: 23

Candidate Starts for Baoshan_41:

(Start: 23 @34767 has 31 MA's), (52, 34998), (54, 35007),

Gene: Battleship_77 Start: 41490, Stop: 41044, Start Num: 13

Candidate Starts for Battleship_77:

(Start: 13 @41490 has 1 MA's), (Start: 22 @41460 has 10 MA's), (Start: 24 @41448 has 3 MA's), (33, 41358), (37, 41331), (60, 41175), (72, 41094),

Gene: Battleship_49 Start: 30296, Stop: 29937, Start Num: 28

Candidate Starts for Battleship_49:

(2, 30701), (4, 30617), (5, 30614), (Start: 28 @30296 has 67 MA's), (39, 30188), (75, 29972),

Gene: Bazzle_43 Start: 35142, Stop: 35504, Start Num: 23

Candidate Starts for Bazzle_43:

(Start: 23 @35142 has 31 MA's), (52, 35373), (54, 35382),

Gene: Bellis_41 Start: 35165, Stop: 35560, Start Num: 16

Candidate Starts for Bellis_41:

(Start: 16 @35165 has 19 MA's), (26, 35201), (Start: 27 @35207 has 1 MA's), (46, 35390), (47, 35396), (52, 35429), (69, 35498), (76, 35543),

Gene: Benedict_42 Start: 30735, Stop: 30355, Start Num: 28

Candidate Starts for Benedict_42:

(Start: 28 @30735 has 67 MA's), (30, 30687), (31, 30684), (34, 30657), (40, 30609), (48, 30543), (50, 30534), (58, 30495), (60, 30486), (61, 30480), (64, 30459), (72, 30405), (79, 30372),

Gene: BigCheese_43 Start: 34906, Stop: 35268, Start Num: 23

Candidate Starts for BigCheese_43:

(Start: 23 @34906 has 31 MA's), (52, 35137), (54, 35146),

Gene: Blinn1_72 Start: 40389, Stop: 39991, Start Num: 27

Candidate Starts for Blinn1_72:

(8, 40491), (15, 40434), (17, 40428), (20, 40416), (Start: 27 @40389 has 1 MA's), (41, 40251), (57, 40137), (63, 40095),

Gene: Bluefalcon_38 Start: 31022, Stop: 30636, Start Num: 28

Candidate Starts for Bluefalcon_38:

(Start: 28 @31022 has 67 MA's), (30, 30974), (34, 30944), (41, 30893), (48, 30821), (50, 30812), (53, 30800), (72, 30686),

Gene: BobsGarage_43 Start: 34906, Stop: 35268, Start Num: 23

Candidate Starts for BobsGarage_43:

(Start: 23 @34906 has 31 MA's), (52, 35137), (54, 35146),

Gene: Bonamassa_40 Start: 31053, Stop: 30667, Start Num: 28

Candidate Starts for Bonamassa_40:

(Start: 28 @31053 has 67 MA's), (30, 31005), (40, 30927), (48, 30861), (50, 30852), (60, 30804), (69, 30756), (72, 30717),

Gene: Boohoo_48 Start: 30327, Stop: 29968, Start Num: 28

Candidate Starts for Boohoo_48:

(Start: 25 @30330 has 1 MA's), (Start: 28 @30327 has 67 MA's), (39, 30219), (75, 30003),

Gene: BourbonZero_40 Start: 35147, Stop: 35542, Start Num: 16

Candidate Starts for BourbonZero_40:

(Start: 16 @35147 has 19 MA's), (46, 35372), (47, 35378), (52, 35411), (69, 35480), (76, 35525),

Gene: BrainDrainer_41 Start: 33839, Stop: 34198, Start Num: 24

Candidate Starts for BrainDrainer_41:

(Start: 24 @33839 has 3 MA's), (Start: 27 @33848 has 1 MA's), (52, 34067), (54, 34076), (66, 34127),

Gene: Breezona_43 Start: 34906, Stop: 35268, Start Num: 23

Candidate Starts for Breezona_43:

(Start: 23 @34906 has 31 MA's), (52, 35137), (54, 35146),

Gene: Bromden_43 Start: 34662, Stop: 35024, Start Num: 23

Candidate Starts for Bromden_43:

(Start: 23 @34662 has 31 MA's), (Start: 24 @34665 has 3 MA's), (52, 34893), (54, 34902), (66, 34953),

Gene: Caitlin_42 Start: 30845, Stop: 30543, Start Num: 28

Candidate Starts for Caitlin_42:

(Start: 28 @30845 has 67 MA's), (39, 30734), (41, 30725), (56, 30632), (67, 30581), (70, 30560),

Gene: Calm_41 Start: 33563, Stop: 33958, Start Num: 18

Candidate Starts for Calm_41:

(14, 33548), (Start: 18 @33563 has 19 MA's), (52, 33821), (54, 33830), (69, 33890), (76, 33935),

Gene: Chadwick_43 Start: 30715, Stop: 30335, Start Num: 28

Candidate Starts for Chadwick_43:

(Start: 28 @30715 has 67 MA's), (30, 30667), (31, 30664), (34, 30637), (40, 30589), (48, 30523), (58, 30475), (60, 30466), (61, 30460), (64, 30439), (72, 30385), (79, 30352),

Gene: Chaser_40 Start: 33656, Stop: 34015, Start Num: 24

Candidate Starts for Chaser_40:

(Start: 24 @33656 has 3 MA's), (Start: 27 @33665 has 1 MA's), (52, 33884), (54, 33893), (66, 33944),

Gene: ChutneyChips_40 Start: 33836, Stop: 34195, Start Num: 24

Candidate Starts for ChutneyChips_40:

(Start: 24 @33836 has 3 MA's), (Start: 27 @33845 has 1 MA's), (52, 34064), (54, 34073), (66, 34124), (73, 34172),

Gene: CicholasNage_41 Start: 33584, Stop: 33979, Start Num: 18
Candidate Starts for CicholasNage_41:
(14, 33569), (Start: 18 @33584 has 19 MA's), (52, 33842), (54, 33851), (69, 33911), (76, 33956),

Gene: Claus_43 Start: 34925, Stop: 35287, Start Num: 23
Candidate Starts for Claus_43:
(Start: 23 @34925 has 31 MA's), (52, 35156), (54, 35165),

Gene: Clautastrophe_41 Start: 35163, Stop: 35558, Start Num: 16
Candidate Starts for Clautastrophe_41:
(Start: 16 @35163 has 19 MA's), (26, 35199), (Start: 27 @35205 has 1 MA's), (46, 35388), (47, 35394),
(52, 35427), (69, 35496), (76, 35541),

Gene: Conspiracy_39 Start: 30746, Stop: 30360, Start Num: 28
Candidate Starts for Conspiracy_39:
(Start: 28 @30746 has 67 MA's), (30, 30698), (31, 30695), (40, 30620), (48, 30554), (50, 30545), (60, 30497), (69, 30449), (72, 30410),

Gene: Coog_39 Start: 30844, Stop: 30458, Start Num: 28
Candidate Starts for Coog_39:
(Start: 28 @30844 has 67 MA's), (30, 30796), (31, 30793), (40, 30718), (48, 30652), (50, 30643), (60, 30595), (69, 30547), (72, 30508),

Gene: Crossroads_43 Start: 34908, Stop: 35270, Start Num: 23
Candidate Starts for Crossroads_43:
(Start: 23 @34908 has 31 MA's), (52, 35139), (54, 35148),

Gene: Cuco_39 Start: 30800, Stop: 30411, Start Num: 28
Candidate Starts for Cuco_39:
(Start: 28 @30800 has 67 MA's), (30, 30752), (31, 30749), (40, 30674), (48, 30608), (50, 30599), (51, 30596), (60, 30551), (62, 30542), (72, 30461),

Gene: DHan_44 Start: 34866, Stop: 35228, Start Num: 23
Candidate Starts for DHan_44:
(Start: 23 @34866 has 31 MA's), (52, 35097), (54, 35106),

Gene: DanBing_42 Start: 34758, Stop: 35120, Start Num: 23
Candidate Starts for DanBing_42:
(Start: 23 @34758 has 31 MA's), (52, 34989), (54, 34998),

Gene: Danforth_43 Start: 30881, Stop: 30579, Start Num: 28
Candidate Starts for Danforth_43:
(Start: 28 @30881 has 67 MA's), (39, 30770), (41, 30761), (56, 30668), (67, 30617), (70, 30596),

Gene: DekHockey33_48 Start: 30545, Stop: 30183, Start Num: 25
Candidate Starts for DekHockey33_48:
(Start: 25 @30545 has 1 MA's), (Start: 28 @30542 has 67 MA's), (39, 30434), (75, 30218),

Gene: DekHockey33_76 Start: 41545, Stop: 41129, Start Num: 22
Candidate Starts for DekHockey33_76:
(Start: 13 @41575 has 1 MA's), (Start: 22 @41545 has 10 MA's), (Start: 24 @41533 has 3 MA's), (33, 41443), (37, 41416), (60, 41260), (72, 41179),

Gene: DirkDirk_40 Start: 33535, Stop: 33930, Start Num: 18

Candidate Starts for DirkDirk_40:

(14, 33520), (Start: 18 @33535 has 19 MA's), (52, 33793), (54, 33802), (69, 33862), (76, 33907),

Gene: Discoknowium_38 Start: 30543, Stop: 30157, Start Num: 28

Candidate Starts for Discoknowium_38:

(Start: 28 @30543 has 67 MA's), (30, 30495), (31, 30492), (40, 30417), (48, 30351), (50, 30342), (60, 30294), (69, 30246), (72, 30207),

Gene: Douge_40 Start: 33594, Stop: 33953, Start Num: 24

Candidate Starts for Douge_40:

(Start: 24 @33594 has 3 MA's), (Start: 27 @33603 has 1 MA's), (52, 33822), (54, 33831), (66, 33882),

Gene: Douzhi_40 Start: 33700, Stop: 34059, Start Num: 24

Candidate Starts for Douzhi_40:

(Start: 24 @33700 has 3 MA's), (Start: 27 @33709 has 1 MA's), (52, 33928), (54, 33937), (66, 33988),

Gene: DrSeegs_43 Start: 34906, Stop: 35268, Start Num: 23

Candidate Starts for DrSeegs_43:

(Start: 23 @34906 has 31 MA's), (52, 35137), (54, 35146),

Gene: Dublin_38 Start: 30565, Stop: 30179, Start Num: 28

Candidate Starts for Dublin_38:

(Start: 28 @30565 has 67 MA's), (30, 30517), (31, 30514), (40, 30439), (48, 30373), (50, 30364), (60, 30316), (69, 30268), (72, 30229),

Gene: DuncansLeg_41 Start: 35184, Stop: 35579, Start Num: 16

Candidate Starts for DuncansLeg_41:

(Start: 16 @35184 has 19 MA's), (26, 35220), (Start: 27 @35226 has 1 MA's), (46, 35409), (47, 35415), (52, 35448), (69, 35517), (76, 35562),

Gene: DyoEdafos_42 Start: 33916, Stop: 34275, Start Num: 24

Candidate Starts for DyoEdafos_42:

(21, 33901), (Start: 24 @33916 has 3 MA's), (52, 34144), (54, 34153), (66, 34204), (73, 34252),

Gene: EagleEye_71 Start: 41731, Stop: 41372, Start Num: 29

Candidate Starts for EagleEye_71:

(7, 41836), (9, 41833), (10, 41830), (Start: 29 @41731 has 6 MA's), (30, 41689), (34, 41656), (55, 41506), (65, 41461), (66, 41458), (78, 41383),

Gene: ElTiger69_41 Start: 30732, Stop: 30352, Start Num: 28

Candidate Starts for ElTiger69_41:

(Start: 28 @30732 has 67 MA's), (30, 30684), (31, 30681), (40, 30606), (48, 30540), (58, 30492), (60, 30483), (61, 30477), (64, 30456), (72, 30402), (79, 30369),

Gene: Elle_44 Start: 28787, Stop: 28425, Start Num: 28

Candidate Starts for Elle_44:

(3, 29156), (Start: 28 @28787 has 67 MA's), (37, 28697), (40, 28673), (44, 28649), (45, 28646), (48, 28607), (75, 28460),

Gene: Ellson_41 Start: 35160, Stop: 35555, Start Num: 16

Candidate Starts for Ellson_41:

(Start: 16 @35160 has 19 MA's), (46, 35385), (47, 35391), (52, 35424), (69, 35493), (76, 35538),

Gene: Enceladus_40 Start: 33518, Stop: 33913, Start Num: 18

Candidate Starts for Enceladus_40:

(14, 33503), (Start: 18 @33518 has 19 MA's), (52, 33776), (54, 33785), (69, 33845), (76, 33890),

Gene: Epsocamisio_71 Start: 40692, Stop: 40276, Start Num: 22

Candidate Starts for Epsocamisio_71:

(Start: 13 @40722 has 1 MA's), (Start: 22 @40692 has 10 MA's), (Start: 24 @40680 has 3 MA's), (33, 40590), (37, 40563), (60, 40407), (72, 40326),

Gene: Epsocamisio_47 Start: 30101, Stop: 29742, Start Num: 28

Candidate Starts for Epsocamisio_47:

(2, 30503), (4, 30419), (Start: 28 @30101 has 67 MA's), (39, 29993), (75, 29777),

Gene: Expelliarmus_43 Start: 30910, Stop: 30608, Start Num: 28

Candidate Starts for Expelliarmus_43:

(Start: 28 @30910 has 67 MA's), (39, 30799), (41, 30790), (56, 30697), (67, 30646), (70, 30625),

Gene: Faith1_43 Start: 34906, Stop: 35268, Start Num: 23

Candidate Starts for Faith1_43:

(Start: 23 @34906 has 31 MA's), (52, 35137), (54, 35146),

Gene: FarmResident_41 Start: 33638, Stop: 33997, Start Num: 24

Candidate Starts for FarmResident_41:

(Start: 24 @33638 has 3 MA's), (Start: 27 @33647 has 1 MA's), (52, 33866), (54, 33875), (66, 33926),

Gene: Finemlucis_43 Start: 35182, Stop: 35544, Start Num: 23

Candidate Starts for Finemlucis_43:

(Start: 23 @35182 has 31 MA's), (52, 35413), (54, 35422),

Gene: Finnry_41 Start: 35166, Stop: 35561, Start Num: 16

Candidate Starts for Finnry_41:

(Start: 16 @35166 has 19 MA's), (26, 35202), (Start: 27 @35208 has 1 MA's), (46, 35391), (47, 35397), (52, 35430), (69, 35499), (76, 35544),

Gene: Florence1_38 Start: 30418, Stop: 30032, Start Num: 28

Candidate Starts for Florence1_38:

(Start: 28 @30418 has 67 MA's), (30, 30370), (40, 30292), (48, 30226), (50, 30217), (60, 30169), (69, 30121), (72, 30082),

Gene: Florence4_39 Start: 30418, Stop: 30032, Start Num: 28

Candidate Starts for Florence4_39:

(Start: 28 @30418 has 67 MA's), (30, 30370), (40, 30292), (48, 30226), (50, 30217), (60, 30169), (69, 30121), (72, 30082),

Gene: ForGetIt_39 Start: 30771, Stop: 30385, Start Num: 28

Candidate Starts for ForGetIt_39:

(Start: 28 @30771 has 67 MA's), (30, 30723), (31, 30720), (40, 30645), (48, 30579), (50, 30570), (60, 30522), (69, 30474), (72, 30435),

Gene: Gabriela_43 Start: 35168, Stop: 35530, Start Num: 23

Candidate Starts for Gabriela_43:

(Start: 23 @35168 has 31 MA's), (52, 35399), (54, 35408),

Gene: Gardann_43 Start: 34907, Stop: 35269, Start Num: 23

Candidate Starts for Gardann_43:

(Start: 23 @34907 has 31 MA's), (52, 35138), (54, 35147),

Gene: George_39 Start: 30995, Stop: 30609, Start Num: 28

Candidate Starts for George_39:

(Start: 28 @30995 has 67 MA's), (30, 30947), (31, 30944), (40, 30869), (48, 30803), (50, 30794), (59, 30749), (60, 30746), (69, 30698), (72, 30659),

Gene: Ghoulboy_41 Start: 31508, Stop: 31122, Start Num: 28

Candidate Starts for Ghoulboy_41:

(Start: 28 @31508 has 67 MA's), (30, 31460), (31, 31457), (40, 31382), (48, 31316), (50, 31307), (60, 31259), (69, 31211), (72, 31172),

Gene: Groundhog_42 Start: 30817, Stop: 30515, Start Num: 28

Candidate Starts for Groundhog_42:

(Start: 28 @30817 has 67 MA's), (39, 30706), (41, 30697), (56, 30604), (67, 30553), (70, 30532),

Gene: GuuelaD_43 Start: 34945, Stop: 35307, Start Num: 23

Candidate Starts for GuuelaD_43:

(Start: 23 @34945 has 31 MA's), (52, 35176), (54, 35185),

Gene: Hafay_43 Start: 34940, Stop: 35302, Start Num: 23

Candidate Starts for Hafay_43:

(Start: 23 @34940 has 31 MA's), (52, 35171), (54, 35180),

Gene: Halena_40 Start: 33559, Stop: 33954, Start Num: 18

Candidate Starts for Halena_40:

(14, 33544), (Start: 18 @33559 has 19 MA's), (52, 33817), (54, 33826), (69, 33886), (76, 33931),

Gene: HuhtaEnerson15_40 Start: 30986, Stop: 30600, Start Num: 28

Candidate Starts for HuhtaEnerson15_40:

(Start: 28 @30986 has 67 MA's), (30, 30938), (40, 30860), (48, 30794), (50, 30785), (60, 30737), (69, 30689), (72, 30650),

Gene: Itos_42 Start: 33812, Stop: 34174, Start Num: 23

Candidate Starts for Itos_42:

(Start: 23 @33812 has 31 MA's), (52, 34043), (54, 34052),

Gene: JSwag_74 Start: 40977, Stop: 40561, Start Num: 22

Candidate Starts for JSwag_74:

(Start: 13 @41007 has 1 MA's), (Start: 22 @40977 has 10 MA's), (Start: 24 @40965 has 3 MA's), (33, 40875), (37, 40848), (60, 40692), (72, 40611),

Gene: JSwag_47 Start: 30039, Stop: 29680, Start Num: 28

Candidate Starts for JSwag_47:

(2, 30441), (4, 30357), (Start: 28 @30039 has 67 MA's), (39, 29931), (75, 29715),

Gene: Jabiru_40 Start: 30604, Stop: 30215, Start Num: 28

Candidate Starts for Jabiru_40:

(Start: 28 @30604 has 67 MA's), (30, 30556), (31, 30553), (40, 30478), (50, 30403), (51, 30400), (60, 30355), (62, 30346), (72, 30265),

Gene: JewelBug_68 Start: 40312, Stop: 39956, Start Num: 29

Candidate Starts for JewelBug_68:

(11, 40390), (Start: 29 @40312 has 6 MA's), (43, 40168), (50, 40111), (66, 40042), (68, 40036), (71, 40015), (75, 39988), (78, 39967),

Gene: Jobypre_41 Start: 35163, Stop: 35558, Start Num: 16

Candidate Starts for Jobypre_41:

(Start: 16 @35163 has 19 MA's), (26, 35199), (Start: 27 @35205 has 1 MA's), (46, 35388), (47, 35394), (52, 35427), (69, 35496), (76, 35541),

Gene: JoeDirt_40 Start: 33516, Stop: 33911, Start Num: 18

Candidate Starts for JoeDirt_40:

(14, 33501), (Start: 18 @33516 has 19 MA's), (52, 33774), (54, 33783), (69, 33843), (76, 33888),

Gene: Jovo_39 Start: 31027, Stop: 30641, Start Num: 28

Candidate Starts for Jovo_39:

(Start: 28 @31027 has 67 MA's), (30, 30979), (31, 30976), (40, 30901), (48, 30835), (50, 30826), (60, 30778), (69, 30730), (72, 30691),

Gene: Jubie_41 Start: 35164, Stop: 35559, Start Num: 16

Candidate Starts for Jubie_41:

(Start: 16 @35164 has 19 MA's), (26, 35200), (Start: 27 @35206 has 1 MA's), (46, 35389), (47, 35395), (52, 35428), (69, 35497), (76, 35542),

Gene: Kahlid_43 Start: 34912, Stop: 35274, Start Num: 23

Candidate Starts for Kahlid_43:

(Start: 23 @34912 has 31 MA's), (52, 35143), (54, 35152),

Gene: KatherineG_75 Start: 41450, Stop: 41034, Start Num: 22

Candidate Starts for KatherineG_75:

(6, 41561), (Start: 13 @41480 has 1 MA's), (Start: 22 @41450 has 10 MA's), (Start: 24 @41438 has 3 MA's), (33, 41348), (37, 41321), (60, 41165), (72, 41084),

Gene: KatherineG_49 Start: 30542, Stop: 30183, Start Num: 28

Candidate Starts for KatherineG_49:

(Start: 25 @30545 has 1 MA's), (Start: 28 @30542 has 67 MA's), (39, 30434), (75, 30218),

Gene: Kingsolomon_41 Start: 35163, Stop: 35558, Start Num: 16

Candidate Starts for Kingsolomon_41:

(Start: 16 @35163 has 19 MA's), (26, 35199), (Start: 27 @35205 has 1 MA's), (46, 35388), (47, 35394), (52, 35427), (69, 35496), (76, 35541),

Gene: KirDoubleO7_39 Start: 35188, Stop: 35583, Start Num: 16

Candidate Starts for KirDoubleO7_39:

(Start: 16 @35188 has 19 MA's), (26, 35224), (Start: 27 @35230 has 1 MA's), (46, 35413), (47, 35419), (52, 35452), (69, 35521), (76, 35566),

Gene: Kropertea_40 Start: 33739, Stop: 34098, Start Num: 24

Candidate Starts for Kropertea_40:

(21, 33724), (Start: 24 @33739 has 3 MA's), (52, 33967), (54, 33976), (66, 34027), (73, 34075),

Gene: Krypton555_41 Start: 35080, Stop: 35475, Start Num: 16

Candidate Starts for Krypton555_41:

(Start: 16 @35080 has 19 MA's), (46, 35305), (47, 35311), (52, 35344), (69, 35413), (76, 35458),

Gene: LastResort_47 Start: 30103, Stop: 29744, Start Num: 28

Candidate Starts for LastResort_47:

(Start: 25 @30106 has 1 MA's), (Start: 28 @30103 has 67 MA's), (39, 29995), (75, 29779),

Gene: LeBron_41 Start: 33560, Stop: 33955, Start Num: 18

Candidate Starts for LeBron_41:

(14, 33545), (Start: 18 @33560 has 19 MA's), (52, 33818), (54, 33827), (69, 33887), (76, 33932),

Gene: Lev2_39 Start: 30659, Stop: 30273, Start Num: 28

Candidate Starts for Lev2_39:

(Start: 28 @30659 has 67 MA's), (30, 30611), (31, 30608), (40, 30533), (48, 30467), (50, 30458), (60, 30410), (69, 30362), (72, 30323),

Gene: Lewan_43 Start: 34899, Stop: 35261, Start Num: 23

Candidate Starts for Lewan_43:

(Start: 23 @34899 has 31 MA's), (52, 35130), (54, 35139),

Gene: LilDestine_43 Start: 34904, Stop: 35266, Start Num: 23

Candidate Starts for LilDestine_43:

(Start: 23 @34904 has 31 MA's), (52, 35135), (54, 35144),

Gene: LittleCherry_40 Start: 30996, Stop: 30610, Start Num: 28

Candidate Starts for LittleCherry_40:

(Start: 28 @30996 has 67 MA's), (30, 30948), (40, 30870), (48, 30804), (50, 30795), (60, 30747), (69, 30699), (72, 30660),

Gene: LiyuLake_41 Start: 35150, Stop: 35545, Start Num: 16

Candidate Starts for LiyuLake_41:

(Start: 16 @35150 has 19 MA's), (46, 35375), (47, 35381), (52, 35414), (69, 35483), (76, 35528),

Gene: Loadrie_43 Start: 34938, Stop: 35300, Start Num: 23

Candidate Starts for Loadrie_43:

(Start: 23 @34938 has 31 MA's), (52, 35169), (54, 35178),

Gene: Lolly9_41 Start: 34974, Stop: 35369, Start Num: 16

Candidate Starts for Lolly9_41:

(Start: 16 @34974 has 19 MA's), (26, 35010), (Start: 27 @35016 has 1 MA's), (46, 35199), (47, 35205), (52, 35238), (69, 35307), (76, 35352),

Gene: Looper_48 Start: 30080, Stop: 29721, Start Num: 28

Candidate Starts for Looper_48:

(Start: 25 @30083 has 1 MA's), (Start: 28 @30080 has 67 MA's), (39, 29972), (75, 29756),

Gene: Lucyedi_70 Start: 41927, Stop: 41568, Start Num: 29

Candidate Starts for Lucyedi_70:

(7, 42032), (9, 42029), (10, 42026), (Start: 29 @41927 has 6 MA's), (30, 41885), (34, 41852), (55, 41702), (65, 41657), (66, 41654), (78, 41579),

Gene: Lumos_41 Start: 35160, Stop: 35555, Start Num: 16

Candidate Starts for Lumos_41:

(12, 35145), (Start: 16 @35160 has 19 MA's), (26, 35196), (Start: 27 @35202 has 1 MA's), (46, 35385), (47, 35391), (52, 35424), (69, 35493), (76, 35538),

Gene: Lynnae_43 Start: 34895, Stop: 35257, Start Num: 23

Candidate Starts for Lynnae_43:

(Start: 23 @34895 has 31 MA's), (52, 35126), (54, 35135),

Gene: MAckerman_41 Start: 33553, Stop: 33948, Start Num: 18

Candidate Starts for MAckerman_41:

(14, 33538), (Start: 18 @33553 has 19 MA's), (52, 33811), (54, 33820), (69, 33880), (76, 33925),

Gene: MarysWell_38 Start: 30859, Stop: 30467, Start Num: 28

Candidate Starts for MarysWell_38:

(Start: 28 @30859 has 67 MA's), (30, 30811), (34, 30781), (41, 30730), (48, 30658), (50, 30649), (53, 30637), (72, 30517),

Gene: Micasa_41 Start: 31126, Stop: 30740, Start Num: 28

Candidate Starts for Micasa_41:

(Start: 28 @31126 has 67 MA's), (30, 31078), (40, 31000), (48, 30934), (50, 30925), (60, 30877), (69, 30829), (72, 30790),

Gene: Midas2_39 Start: 30844, Stop: 30458, Start Num: 28

Candidate Starts for Midas2_39:

(Start: 28 @30844 has 67 MA's), (30, 30796), (31, 30793), (40, 30718), (48, 30652), (50, 30643), (60, 30595), (69, 30547), (72, 30508),

Gene: Milcery_40 Start: 30963, Stop: 30577, Start Num: 28

Candidate Starts for Milcery_40:

(Start: 28 @30963 has 67 MA's), (30, 30915), (31, 30912), (40, 30837), (48, 30771), (50, 30762), (60, 30714), (69, 30666), (72, 30627),

Gene: Miley16_43 Start: 34906, Stop: 35268, Start Num: 23

Candidate Starts for Miley16_43:

(Start: 23 @34906 has 31 MA's), (52, 35137), (54, 35146),

Gene: MinecraftSteve_75 Start: 41265, Stop: 40849, Start Num: 22

Candidate Starts for MinecraftSteve_75:

(Start: 13 @41295 has 1 MA's), (Start: 22 @41265 has 10 MA's), (Start: 24 @41253 has 3 MA's), (33, 41163), (37, 41136), (60, 40980), (72, 40899),

Gene: MinecraftSteve_49 Start: 30303, Stop: 29944, Start Num: 28

Candidate Starts for MinecraftSteve_49:

(2, 30705), (4, 30621), (Start: 28 @30303 has 67 MA's), (39, 30195), (57, 30078), (75, 29979),

Gene: MiniLon_41 Start: 34975, Stop: 35370, Start Num: 16

Candidate Starts for MiniLon_41:

(Start: 16 @34975 has 19 MA's), (26, 35011), (Start: 27 @35017 has 1 MA's), (46, 35200), (47, 35206), (52, 35239), (69, 35308), (76, 35353),

Gene: MiniMac_41 Start: 34972, Stop: 35367, Start Num: 16

Candidate Starts for MiniMac_41:

(Start: 16 @34972 has 19 MA's), (26, 35008), (Start: 27 @35014 has 1 MA's), (46, 35197), (47, 35203), (52, 35236), (69, 35305), (76, 35350),

Gene: MkaliMitinis3_43 Start: 34908, Stop: 35270, Start Num: 23

Candidate Starts for MkaliMitinis3_43:

(Start: 23 @34908 has 31 MA's), (52, 35139), (54, 35148),

Gene: Moostard_41 Start: 35165, Stop: 35560, Start Num: 16

Candidate Starts for Moostard_41:

(Start: 16 @35165 has 19 MA's), (26, 35201), (Start: 27 @35207 has 1 MA's), (46, 35390), (47, 35396), (52, 35429), (69, 35498), (76, 35543),

Gene: MsGreen_41 Start: 35163, Stop: 35558, Start Num: 16

Candidate Starts for MsGreen_41:

(Start: 16 @35163 has 19 MA's), (26, 35199), (Start: 27 @35205 has 1 MA's), (46, 35388), (47, 35394), (52, 35427), (69, 35496), (76, 35541),

Gene: Naca_41 Start: 31274, Stop: 30894, Start Num: 28

Candidate Starts for Naca_41:

(Start: 28 @31274 has 67 MA's), (30, 31226), (31, 31223), (40, 31148), (48, 31082), (50, 31073), (58, 31034), (60, 31025), (64, 30998), (72, 30944), (79, 30911),

Gene: Nebulosus_72 Start: 40929, Stop: 40513, Start Num: 22

Candidate Starts for Nebulosus_72:

(Start: 13 @40959 has 1 MA's), (Start: 22 @40929 has 10 MA's), (Start: 24 @40917 has 3 MA's), (33, 40827), (37, 40800), (60, 40644), (72, 40563),

Gene: Nebulosus_47 Start: 30099, Stop: 29740, Start Num: 28

Candidate Starts for Nebulosus_47:

(Start: 25 @30102 has 1 MA's), (Start: 28 @30099 has 67 MA's), (39, 29991), (75, 29775),

Gene: Netyap_43 Start: 34906, Stop: 35268, Start Num: 23

Candidate Starts for Netyap_43:

(Start: 23 @34906 has 31 MA's), (52, 35137), (54, 35146),

Gene: Nicholas_41 Start: 35163, Stop: 35558, Start Num: 16

Candidate Starts for Nicholas_41:

(Start: 16 @35163 has 19 MA's), (26, 35199), (Start: 27 @35205 has 1 MA's), (46, 35388), (47, 35394), (52, 35427), (69, 35496), (76, 35541),

Gene: Nicholasp3_43 Start: 34907, Stop: 35269, Start Num: 23

Candidate Starts for Nicholasp3_43:

(Start: 23 @34907 has 31 MA's), (52, 35138), (54, 35147),

Gene: Nova53_257 Start: 128188, Stop: 128547, Start Num: 23

Candidate Starts for Nova53_257:

(19, 128170), (Start: 23 @128188 has 31 MA's), (30, 128254), (34, 128284), (56, 128434), (74, 128533),

Gene: OhShagHennessy_40 Start: 33506, Stop: 33901, Start Num: 18

Candidate Starts for OhShagHennessy_40:

(14, 33491), (Start: 18 @33506 has 19 MA's), (52, 33764), (54, 33773), (69, 33833), (76, 33878),

Gene: Oofda_48 Start: 30194, Stop: 29835, Start Num: 28

Candidate Starts for Oofda_48:

(2, 30596), (4, 30512), (Start: 28 @30194 has 67 MA's), (39, 30086), (75, 29870),

Gene: OverPar_44 Start: 34938, Stop: 35300, Start Num: 23

Candidate Starts for OverPar_44:

(Start: 23 @34938 has 31 MA's), (52, 35169), (54, 35178),

Gene: PYPDinur_40 Start: 33700, Stop: 34059, Start Num: 24

Candidate Starts for PYPDinur_40:

(Start: 24 @33700 has 3 MA's), (Start: 27 @33709 has 1 MA's), (52, 33928), (54, 33937), (66, 33988),

Gene: PainterBoy_69 Start: 41636, Stop: 41277, Start Num: 29

Candidate Starts for PainterBoy_69:

(7, 41741), (9, 41738), (10, 41735), (Start: 29 @41636 has 6 MA's), (30, 41594), (34, 41561), (55, 41411), (65, 41366), (66, 41363), (78, 41288),

Gene: PetterN_43 Start: 30715, Stop: 30335, Start Num: 28

Candidate Starts for PetterN_43:

(Start: 28 @30715 has 67 MA's), (30, 30667), (31, 30664), (34, 30637), (40, 30589), (48, 30523), (58, 30475), (60, 30466), (61, 30460), (64, 30439), (72, 30385), (79, 30352),

Gene: Phillis_45 Start: 31235, Stop: 30933, Start Num: 28

Candidate Starts for Phillis_45:

(Start: 28 @31235 has 67 MA's), (39, 31124), (41, 31115), (48, 31055), (56, 31022), (67, 30971), (70, 30950),

Gene: Phlorence_38 Start: 30534, Stop: 30148, Start Num: 28

Candidate Starts for Phlorence_38:

(Start: 28 @30534 has 67 MA's), (30, 30486), (31, 30483), (40, 30408), (48, 30342), (50, 30333), (60, 30285), (69, 30237), (72, 30198),

Gene: PickleBack_39 Start: 30660, Stop: 30274, Start Num: 28

Candidate Starts for PickleBack_39:

(Start: 28 @30660 has 67 MA's), (30, 30612), (31, 30609), (40, 30534), (48, 30468), (50, 30459), (60, 30411), (69, 30363), (72, 30324),

Gene: Polyphemus_70 Start: 40393, Stop: 40037, Start Num: 29

Candidate Starts for Polyphemus_70:

(11, 40471), (Start: 29 @40393 has 6 MA's), (43, 40249), (50, 40192), (66, 40123), (71, 40096), (75, 40069), (78, 40048),

Gene: Poochiewood_40 Start: 33534, Stop: 33929, Start Num: 18

Candidate Starts for Poochiewood_40:

(14, 33519), (Start: 18 @33534 has 19 MA's), (52, 33792), (54, 33801), (69, 33861), (76, 33906),

Gene: Prinashel1_40 Start: 30826, Stop: 30440, Start Num: 28

Candidate Starts for Prinashel1_40:

(Start: 28 @30826 has 67 MA's), (30, 30778), (31, 30775), (40, 30700), (48, 30634), (50, 30625), (59, 30580), (60, 30577), (69, 30529), (72, 30490),

Gene: Quby_41 Start: 33594, Stop: 33953, Start Num: 24

Candidate Starts for Quby_41:

(Start: 24 @33594 has 3 MA's), (Start: 27 @33603 has 1 MA's), (52, 33822), (54, 33831), (66, 33882),

Gene: Ravana_50 Start: 30731, Stop: 30372, Start Num: 28

Candidate Starts for Ravana_50:

(Start: 28 @30731 has 67 MA's), (75, 30407),

Gene: ReMo_47 Start: 30100, Stop: 29741, Start Num: 28

Candidate Starts for ReMo_47:

(Start: 25 @30103 has 1 MA's), (Start: 28 @30100 has 67 MA's), (39, 29992), (75, 29776),

Gene: Red305_41 Start: 35163, Stop: 35558, Start Num: 16

Candidate Starts for Red305_41:

(Start: 16 @35163 has 19 MA's), (26, 35199), (Start: 27 @35205 has 1 MA's), (46, 35388), (47, 35394), (52, 35427), (69, 35496), (76, 35541),

Gene: Remus_48 Start: 30019, Stop: 29660, Start Num: 28

Candidate Starts for Remus_48:

(1, 30424), (2, 30421), (4, 30337), (Start: 28 @30019 has 67 MA's), (39, 29911), (75, 29695),

Gene: Roary_44 Start: 30866, Stop: 30564, Start Num: 28

Candidate Starts for Roary_44:

(Start: 28 @30866 has 67 MA's), (39, 30755), (41, 30746), (56, 30653), (67, 30602), (70, 30581),

Gene: Rosalind_73 Start: 41184, Stop: 40768, Start Num: 22

Candidate Starts for Rosalind_73:

(Start: 13 @41214 has 1 MA's), (Start: 22 @41184 has 10 MA's), (Start: 24 @41172 has 3 MA's), (33, 41082), (37, 41055), (60, 40899), (72, 40818),

Gene: Rosalind_47 Start: 30222, Stop: 29863, Start Num: 28

Candidate Starts for Rosalind_47:

(2, 30624), (4, 30540), (Start: 28 @30222 has 67 MA's), (39, 30114), (75, 29898),

Gene: Rose5_40 Start: 33548, Stop: 33943, Start Num: 18

Candidate Starts for Rose5_40:

(14, 33533), (Start: 18 @33548 has 19 MA's), (52, 33806), (54, 33815), (69, 33875), (76, 33920),

Gene: Rossetti_44 Start: 35454, Stop: 35816, Start Num: 23

Candidate Starts for Rossetti_44:

(Start: 23 @35454 has 31 MA's), (Start: 24 @35457 has 3 MA's), (52, 35685), (54, 35694),

Gene: Rumpelstiltskin_43 Start: 35173, Stop: 35535, Start Num: 23

Candidate Starts for Rumpelstiltskin_43:

(Start: 23 @35173 has 31 MA's), (52, 35404), (54, 35413),

Gene: Samty_41 Start: 35164, Stop: 35559, Start Num: 16

Candidate Starts for Samty_41:

(Start: 16 @35164 has 19 MA's), (26, 35200), (Start: 27 @35206 has 1 MA's), (46, 35389), (47, 35395), (52, 35428), (69, 35497), (76, 35542),

Gene: Sarshaun_43 Start: 34940, Stop: 35302, Start Num: 23

Candidate Starts for Sarshaun_43:

(Start: 23 @34940 has 31 MA's), (52, 35171), (54, 35180),

Gene: Scorpia_43 Start: 30792, Stop: 30412, Start Num: 28

Candidate Starts for Scorpia_43:

(Start: 28 @30792 has 67 MA's), (30, 30744), (31, 30741), (40, 30666), (48, 30600), (58, 30552), (60, 30543), (64, 30516), (72, 30462), (79, 30429),

Gene: ShayRa_49 Start: 30304, Stop: 29945, Start Num: 28

Candidate Starts for ShayRa_49:

(Start: 25 @30307 has 1 MA's), (Start: 28 @30304 has 67 MA's), (39, 30196), (75, 29980),

Gene: ShayRa_75 Start: 41213, Stop: 40797, Start Num: 22

Candidate Starts for ShayRa_75:

(Start: 13 @41243 has 1 MA's), (Start: 22 @41213 has 10 MA's), (Start: 24 @41201 has 3 MA's), (33, 41111), (37, 41084), (60, 40928), (72, 40847),

Gene: Sheng711_41 Start: 33700, Stop: 34059, Start Num: 24

Candidate Starts for Sheng711_41:

(Start: 24 @33700 has 3 MA's), (Start: 27 @33709 has 1 MA's), (52, 33928), (54, 33937), (66, 33988),

Gene: Silverleaf_40 Start: 33548, Stop: 33943, Start Num: 18

Candidate Starts for Silverleaf_40:

(14, 33533), (Start: 18 @33548 has 19 MA's), (52, 33806), (54, 33815), (69, 33875), (76, 33920),

Gene: Smeadley_44 Start: 31032, Stop: 30730, Start Num: 28

Candidate Starts for Smeadley_44:

(Start: 28 @31032 has 67 MA's), (39, 30921), (41, 30912), (56, 30819), (67, 30768), (70, 30747),

Gene: Snenia_41 Start: 35164, Stop: 35559, Start Num: 16

Candidate Starts for Snenia_41:

(Start: 16 @35164 has 19 MA's), (26, 35200), (Start: 27 @35206 has 1 MA's), (46, 35389), (47, 35395), (52, 35428), (69, 35497), (76, 35542),

Gene: SoJulia_44 Start: 35166, Stop: 35528, Start Num: 23

Candidate Starts for SoJulia_44:

(Start: 23 @35166 has 31 MA's), (52, 35397), (54, 35406),

Gene: Soap141_43 Start: 34940, Stop: 35302, Start Num: 23

Candidate Starts for Soap141_43:

(Start: 23 @34940 has 31 MA's), (52, 35171), (54, 35180),

Gene: Soups_48 Start: 30303, Stop: 29944, Start Num: 28

Candidate Starts for Soups_48:

(Start: 25 @30306 has 1 MA's), (Start: 28 @30303 has 67 MA's), (39, 30195), (75, 29979),

Gene: Soups_75 Start: 41477, Stop: 41061, Start Num: 22

Candidate Starts for Soups_75:

(Start: 13 @41507 has 1 MA's), (Start: 22 @41477 has 10 MA's), (Start: 24 @41465 has 3 MA's), (33, 41375), (37, 41348), (60, 41192), (72, 41111),

Gene: Stellammi_92 Start: 44459, Stop: 44845, Start Num: 22

Candidate Starts for Stellammi_92:

(Start: 22 @44459 has 10 MA's), (32, 44537), (35, 44564), (36, 44582), (42, 44630), (49, 44690), (54, 44711), (77, 44828),

Gene: Stephig9_44 Start: 30891, Stop: 30589, Start Num: 28

Candidate Starts for Stephig9_44:

(Start: 28 @30891 has 67 MA's), (39, 30780), (41, 30771), (56, 30678), (67, 30627), (70, 30606),

Gene: Strosahl_48 Start: 30019, Stop: 29660, Start Num: 28

Candidate Starts for Strosahl_48:

(1, 30424), (2, 30421), (4, 30337), (Start: 28 @30019 has 67 MA's), (39, 29911), (75, 29695),

Gene: SuperAwesome_68 Start: 40045, Stop: 39689, Start Num: 29

Candidate Starts for SuperAwesome_68:

(11, 40123), (Start: 29 @40045 has 6 MA's), (43, 39901), (50, 39844), (66, 39775), (71, 39748), (75, 39721), (78, 39700),

Gene: Swirley_42 Start: 31327, Stop: 30941, Start Num: 28

Candidate Starts for Swirley_42:

(Start: 28 @31327 has 67 MA's), (30, 31279), (40, 31201), (48, 31135), (50, 31126), (60, 31078), (69, 31030), (72, 30991),

Gene: Switzerland_48 Start: 30402, Stop: 30043, Start Num: 28

Candidate Starts for Switzerland_48:

(2, 30804), (4, 30720), (Start: 28 @30402 has 67 MA's), (39, 30294), (75, 30078),

Gene: Switzerland_74 Start: 41352, Stop: 40936, Start Num: 22

Candidate Starts for Switzerland_74:

(Start: 13 @41382 has 1 MA's), (Start: 22 @41352 has 10 MA's), (Start: 24 @41340 has 3 MA's), (33, 41250), (37, 41223), (60, 41067), (72, 40986),

Gene: SydNat_41 Start: 31517, Stop: 31131, Start Num: 28

Candidate Starts for SydNat_41:

(Start: 28 @31517 has 67 MA's), (30, 31469), (31, 31466), (40, 31391), (48, 31325), (50, 31316), (60, 31268), (69, 31220), (72, 31181),

Gene: Tarynearal_38 Start: 30769, Stop: 30383, Start Num: 28

Candidate Starts for Tarynearal_38:

(Start: 28 @30769 has 67 MA's), (30, 30721), (40, 30643), (48, 30577), (50, 30568), (59, 30523), (60, 30520), (69, 30472), (72, 30433),

Gene: Theia_37 Start: 30792, Stop: 30406, Start Num: 28

Candidate Starts for Theia_37:

(Start: 28 @30792 has 67 MA's), (30, 30744), (31, 30741), (40, 30666), (48, 30600), (50, 30591), (60, 30543), (69, 30495), (72, 30456),

Gene: Tiger_38 Start: 30325, Stop: 29939, Start Num: 28

Candidate Starts for Tiger_38:

(Start: 28 @30325 has 67 MA's), (30, 30277), (31, 30274), (40, 30199), (48, 30133), (50, 30124), (60, 30076), (69, 30028), (72, 29989),

Gene: TriFive_41 Start: 35163, Stop: 35558, Start Num: 16

Candidate Starts for TriFive_41:

(Start: 16 @35163 has 19 MA's), (26, 35199), (Start: 27 @35205 has 1 MA's), (46, 35388), (47, 35394), (52, 35427), (69, 35496), (76, 35541),

Gene: Twigg_40 Start: 30966, Stop: 30580, Start Num: 28

Candidate Starts for Twigg_40:

(Start: 28 @30966 has 67 MA's), (30, 30918), (31, 30915), (40, 30840), (48, 30774), (50, 30765), (60, 30717), (69, 30669), (72, 30630),

Gene: Tyson_40 Start: 33549, Stop: 33944, Start Num: 18

Candidate Starts for Tyson_40:

(14, 33534), (Start: 18 @33549 has 19 MA's), (52, 33807), (54, 33816), (69, 33876), (76, 33921),

Gene: UPIE_41 Start: 33532, Stop: 33927, Start Num: 18

Candidate Starts for UPIE_41:

(14, 33517), (Start: 18 @33532 has 19 MA's), (52, 33790), (54, 33799), (69, 33859), (76, 33904),

Gene: Underpass_43 Start: 34907, Stop: 35269, Start Num: 23

Candidate Starts for Underpass_43:

(Start: 23 @34907 has 31 MA's), (52, 35138), (54, 35147),

Gene: UnionJack_40 Start: 30292, Stop: 29903, Start Num: 28

Candidate Starts for UnionJack_40:

(Start: 28 @30292 has 67 MA's), (30, 30244), (31, 30241), (40, 30166), (50, 30091), (60, 30043), (62, 30034), (72, 29953),

Gene: Vetrix_43 Start: 34913, Stop: 35275, Start Num: 23

Candidate Starts for Vetrix_43:

(Start: 23 @34913 has 31 MA's), (52, 35144), (54, 35153),

Gene: Waits_48 Start: 30191, Stop: 29832, Start Num: 28

Candidate Starts for Waits_48:

(2, 30593), (4, 30509), (Start: 28 @30191 has 67 MA's), (39, 30083), (75, 29867),

Gene: Wamburgexpress_41 Start: 33547, Stop: 33942, Start Num: 18

Candidate Starts for Wamburgexpress_41:

(14, 33532), (Start: 18 @33547 has 19 MA's), (52, 33805), (54, 33814), (69, 33874), (76, 33919),

Gene: Warrior24_49 Start: 30398, Stop: 30039, Start Num: 28

Candidate Starts for Warrior24_49:

(2, 30803), (4, 30719), (5, 30716), (Start: 28 @30398 has 67 MA's), (37, 30308), (38, 30299), (44, 30260), (75, 30074),

Gene: Whirlwind_42 Start: 34922, Stop: 35317, Start Num: 16

Candidate Starts for Whirlwind_42:

(Start: 16 @34922 has 19 MA's), (46, 35147), (47, 35153), (52, 35186), (69, 35255), (76, 35300),

Gene: Wigglewobble_43 Start: 34939, Stop: 35301, Start Num: 23

Candidate Starts for Wigglewobble_43:

(Start: 23 @34939 has 31 MA's), (52, 35170), (54, 35179),

Gene: Wilder_43 Start: 34912, Stop: 35274, Start Num: 23

Candidate Starts for Wilder_43:

(Start: 23 @34912 has 31 MA's), (52, 35143), (54, 35152),

Gene: Winky_43 Start: 34906, Stop: 35268, Start Num: 23

Candidate Starts for Winky_43:

(Start: 23 @34906 has 31 MA's), (52, 35137), (54, 35146),

Gene: Wyatt2_41 Start: 33548, Stop: 33943, Start Num: 18

Candidate Starts for Wyatt2_41:

(14, 33533), (Start: 18 @33548 has 19 MA's), (52, 33806), (54, 33815), (69, 33875), (76, 33920),

Gene: Zakai_43 Start: 35164, Stop: 35526, Start Num: 23

Candidate Starts for Zakai_43:

(Start: 23 @35164 has 31 MA's), (52, 35395), (54, 35404),

Gene: Zaria_41 Start: 33563, Stop: 33958, Start Num: 18

Candidate Starts for Zaria_41:

(14, 33548), (Start: 18 @33563 has 19 MA's), (52, 33821), (54, 33830), (69, 33890), (76, 33935),

Gene: ZhongYanYuan_41 Start: 34767, Stop: 35129, Start Num: 23

Candidate Starts for ZhongYanYuan_41:

(Start: 23 @34767 has 31 MA's), (52, 34998), (54, 35007),

Gene: Zolita_40 Start: 31521, Stop: 31135, Start Num: 28

Candidate Starts for Zolita_40:

(Start: 28 @31521 has 67 MA's), (30, 31473), (31, 31470), (40, 31395), (48, 31329), (50, 31320), (60, 31272), (69, 31224), (72, 31185),