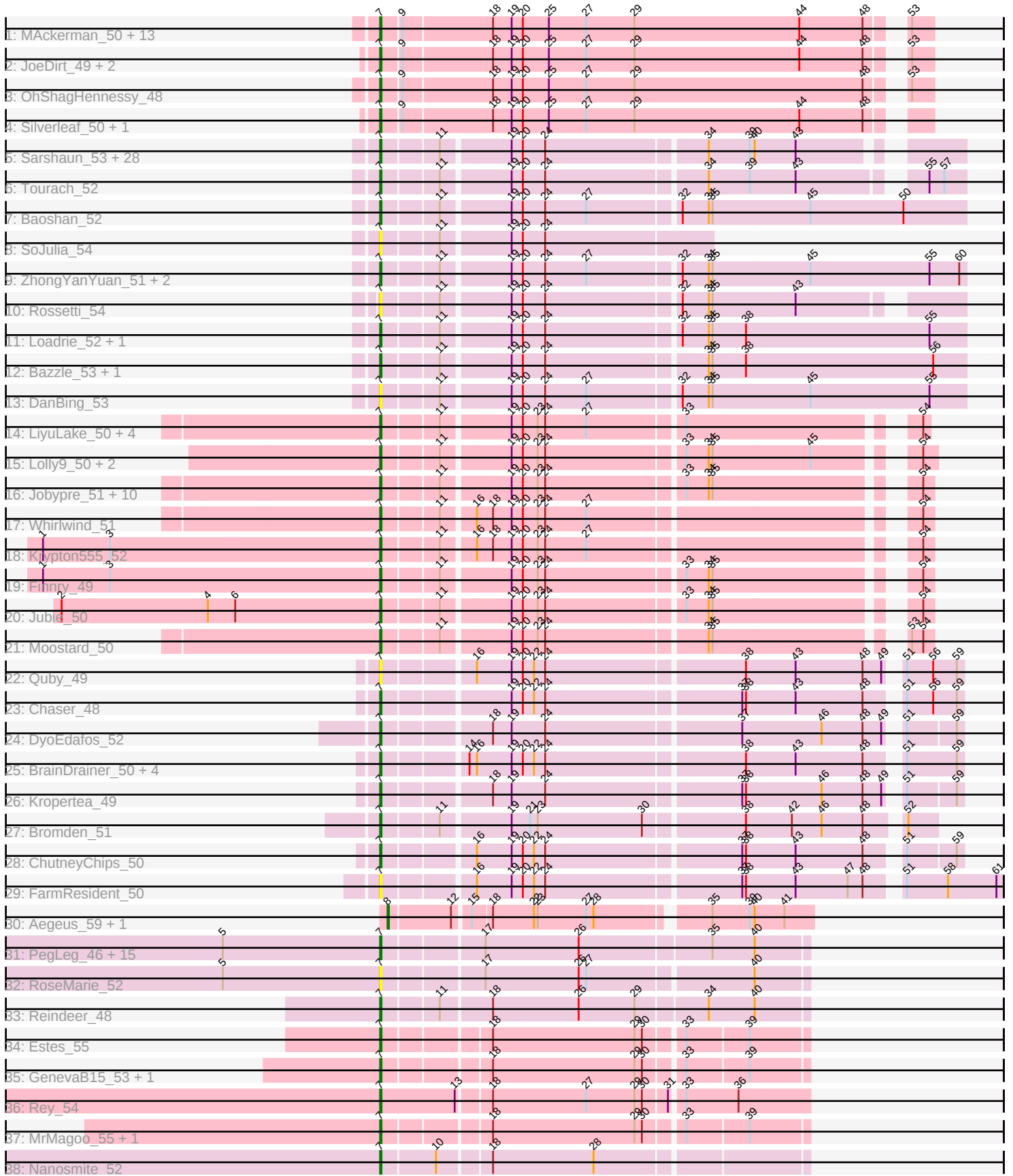


Pham 317316



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 317316 Report

This analysis was run 09/05/26 on database version 662.

Pham number 317316 has 124 members, 26 are drafts.

Phages represented in each track:

- Track 1 : MAckerman_50, Halena_49, Poochiewood_50, DirkDirk_49, Wamburgexpress_50, Calm_51, CicholasNage_50, Wyatt2_51, Acquire49_51, Rose5_50, Tyson_50, UPIE_50, Zaria_51, Enceladus_49
- Track 2 : JoeDirt_49, Appletree2_49, LeBron_50
- Track 3 : OhShagHennessy_48
- Track 4 : Silverleaf_50, AvadaKedavra_50
- Track 5 : Sarshaun_53, Wigglewiggles_53, Kahlid_53, Zakai_53, Hafay_54, Vetrix_53, Crossroads_53, Hiraya_53, Soap141_53, Nicholasp3_53, Itos_52, Winky_53, Lynnae_54, GuuelaD_52, Breezonia_53, Finemlucis_53, BobsGarage_53, Gardann_53, Netyap_54, Wilder_53, Rumpelstiltskin_52, BigCheese_53, Faith1_53, MkaliMitinis3_54, Miley16_53, ChengKai98_53, LilDestine_53, DrSeegs_53, Lewan_54
- Track 6 : Tourach_52
- Track 7 : Baoshan_52
- Track 8 : SoJulia_54
- Track 9 : ZhongYanYuan_51, Claus_53, DHan_54
- Track 10 : Rossetti_54
- Track 11 : Loadie_52, OverPar_53
- Track 12 : Bazzle_53, Archie_53
- Track 13 : DanBing_53
- Track 14 : LiyuLake_50, BourbonZero_51, Ellson_50, KirDoubleO7_49, DuncansLeg_50
- Track 15 : Lolly9_50, MiniLon_52, MiniMac_52
- Track 16 : Jobypre_51, Samty_50, MsGreen_50, Red305_51, Clautastrophe_50, Kingsolomon_50, Lumos_51, Bellis_50, Snenia_50, TriFive_51, Nicholas_50
- Track 17 : Whirlwind_51
- Track 18 : Krypton555_52
- Track 19 : Finnry_49
- Track 20 : Jubie_50
- Track 21 : Moostard_50
- Track 22 : Quby_49
- Track 23 : Chaser_48
- Track 24 : DyoEdafos_52
- Track 25 : BrainDrainer_50, PYPDinur_48, Douzhi_50, Sheng711_50, Douge_49
- Track 26 : Kropertea_49
- Track 27 : Bromden_51
- Track 28 : ChutneyChips_50

- Track 29 : FarmResident_50
- Track 30 : Aegeus_59, Baudelaire_59
- Track 31 : PegLeg_46, LilhomieP_45, Diminimus_47, Bongo_46, SlimJimmy_45, Auspice_46, Dulcita_47, Bricole_46, IPHane7_46, FreakyGoo_47, Izel_47, TpudiCK_48, TyDawg_46, Glaske16_47, KleverKiS_47, Skinny_47
- Track 32 : RoseMarie_52
- Track 33 : Reindeer_48
- Track 34 : Estes_55
- Track 35 : GenevaB15_53, Aziz_53
- Track 36 : Rey_54
- Track 37 : MrMagoo_55, GardenSalsa_55
- Track 38 : Nanosmite_52

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

The start number called the most often in the published annotations is 7, it was called in 96 of the 98 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_51, Appletree2_49, Archie_53, Auspice_46, AvadaKedavra_50, Aziz_53, Baoshan_52, Bazzle_53, Bellis_50, BigCheese_53, BobsGarage_53, Bongo_46, BourbonZero_51, BrainDrainer_50, Breezona_53, Bricole_46, Bromden_51, Calm_51, Chaser_48, ChengKai98_53, ChutneyChips_50, CicholasNage_50, Claus_53, Clautastrophe_50, Crossroads_53, DHan_54, DanBing_53, Diminimus_47, DirkDirk_49, Douge_49, Douzhi_50, DrSeegs_53, Dulcita_47, DuncansLeg_50, DyoEdafos_52, Ellson_50, Enceladus_49, Estes_55, Faith1_53, FarmResident_50, Finemlucis_53, Finnry_49, FreakyGoo_47, Gardann_53, GardenSalsa_55, GenevaB15_53, Glaske16_47, GuuelaD_52, Hafay_54, Halena_49, Hiraya_53, IPHane7_46, Itos_52, Izel_47, Jobypre_51, JoeDirt_49, Jubie_50, Kahlid_53, Kingsolomon_50, KirDoubleO7_49, KleverKiS_47, Kropertea_49, Krypton555_52, LeBron_50, Lewan_54, LilDestine_53, LilhomieP_45, LiyuLake_50, Loadrie_52, Lolly9_50, Lumos_51, Lynnae_54, MAckerman_50, Miley16_53, MiniLon_52, MiniMac_52, MkaliMitinis3_54, Moostard_50, MrMagoo_55, MsGreen_50, Nanosmite_52, Netyap_54, Nicholas_50, Nicholasp3_53, OhShagHennessy_48, OverPar_53, PYPDinur_48, PegLeg_46, Poochiewood_50, Quby_49, Red305_51, Reindeer_48, Rey_54, Rose5_50, RoseMarie_52, Rossetti_54, Rumpelstiltskin_52, Samty_50, Sarshaun_53, Sheng711_50, Silverleaf_50, Skinny_47, SlimJimmy_45, Snenia_50, SoJulia_54, Soap141_53, Tourach_52, TpudiCK_48, TriFive_51, TyDawg_46, Tyson_50, UPIE_50, Vetrix_53, Wamburgxpress_50, Whirlwind_51, Wigglewiggles_53, Wilder_53, Winky_53, Wyatt2_51, Zakai_53, Zaria_51, ZhongYanYuan_51,

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

-

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

- Aegeus_59, Baudelaire_59,

Summary by start number:

Start 7:

- Found in 122 of 124 (98.4%) of genes in pham
- Manual Annotations of this start: 96 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49_51 (L1), Appletree2_49 (L1), Archie_53 (L2), Auspice_46 (M1), AvadaKedavra_50 (L1), Aziz_53 (M2), Baoshan_52 (L2), Bazzle_53 (L2), Bellis_50 (L3), BigCheese_53 (L2), BobsGarage_53 (L2), Bongo_46 (M1), BourbonZero_51 (L3), BrainDrainer_50 (L4), Breezona_53 (L2), Bricole_46 (M1), Bromden_51 (L4), Calm_51 (L1), Chaser_48 (L4), ChengKai98_53 (L2), ChutneyChips_50 (L4), CicholasNage_50 (L1), Claus_53 (L2), Clautastrophe_50 (L3), Crossroads_53 (L2), DHan_54 (L2), DanBing_53 (L2), Diminimus_47 (M1), DirkDirk_49 (L1), Douge_49 (L4), Douzhi_50 (L4), DrSeegs_53 (L2), Dulcita_47 (M1), DuncansLeg_50 (L3), DyoEdafos_52 (L4), Ellson_50 (L3), Enceladus_49 (L1), Estes_55 (M2), Faith1_53 (L2), FarmResident_50 (L4), Finemlucis_53 (L2), Finnry_49 (L3), FreakyGoo_47 (M1), Gardann_53 (L2), GardenSalsa_55 (M2), GenevaB15_53 (M2), Glaske16_47 (M1), GuuelaD_52 (L2), Hafay_54 (L2), Halena_49 (L1), Hiraya_53 (L2), IPHane7_46 (M1), Itos_52 (L2), Izel_47 (M1), Jobypre_51 (L3), JoeDirt_49 (L1), Jubie_50 (L3), Kahlid_53 (L2), Kingsolomon_50 (L3), KirDoubleO7_49 (L3), KleverKiS_47 (M1), Kropertea_49 (L4), Krypton555_52 (L3), LeBron_50 (L1), Lewan_54 (L2), LilDestine_53 (L2), LilhomieP_45 (M1), LiyuLake_50 (L3), Loadie_52 (L2), Lolly9_50 (L3), Lumos_51 (L3), Lynnae_54 (L2), MACKerman_50 (L1), Miley16_53 (L2), MiniLon_52 (L3), MiniMac_52 (L3), MkaliMitinis3_54 (L2), Moostard_50 (L3), MrMagoo_55 (M2), MsGreen_50 (L3), Nanosmite_52 (M3), Netyap_54 (L2), Nicholas_50 (L3), Nicholasp3_53 (L2), OhShagHennessey_48 (L1), OverPar_53 (L2), PYPDinur_48 (L4), PegLeg_46 (M1), Poochiewood_50 (L1), Quby_49 (L4), Red305_51 (L3), Reindeer_48 (M1), Rey_54 (M2), Rose5_50 (L1), RoseMarie_52 (M1), Rossetti_54 (L2), Rumpelstiltskin_52 (L2), Samty_50 (L3), Sarshaun_53 (L2), Sheng711_50 (L4), Silverleaf_50 (L1), Skinny_47 (M1), SlimJimmy_45 (M1), Snenia_50 (L3), SoJulia_54 (L2), Soap141_53 (L2), Tourach_52 (L2), TpudiCK_48 (M1), TriFive_51 (L3), TyDawg_46 (M1), Tyson_50 (L1), UPIE_50 (L1), Vetrix_53 (L2), Wamburgxpress_50 (L1), Whirlwind_51 (L3), Wigglewiggle_53 (L2), Wilder_53 (L2), Winky_53 (L2), Wyatt2_51 (L1), Zakai_53 (L2), Zaria_51 (L1), ZhongYanYuan_51 (L2),

Start 8:

- Found in 2 of 124 (1.6%) 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: Aegeus_59 (L5), Baudelaire_59 (L5),

Summary by clusters:

There are 8 clusters represented in this pham: L1, L4, L5, M1, L3, M3, M2, L2,

Info for manual annotations of cluster L1:

- Start number 7 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 7 was manually annotated 30 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 7 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 7 was manually annotated 6 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 8 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:

- Start number 7 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 7 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 7 was manually annotated 1 time for cluster M3.

Gene Information:

Gene: Acquire49_51 Start: 38005, Stop: 38421, Start Num: 7

Candidate Starts for Acquire49_51:

(Start: 7 @38005 has 96 MA's), (9, 38020), (18, 38089), (19, 38104), (20, 38113), (25, 38134), (27, 38164), (29, 38203), (44, 38335), (48, 38386), (53, 38404),

Gene: Aegeus_59 Start: 41204, Stop: 41521, Start Num: 8

Candidate Starts for Aegeus_59:

(Start: 8 @41204 has 2 MA's), (12, 41252), (15, 41264), (18, 41279), (22, 41312), (23, 41315), (27, 41354), (28, 41360), (35, 41441), (39, 41471), (40, 41474), (41, 41498),

Gene: Appletree2_49 Start: 37838, Stop: 38254, Start Num: 7

Candidate Starts for Appletree2_49:

(Start: 7 @37838 has 96 MA's), (9, 37853), (18, 37922), (19, 37937), (20, 37946), (25, 37967), (27, 37997), (29, 38036), (44, 38168), (48, 38219), (53, 38237),

Gene: Archie_53 Start: 39956, Stop: 40405, Start Num: 7

Candidate Starts for Archie_53:

(Start: 7 @39956 has 96 MA's), (11, 39998), (19, 40049), (20, 40058), (24, 40076), (34, 40199), (35, 40202), (38, 40229), (56, 40379),

Gene: Auspice_46 Start: 35134, Stop: 34808, Start Num: 7

Candidate Starts for Auspice_46:

(5, 35260), (Start: 7 @35134 has 96 MA's), (17, 35059), (26, 34984), (35, 34882), (40, 34849),

Gene: AvadaKedavra_50 Start: 37907, Stop: 38323, Start Num: 7

Candidate Starts for AvadaKedavra_50:

(Start: 7 @37907 has 96 MA's), (9, 37922), (18, 37991), (19, 38006), (20, 38015), (25, 38036), (27, 38066), (29, 38105), (44, 38237), (48, 38288),

Gene: Aziz_53 Start: 37071, Stop: 36754, Start Num: 7

Candidate Starts for Aziz_53:

(Start: 7 @37071 has 96 MA's), (18, 36993), (29, 36879), (30, 36873), (33, 36846), (39, 36798),

Gene: Baoshan_52 Start: 39640, Stop: 40089, Start Num: 7

Candidate Starts for Baoshan_52:

(Start: 7 @39640 has 96 MA's), (11, 39682), (19, 39733), (20, 39742), (24, 39760), (27, 39793), (32, 39862), (34, 39883), (35, 39886), (45, 39964), (50, 40039),

Gene: Baudelaire_59 Start: 41204, Stop: 41521, Start Num: 8

Candidate Starts for Baudelaire_59:

(Start: 8 @41204 has 2 MA's), (12, 41252), (15, 41264), (18, 41279), (22, 41312), (23, 41315), (27, 41354), (28, 41360), (35, 41441), (39, 41471), (40, 41474), (41, 41498),

Gene: Bazzle_53 Start: 40026, Stop: 40475, Start Num: 7

Candidate Starts for Bazzle_53:

(Start: 7 @40026 has 96 MA's), (11, 40068), (19, 40119), (20, 40128), (24, 40146), (34, 40269), (35, 40272), (38, 40299), (56, 40449),

Gene: Bellis_50 Start: 39683, Stop: 40078, Start Num: 7

Candidate Starts for Bellis_50:

(Start: 7 @39683 has 96 MA's), (11, 39725), (19, 39776), (20, 39785), (23, 39797), (24, 39803), (33, 39908), (34, 39926), (35, 39929), (54, 40070),

Gene: BigCheese_53 Start: 39745, Stop: 40164, Start Num: 7

Candidate Starts for BigCheese_53:

(Start: 7 @39745 has 96 MA's), (11, 39787), (19, 39838), (20, 39847), (24, 39865), (34, 39988), (39, 40021), (40, 40024), (43, 40057),

Gene: BobsGarage_53 Start: 39745, Stop: 40164, Start Num: 7

Candidate Starts for BobsGarage_53:

(Start: 7 @39745 has 96 MA's), (11, 39787), (19, 39838), (20, 39847), (24, 39865), (34, 39988), (39, 40021), (40, 40024), (43, 40057),

Gene: Bongo_46 Start: 35134, Stop: 34808, Start Num: 7

Candidate Starts for Bongo_46:

(5, 35260), (Start: 7 @35134 has 96 MA's), (17, 35059), (26, 34984), (35, 34882), (40, 34849),

Gene: BourbonZero_51 Start: 39723, Stop: 40115, Start Num: 7

Candidate Starts for BourbonZero_51:

(Start: 7 @39723 has 96 MA's), (11, 39765), (19, 39816), (20, 39825), (23, 39837), (24, 39843), (27, 39876), (33, 39948), (54, 40110),

Gene: BrainDrainer_50 Start: 38369, Stop: 38800, Start Num: 7

Candidate Starts for BrainDrainer_50:

(Start: 7 @38369 has 96 MA's), (14, 38429), (16, 38435), (19, 38462), (20, 38471), (22, 38480), (24, 38489), (38, 38642), (43, 38681), (48, 38735), (51, 38756), (59, 38795),

Gene: Breezona_53 Start: 39745, Stop: 40164, Start Num: 7

Candidate Starts for Breezona_53:

(Start: 7 @39745 has 96 MA's), (11, 39787), (19, 39838), (20, 39847), (24, 39865), (34, 39988), (39, 40021), (40, 40024), (43, 40057),

Gene: Bricole_46 Start: 35120, Stop: 34794, Start Num: 7

Candidate Starts for Bricole_46:

(5, 35246), (Start: 7 @35120 has 96 MA's), (17, 35045), (26, 34970), (35, 34868), (40, 34835),

Gene: Bromden_51 Start: 39185, Stop: 39598, Start Num: 7

Candidate Starts for Bromden_51:

(Start: 7 @39185 has 96 MA's), (11, 39227), (19, 39278), (21, 39293), (23, 39299), (30, 39383), (38, 39458), (42, 39494), (46, 39518), (48, 39551), (52, 39575),

Gene: Calm_51 Start: 38020, Stop: 38436, Start Num: 7

Candidate Starts for Calm_51:

(Start: 7 @38020 has 96 MA's), (9, 38035), (18, 38104), (19, 38119), (20, 38128), (25, 38149), (27, 38179), (29, 38218), (44, 38350), (48, 38401), (53, 38419),

Gene: Chaser_48 Start: 38128, Stop: 38559, Start Num: 7

Candidate Starts for Chaser_48:

(Start: 7 @38128 has 96 MA's), (19, 38221), (20, 38230), (22, 38239), (24, 38248), (37, 38398), (38, 38401), (43, 38440), (48, 38494), (51, 38515), (56, 38536), (59, 38554),

Gene: ChengKai98_53 Start: 39780, Stop: 40199, Start Num: 7

Candidate Starts for ChengKai98_53:

(Start: 7 @39780 has 96 MA's), (11, 39822), (19, 39873), (20, 39882), (24, 39900), (34, 40023), (39, 40056), (40, 40059), (43, 40092),

Gene: ChutneyChips_50 Start: 38531, Stop: 38959, Start Num: 7

Candidate Starts for ChutneyChips_50:

(Start: 7 @38531 has 96 MA's), (16, 38597), (19, 38624), (20, 38633), (22, 38642), (24, 38651), (37, 38801), (38, 38804), (43, 38843), (48, 38897), (51, 38918), (59, 38954),

Gene: CicholasNage_50 Start: 38041, Stop: 38457, Start Num: 7

Candidate Starts for CicholasNage_50:

(Start: 7 @38041 has 96 MA's), (9, 38056), (18, 38125), (19, 38140), (20, 38149), (25, 38170), (27, 38200), (29, 38239), (44, 38371), (48, 38422), (53, 38440),

Gene: Claus_53 Start: 39792, Stop: 40241, Start Num: 7

Candidate Starts for Claus_53:

(Start: 7 @39792 has 96 MA's), (11, 39834), (19, 39885), (20, 39894), (24, 39912), (27, 39945), (32, 40014), (34, 40035), (35, 40038), (45, 40116), (55, 40212), (60, 40236),

Gene: Clautastrophe_50 Start: 39680, Stop: 40075, Start Num: 7

Candidate Starts for Clautastrophe_50:

(Start: 7 @39680 has 96 MA's), (11, 39722), (19, 39773), (20, 39782), (23, 39794), (24, 39800), (33, 39905), (34, 39923), (35, 39926), (54, 40067),

Gene: Crossroads_53 Start: 39815, Stop: 40234, Start Num: 7

Candidate Starts for Crossroads_53:

(Start: 7 @39815 has 96 MA's), (11, 39857), (19, 39908), (20, 39917), (24, 39935), (34, 40058), (39, 40091), (40, 40094), (43, 40127),

Gene: DHan_54 Start: 39695, Stop: 40144, Start Num: 7

Candidate Starts for DHan_54:

(Start: 7 @39695 has 96 MA's), (11, 39737), (19, 39788), (20, 39797), (24, 39815), (27, 39848), (32, 39917), (34, 39938), (35, 39941), (45, 40019), (55, 40115), (60, 40139),

Gene: DanBing_53 Start: 39645, Stop: 40094, Start Num: 7

Candidate Starts for DanBing_53:

(Start: 7 @39645 has 96 MA's), (11, 39687), (19, 39738), (20, 39747), (24, 39765), (27, 39798), (32, 39867), (34, 39888), (35, 39891), (45, 39969), (55, 40065),

Gene: Diminimus_47 Start: 35133, Stop: 34807, Start Num: 7

Candidate Starts for Diminimus_47:

(5, 35259), (Start: 7 @35133 has 96 MA's), (17, 35058), (26, 34983), (35, 34881), (40, 34848),

Gene: DirkDirk_49 Start: 37884, Stop: 38300, Start Num: 7

Candidate Starts for DirkDirk_49:

(Start: 7 @37884 has 96 MA's), (9, 37899), (18, 37968), (19, 37983), (20, 37992), (25, 38013), (27, 38043), (29, 38082), (44, 38214), (48, 38265), (53, 38283),

Gene: Douge_49 Start: 38123, Stop: 38554, Start Num: 7

Candidate Starts for Douge_49:

(Start: 7 @38123 has 96 MA's), (14, 38183), (16, 38189), (19, 38216), (20, 38225), (22, 38234), (24, 38243), (38, 38396), (43, 38435), (48, 38489), (51, 38510), (59, 38549),

Gene: Douzhi_50 Start: 38197, Stop: 38628, Start Num: 7

Candidate Starts for Douzhi_50:

(Start: 7 @38197 has 96 MA's), (14, 38257), (16, 38263), (19, 38290), (20, 38299), (22, 38308), (24, 38317), (38, 38470), (43, 38509), (48, 38563), (51, 38584), (59, 38623),

Gene: DrSeegs_53 Start: 39745, Stop: 40164, Start Num: 7

Candidate Starts for DrSeegs_53:

(Start: 7 @39745 has 96 MA's), (11, 39787), (19, 39838), (20, 39847), (24, 39865), (34, 39988), (39, 40021), (40, 40024), (43, 40057),

Gene: Dulcita_47 Start: 35134, Stop: 34808, Start Num: 7

Candidate Starts for Dulcita_47:

(5, 35260), (Start: 7 @35134 has 96 MA's), (17, 35059), (26, 34984), (35, 34882), (40, 34849),

Gene: DuncansLeg_50 Start: 39706, Stop: 40098, Start Num: 7

Candidate Starts for DuncansLeg_50:

(Start: 7 @39706 has 96 MA's), (11, 39748), (19, 39799), (20, 39808), (23, 39820), (24, 39826), (27, 39859), (33, 39931), (54, 40093),

Gene: DyoEdafos_52 Start: 38404, Stop: 38832, Start Num: 7

Candidate Starts for DyoEdafos_52:

(Start: 7 @38404 has 96 MA's), (18, 38482), (19, 38497), (24, 38524), (37, 38674), (46, 38737), (48, 38770), (49, 38785), (51, 38791), (59, 38827),

Gene: Ellson_50 Start: 39736, Stop: 40128, Start Num: 7

Candidate Starts for Ellson_50:

(Start: 7 @39736 has 96 MA's), (11, 39778), (19, 39829), (20, 39838), (23, 39850), (24, 39856), (27, 39889), (33, 39961), (54, 40123),

Gene: Enceladus_49 Start: 37879, Stop: 38295, Start Num: 7

Candidate Starts for Enceladus_49:

(Start: 7 @37879 has 96 MA's), (9, 37894), (18, 37963), (19, 37978), (20, 37987), (25, 38008), (27, 38038), (29, 38077), (44, 38209), (48, 38260), (53, 38278),

Gene: Estes_55 Start: 37337, Stop: 37020, Start Num: 7

Candidate Starts for Estes_55:

(Start: 7 @37337 has 96 MA's), (18, 37259), (29, 37145), (30, 37139), (33, 37112), (39, 37064),

Gene: Faith1_53 Start: 39745, Stop: 40164, Start Num: 7

Candidate Starts for Faith1_53:

(Start: 7 @39745 has 96 MA's), (11, 39787), (19, 39838), (20, 39847), (24, 39865), (34, 39988), (39, 40021), (40, 40024), (43, 40057),

Gene: FarmResident_50 Start: 38125, Stop: 38589, Start Num: 7

Candidate Starts for FarmResident_50:

(Start: 7 @38125 has 96 MA's), (16, 38191), (19, 38218), (20, 38227), (22, 38236), (24, 38245), (37, 38395), (38, 38398), (43, 38437), (47, 38479), (48, 38491), (51, 38512), (58, 38545), (61, 38584),

Gene: Finemlucis_53 Start: 40066, Stop: 40485, Start Num: 7

Candidate Starts for Finemlucis_53:

(Start: 7 @40066 has 96 MA's), (11, 40108), (19, 40159), (20, 40168), (24, 40186), (34, 40309), (39, 40342), (40, 40345), (43, 40378),

Gene: Finnry_49 Start: 39945, Stop: 40340, Start Num: 7

Candidate Starts for Finnry_49:

(1, 39675), (3, 39729), (Start: 7 @39945 has 96 MA's), (11, 39987), (19, 40038), (20, 40047), (23, 40059), (24, 40065), (33, 40170), (34, 40188), (35, 40191), (54, 40332),

Gene: FreakyGoo_47 Start: 35134, Stop: 34808, Start Num: 7

Candidate Starts for FreakyGoo_47:

(5, 35260), (Start: 7 @35134 has 96 MA's), (17, 35059), (26, 34984), (35, 34882), (40, 34849),

Gene: Gardann_53 Start: 39781, Stop: 40200, Start Num: 7

Candidate Starts for Gardann_53:

(Start: 7 @39781 has 96 MA's), (11, 39823), (19, 39874), (20, 39883), (24, 39901), (34, 40024), (39, 40057), (40, 40060), (43, 40093),

Gene: GardenSalsa_55 Start: 37435, Stop: 37118, Start Num: 7

Candidate Starts for GardenSalsa_55:

(Start: 7 @37435 has 96 MA's), (18, 37357), (29, 37243), (30, 37237), (33, 37210), (39, 37162),

Gene: GenevaB15_53 Start: 37071, Stop: 36754, Start Num: 7

Candidate Starts for GenevaB15_53:

(Start: 7 @37071 has 96 MA's), (18, 36993), (29, 36879), (30, 36873), (33, 36846), (39, 36798),

Gene: Glaske16_47 Start: 35133, Stop: 34807, Start Num: 7

Candidate Starts for Glaske16_47:

(5, 35259), (Start: 7 @35133 has 96 MA's), (17, 35058), (26, 34983), (35, 34881), (40, 34848),

Gene: GuuelaD_52 Start: 39852, Stop: 40271, Start Num: 7

Candidate Starts for GuuelaD_52:

(Start: 7 @39852 has 96 MA's), (11, 39894), (19, 39945), (20, 39954), (24, 39972), (34, 40095), (39, 40128), (40, 40131), (43, 40164),

Gene: Hafay_54 Start: 39849, Stop: 40268, Start Num: 7

Candidate Starts for Hafay_54:

(Start: 7 @39849 has 96 MA's), (11, 39891), (19, 39942), (20, 39951), (24, 39969), (34, 40092), (39, 40125), (40, 40128), (43, 40161),

Gene: Halena_49 Start: 37921, Stop: 38337, Start Num: 7

Candidate Starts for Halena_49:

(Start: 7 @37921 has 96 MA's), (9, 37936), (18, 38005), (19, 38020), (20, 38029), (25, 38050), (27, 38080), (29, 38119), (44, 38251), (48, 38302), (53, 38320),

Gene: Hiraya_53 Start: 39816, Stop: 40235, Start Num: 7

Candidate Starts for Hiraya_53:

(Start: 7 @39816 has 96 MA's), (11, 39858), (19, 39909), (20, 39918), (24, 39936), (34, 40059), (39, 40092), (40, 40095), (43, 40128),

Gene: IPhone7_46 Start: 35134, Stop: 34808, Start Num: 7

Candidate Starts for IPhone7_46:

(5, 35260), (Start: 7 @35134 has 96 MA's), (17, 35059), (26, 34984), (35, 34882), (40, 34849),

Gene: Itos_52 Start: 38651, Stop: 39070, Start Num: 7

Candidate Starts for Itos_52:

(Start: 7 @38651 has 96 MA's), (11, 38693), (19, 38744), (20, 38753), (24, 38771), (34, 38894), (39, 38927), (40, 38930), (43, 38963),

Gene: Izel_47 Start: 35133, Stop: 34807, Start Num: 7

Candidate Starts for Izel_47:

(5, 35259), (Start: 7 @35133 has 96 MA's), (17, 35058), (26, 34983), (35, 34881), (40, 34848),

Gene: Jobypre_51 Start: 39680, Stop: 40075, Start Num: 7

Candidate Starts for Jobypre_51:

(Start: 7 @39680 has 96 MA's), (11, 39722), (19, 39773), (20, 39782), (23, 39794), (24, 39800), (33, 39905), (34, 39923), (35, 39926), (54, 40067),

Gene: JoeDirt_49 Start: 37878, Stop: 38294, Start Num: 7

Candidate Starts for JoeDirt_49:

(Start: 7 @37878 has 96 MA's), (9, 37893), (18, 37962), (19, 37977), (20, 37986), (25, 38007), (27, 38037), (29, 38076), (44, 38208), (48, 38259), (53, 38277),

Gene: Jubie_50 Start: 39815, Stop: 40210, Start Num: 7

Candidate Starts for Jubie_50:

(2, 39560), (4, 39677), (6, 39698), (Start: 7 @39815 has 96 MA's), (11, 39857), (19, 39908), (20, 39917), (23, 39929), (24, 39935), (33, 40040), (34, 40058), (35, 40061), (54, 40202),

Gene: Kahlid_53 Start: 39751, Stop: 40170, Start Num: 7

Candidate Starts for Kahlid_53:

(Start: 7 @39751 has 96 MA's), (11, 39793), (19, 39844), (20, 39853), (24, 39871), (34, 39994), (39, 40027), (40, 40030), (43, 40063),

Gene: Kingsolomon_50 Start: 39680, Stop: 40075, Start Num: 7

Candidate Starts for Kingsolomon_50:

(Start: 7 @39680 has 96 MA's), (11, 39722), (19, 39773), (20, 39782), (23, 39794), (24, 39800), (33, 39905), (34, 39923), (35, 39926), (54, 40067),

Gene: KirDoubleO7_49 Start: 39710, Stop: 40102, Start Num: 7

Candidate Starts for KirDoubleO7_49:

(Start: 7 @39710 has 96 MA's), (11, 39752), (19, 39803), (20, 39812), (23, 39824), (24, 39830), (27, 39863), (33, 39935), (54, 40097),

Gene: KleverKiS_47 Start: 35114, Stop: 34788, Start Num: 7

Candidate Starts for KleverKiS_47:

(5, 35240), (Start: 7 @35114 has 96 MA's), (17, 35039), (26, 34964), (35, 34862), (40, 34829),

Gene: Kropertea_49 Start: 38303, Stop: 38731, Start Num: 7

Candidate Starts for Kropertea_49:

(Start: 7 @38303 has 96 MA's), (18, 38381), (19, 38396), (24, 38423), (37, 38573), (38, 38576), (46, 38636), (48, 38669), (49, 38684), (51, 38690), (59, 38726),

Gene: Krypton555_52 Start: 39917, Stop: 40312, Start Num: 7

Candidate Starts for Krypton555_52:

(1, 39647), (3, 39701), (Start: 7 @39917 has 96 MA's), (11, 39959), (16, 39983), (18, 39995), (19, 40010), (20, 40019), (23, 40031), (24, 40037), (27, 40070), (54, 40304),

Gene: LeBron_50 Start: 37922, Stop: 38338, Start Num: 7

Candidate Starts for LeBron_50:

(Start: 7 @37922 has 96 MA's), (9, 37937), (18, 38006), (19, 38021), (20, 38030), (25, 38051), (27, 38081), (29, 38120), (44, 38252), (48, 38303), (53, 38321),

Gene: Lewan_54 Start: 39804, Stop: 40223, Start Num: 7

Candidate Starts for Lewan_54:

(Start: 7 @39804 has 96 MA's), (11, 39846), (19, 39897), (20, 39906), (24, 39924), (34, 40047), (39, 40080), (40, 40083), (43, 40116),

Gene: LilDestine_53 Start: 39778, Stop: 40197, Start Num: 7

Candidate Starts for LilDestine_53:

(Start: 7 @39778 has 96 MA's), (11, 39820), (19, 39871), (20, 39880), (24, 39898), (34, 40021), (39, 40054), (40, 40057), (43, 40090),

Gene: LilhomieP_45 Start: 35134, Stop: 34808, Start Num: 7

Candidate Starts for LilhomieP_45:

(5, 35260), (Start: 7 @35134 has 96 MA's), (17, 35059), (26, 34984), (35, 34882), (40, 34849),

Gene: LiyuLake_50 Start: 39726, Stop: 40118, Start Num: 7

Candidate Starts for LiyuLake_50:

(Start: 7 @39726 has 96 MA's), (11, 39768), (19, 39819), (20, 39828), (23, 39840), (24, 39846), (27, 39879), (33, 39951), (54, 40113),

Gene: Loadrie_52 Start: 39805, Stop: 40254, Start Num: 7

Candidate Starts for Loadrie_52:

(Start: 7 @39805 has 96 MA's), (11, 39847), (19, 39898), (20, 39907), (24, 39925), (32, 40027), (34, 40048), (35, 40051), (38, 40078), (55, 40225),

Gene: Lolly9_50 Start: 39499, Stop: 39897, Start Num: 7

Candidate Starts for Lolly9_50:

(Start: 7 @39499 has 96 MA's), (11, 39541), (19, 39592), (20, 39601), (23, 39613), (24, 39619), (33, 39724), (34, 39742), (35, 39745), (45, 39823), (54, 39886),

Gene: Lumos_51 Start: 39677, Stop: 40072, Start Num: 7

Candidate Starts for Lumos_51:

(Start: 7 @39677 has 96 MA's), (11, 39719), (19, 39770), (20, 39779), (23, 39791), (24, 39797), (33, 39902), (34, 39920), (35, 39923), (54, 40064),

Gene: Lynnae_54 Start: 39776, Stop: 40195, Start Num: 7

Candidate Starts for Lynnae_54:

(Start: 7 @39776 has 96 MA's), (11, 39818), (19, 39869), (20, 39878), (24, 39896), (34, 40019), (39, 40052), (40, 40055), (43, 40088),

Gene: MAckerman_50 Start: 37914, Stop: 38330, Start Num: 7

Candidate Starts for MAckerman_50:

(Start: 7 @37914 has 96 MA's), (9, 37929), (18, 37998), (19, 38013), (20, 38022), (25, 38043), (27, 38073), (29, 38112), (44, 38244), (48, 38295), (53, 38313),

Gene: Miley16_53 Start: 39745, Stop: 40164, Start Num: 7

Candidate Starts for Miley16_53:

(Start: 7 @39745 has 96 MA's), (11, 39787), (19, 39838), (20, 39847), (24, 39865), (34, 39988), (39, 40021), (40, 40024), (43, 40057),

Gene: MiniLon_52 Start: 39500, Stop: 39898, Start Num: 7

Candidate Starts for MiniLon_52:

(Start: 7 @39500 has 96 MA's), (11, 39542), (19, 39593), (20, 39602), (23, 39614), (24, 39620), (33, 39725), (34, 39743), (35, 39746), (45, 39824), (54, 39887),

Gene: MiniMac_52 Start: 39498, Stop: 39896, Start Num: 7

Candidate Starts for MiniMac_52:

(Start: 7 @39498 has 96 MA's), (11, 39540), (19, 39591), (20, 39600), (23, 39612), (24, 39618), (33, 39723), (34, 39741), (35, 39744), (45, 39822), (54, 39885),

Gene: MkaliMitinis3_54 Start: 39817, Stop: 40236, Start Num: 7

Candidate Starts for MkaliMitinis3_54:

(Start: 7 @39817 has 96 MA's), (11, 39859), (19, 39910), (20, 39919), (24, 39937), (34, 40060), (39, 40093), (40, 40096), (43, 40129),

Gene: Moostard_50 Start: 39683, Stop: 40078, Start Num: 7

Candidate Starts for Moostard_50:

(Start: 7 @39683 has 96 MA's), (11, 39725), (19, 39776), (20, 39785), (23, 39797), (24, 39803), (34, 39926), (35, 39929), (53, 40061), (54, 40070),

Gene: MrMagoo_55 Start: 37435, Stop: 37118, Start Num: 7

Candidate Starts for MrMagoo_55:

(Start: 7 @37435 has 96 MA's), (18, 37357), (29, 37243), (30, 37237), (33, 37210), (39, 37162),

Gene: MsGreen_50 Start: 39680, Stop: 40075, Start Num: 7

Candidate Starts for MsGreen_50:

(Start: 7 @39680 has 96 MA's), (11, 39722), (19, 39773), (20, 39782), (23, 39794), (24, 39800), (33, 39905), (34, 39923), (35, 39926), (54, 40067),

Gene: Nanosmite_52 Start: 36753, Stop: 36433, Start Num: 7

Candidate Starts for Nanosmite_52:

(Start: 7 @36753 has 96 MA's), (10, 36711), (18, 36672), (28, 36591),

Gene: Netyap_54 Start: 39746, Stop: 40165, Start Num: 7

Candidate Starts for Netyap_54:

(Start: 7 @39746 has 96 MA's), (11, 39788), (19, 39839), (20, 39848), (24, 39866), (34, 39989), (39, 40022), (40, 40025), (43, 40058),

Gene: Nicholas_50 Start: 39680, Stop: 40075, Start Num: 7

Candidate Starts for Nicholas_50:

(Start: 7 @39680 has 96 MA's), (11, 39722), (19, 39773), (20, 39782), (23, 39794), (24, 39800), (33, 39905), (34, 39923), (35, 39926), (54, 40067),

Gene: Nicholasp3_53 Start: 39781, Stop: 40200, Start Num: 7

Candidate Starts for Nicholasp3_53:

(Start: 7 @39781 has 96 MA's), (11, 39823), (19, 39874), (20, 39883), (24, 39901), (34, 40024), (39, 40057), (40, 40060), (43, 40093),

Gene: OhShagHennessy_48 Start: 36908, Stop: 37324, Start Num: 7

Candidate Starts for OhShagHennessy_48:

(Start: 7 @36908 has 96 MA's), (9, 36923), (18, 36992), (19, 37007), (20, 37016), (25, 37037), (27, 37067), (29, 37106), (48, 37289), (53, 37307),

Gene: OverPar_53 Start: 39805, Stop: 40254, Start Num: 7

Candidate Starts for OverPar_53:

(Start: 7 @39805 has 96 MA's), (11, 39847), (19, 39898), (20, 39907), (24, 39925), (32, 40027), (34, 40048), (35, 40051), (38, 40078), (55, 40225),

Gene: PYPDinur_48 Start: 38230, Stop: 38661, Start Num: 7

Candidate Starts for PYPDinur_48:

(Start: 7 @38230 has 96 MA's), (14, 38290), (16, 38296), (19, 38323), (20, 38332), (22, 38341), (24, 38350), (38, 38503), (43, 38542), (48, 38596), (51, 38617), (59, 38656),

Gene: PegLeg_46 Start: 35133, Stop: 34807, Start Num: 7

Candidate Starts for PegLeg_46:

(5, 35259), (Start: 7 @35133 has 96 MA's), (17, 35058), (26, 34983), (35, 34881), (40, 34848),

Gene: Poochiewood_50 Start: 37993, Stop: 38409, Start Num: 7

Candidate Starts for Poochiewood_50:

(Start: 7 @37993 has 96 MA's), (9, 38008), (18, 38077), (19, 38092), (20, 38101), (25, 38122), (27, 38152), (29, 38191), (44, 38323), (48, 38374), (53, 38392),

Gene: Quby_49 Start: 38083, Stop: 38514, Start Num: 7

Candidate Starts for Quby_49:

(Start: 7 @38083 has 96 MA's), (16, 38149), (19, 38176), (20, 38185), (22, 38194), (24, 38203), (38, 38356), (43, 38395), (48, 38449), (49, 38464), (51, 38470), (56, 38491), (59, 38509),

Gene: Red305_51 Start: 39680, Stop: 40075, Start Num: 7

Candidate Starts for Red305_51:

(Start: 7 @39680 has 96 MA's), (11, 39722), (19, 39773), (20, 39782), (23, 39794), (24, 39800), (33, 39905), (34, 39923), (35, 39926), (54, 40067),

Gene: Reindeer_48 Start: 36342, Stop: 36016, Start Num: 7

Candidate Starts for Reindeer_48:

(Start: 7 @36342 has 96 MA's), (11, 36300), (18, 36261), (26, 36192), (29, 36147), (34, 36093), (40, 36057),

Gene: Rey_54 Start: 37371, Stop: 37042, Start Num: 7

Candidate Starts for Rey_54:

(Start: 7 @37371 has 96 MA's), (13, 37311), (18, 37287), (27, 37212), (29, 37173), (30, 37167), (31, 37149), (33, 37140), (36, 37098),

Gene: Rose5_50 Start: 38005, Stop: 38421, Start Num: 7

Candidate Starts for Rose5_50:

(Start: 7 @38005 has 96 MA's), (9, 38020), (18, 38089), (19, 38104), (20, 38113), (25, 38134), (27, 38164), (29, 38203), (44, 38335), (48, 38386), (53, 38404),

Gene: RoseMarie_52 Start: 38796, Stop: 38473, Start Num: 7

Candidate Starts for RoseMarie_52:

(5, 38922), (Start: 7 @38796 has 96 MA's), (17, 38721), (26, 38646), (27, 38640), (40, 38514),

Gene: Rossetti_54 Start: 40316, Stop: 40741, Start Num: 7

Candidate Starts for Rossetti_54:

(Start: 7 @40316 has 96 MA's), (11, 40358), (19, 40409), (20, 40418), (24, 40436), (32, 40538), (34, 40559), (35, 40562), (43, 40628),

Gene: Rumpelstiltskin_52 Start: 39174, Stop: 39593, Start Num: 7

Candidate Starts for Rumpelstiltskin_52:

(Start: 7 @39174 has 96 MA's), (11, 39216), (19, 39267), (20, 39276), (24, 39294), (34, 39417), (39, 39450), (40, 39453), (43, 39486),

Gene: Samty_50 Start: 39682, Stop: 40077, Start Num: 7

Candidate Starts for Samty_50:

(Start: 7 @39682 has 96 MA's), (11, 39724), (19, 39775), (20, 39784), (23, 39796), (24, 39802), (33, 39907), (34, 39925), (35, 39928), (54, 40069),

Gene: Sarshaun_53 Start: 39842, Stop: 40261, Start Num: 7

Candidate Starts for Sarshaun_53:

(Start: 7 @39842 has 96 MA's), (11, 39884), (19, 39935), (20, 39944), (24, 39962), (34, 40085), (39, 40118), (40, 40121), (43, 40154),

Gene: Sheng711_50 Start: 38207, Stop: 38638, Start Num: 7

Candidate Starts for Sheng711_50:

(Start: 7 @38207 has 96 MA's), (14, 38267), (16, 38273), (19, 38300), (20, 38309), (22, 38318), (24, 38327), (38, 38480), (43, 38519), (48, 38573), (51, 38594), (59, 38633),

Gene: Silverleaf_50 Start: 37900, Stop: 38316, Start Num: 7

Candidate Starts for Silverleaf_50:

(Start: 7 @37900 has 96 MA's), (9, 37915), (18, 37984), (19, 37999), (20, 38008), (25, 38029), (27, 38059), (29, 38098), (44, 38230), (48, 38281),

Gene: Skinny_47 Start: 35563, Stop: 35237, Start Num: 7

Candidate Starts for Skinny_47:

(5, 35689), (Start: 7 @35563 has 96 MA's), (17, 35488), (26, 35413), (35, 35311), (40, 35278),

Gene: SlimJimmy_45 Start: 35117, Stop: 34791, Start Num: 7

Candidate Starts for SlimJimmy_45:

(5, 35243), (Start: 7 @35117 has 96 MA's), (17, 35042), (26, 34967), (35, 34865), (40, 34832),

Gene: Snenia_50 Start: 39681, Stop: 40076, Start Num: 7

Candidate Starts for Snenia_50:

(Start: 7 @39681 has 96 MA's), (11, 39723), (19, 39774), (20, 39783), (23, 39795), (24, 39801), (33, 39906), (34, 39924), (35, 39927), (54, 40068),

Gene: SoJulia_54 Start: 40005, Stop: 40256, Start Num: 7

Candidate Starts for SoJulia_54:

(Start: 7 @40005 has 96 MA's), (11, 40047), (19, 40098), (20, 40107), (24, 40125),

Gene: Soap141_53 Start: 39842, Stop: 40261, Start Num: 7

Candidate Starts for Soap141_53:

(Start: 7 @39842 has 96 MA's), (11, 39884), (19, 39935), (20, 39944), (24, 39962), (34, 40085), (39, 40118), (40, 40121), (43, 40154),

Gene: Tourach_52 Start: 39805, Stop: 40230, Start Num: 7

Candidate Starts for Tourach_52:

(Start: 7 @39805 has 96 MA's), (11, 39847), (19, 39898), (20, 39907), (24, 39925), (34, 40048), (39, 40081), (43, 40117), (55, 40201), (57, 40213),

Gene: TpudiCK_48 Start: 35133, Stop: 34807, Start Num: 7

Candidate Starts for TpudiCK_48:

(5, 35259), (Start: 7 @35133 has 96 MA's), (17, 35058), (26, 34983), (35, 34881), (40, 34848),

Gene: TriFive_51 Start: 39680, Stop: 40075, Start Num: 7

Candidate Starts for TriFive_51:

(Start: 7 @39680 has 96 MA's), (11, 39722), (19, 39773), (20, 39782), (23, 39794), (24, 39800), (33, 39905), (34, 39923), (35, 39926), (54, 40067),

Gene: TyDawg_46 Start: 35134, Stop: 34808, Start Num: 7

Candidate Starts for TyDawg_46:

(5, 35260), (Start: 7 @35134 has 96 MA's), (17, 35059), (26, 34984), (35, 34882), (40, 34849),

Gene: Tyson_50 Start: 38007, Stop: 38423, Start Num: 7

Candidate Starts for Tyson_50:

(Start: 7 @38007 has 96 MA's), (9, 38022), (18, 38091), (19, 38106), (20, 38115), (25, 38136), (27, 38166), (29, 38205), (44, 38337), (48, 38388), (53, 38406),

Gene: UPIE_50 Start: 37893, Stop: 38309, Start Num: 7

Candidate Starts for UPIE_50:

(Start: 7 @37893 has 96 MA's), (9, 37908), (18, 37977), (19, 37992), (20, 38001), (25, 38022), (27, 38052), (29, 38091), (44, 38223), (48, 38274), (53, 38292),

Gene: Vetrix_53 Start: 39786, Stop: 40205, Start Num: 7

Candidate Starts for Vetrix_53:

(Start: 7 @39786 has 96 MA's), (11, 39828), (19, 39879), (20, 39888), (24, 39906), (34, 40029), (39, 40062), (40, 40065), (43, 40098),

Gene: Wamburgrxpress_50 Start: 37909, Stop: 38325, Start Num: 7

Candidate Starts for Wamburgrxpress_50:

(Start: 7 @37909 has 96 MA's), (9, 37924), (18, 37993), (19, 38008), (20, 38017), (25, 38038), (27, 38068), (29, 38107), (44, 38239), (48, 38290), (53, 38308),

Gene: Whirlwind_51 Start: 39496, Stop: 39891, Start Num: 7

Candidate Starts for Whirlwind_51:

(Start: 7 @39496 has 96 MA's), (11, 39538), (16, 39562), (18, 39574), (19, 39589), (20, 39598), (23, 39610), (24, 39616), (27, 39649), (54, 39883),

Gene: Wigglewiggle_53 Start: 39806, Stop: 40225, Start Num: 7

Candidate Starts for Wigglewiggle_53:

(Start: 7 @39806 has 96 MA's), (11, 39848), (19, 39899), (20, 39908), (24, 39926), (34, 40049), (39, 40082), (40, 40085), (43, 40118),

Gene: Wilder_53 Start: 39751, Stop: 40170, Start Num: 7

Candidate Starts for Wilder_53:

(Start: 7 @39751 has 96 MA's), (11, 39793), (19, 39844), (20, 39853), (24, 39871), (34, 39994), (39, 40027), (40, 40030), (43, 40063),

Gene: Winky_53 Start: 39745, Stop: 40164, Start Num: 7

Candidate Starts for Winky_53:

(Start: 7 @39745 has 96 MA's), (11, 39787), (19, 39838), (20, 39847), (24, 39865), (34, 39988), (39, 40021), (40, 40024), (43, 40057),

Gene: Wyatt2_51 Start: 38005, Stop: 38421, Start Num: 7

Candidate Starts for Wyatt2_51:

(Start: 7 @38005 has 96 MA's), (9, 38020), (18, 38089), (19, 38104), (20, 38113), (25, 38134), (27, 38164), (29, 38203), (44, 38335), (48, 38386), (53, 38404),

Gene: Zakai_53 Start: 40071, Stop: 40490, Start Num: 7

Candidate Starts for Zakai_53:

(Start: 7 @40071 has 96 MA's), (11, 40113), (19, 40164), (20, 40173), (24, 40191), (34, 40314), (39, 40347), (40, 40350), (43, 40383),

Gene: Zaria_51 Start: 38020, Stop: 38436, Start Num: 7

Candidate Starts for Zaria_51:

(Start: 7 @38020 has 96 MA's), (9, 38035), (18, 38104), (19, 38119), (20, 38128), (25, 38149), (27, 38179), (29, 38218), (44, 38350), (48, 38401), (53, 38419),

Gene: ZhongYanYuan_51 Start: 39605, Stop: 40054, Start Num: 7

Candidate Starts for ZhongYanYuan_51:

(Start: 7 @39605 has 96 MA's), (11, 39647), (19, 39698), (20, 39707), (24, 39725), (27, 39758), (32, 39827), (34, 39848), (35, 39851), (45, 39929), (55, 40025), (60, 40049),