

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 208541 Report

This analysis was run 02/22/25 on database version 588.

Pham number 208541 has 92 members, 23 are drafts.

Phages represented in each track:

- Track 1 : MAckerman_50, Halena_49, Poochiewood_50, DirkDirk_49, Wamburgrxpress_50, Calm_51, CicholasNage_50, Wyatt2_51, Rose5_50, Acquire49_51, 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, Vetric_53, Crossroads_53, Soap141_53, Nicholasp3_53, Itos_52, Winky_53, Breezona_53, Finemlucis_53, BobsGarage_53, Gardann_53, Netyap_54, Wilder_53, Rumpelstiltskin_52, BigCheese_53, Faith1_53, MkaliMitinis3_54, Miley16_53, LilDestine_53, DrSeegs_53, Lewan_54, GuelaD_52
- Track 6 : Tourach_52
- Track 7 : ZhongYanYuan_51, Claus_53, DHan_54
- Track 8 : Loadrie_52
- Track 9 : Bazzle_53, Archie_53
- Track 10 : Baoshan_51
- Track 11 : DanBing_53
- Track 12 : LiyuLake_50, BourbonZero_51, Ellson_50, KirDoubleO7_49, DuncansLeg_50
- Track 13 : Lolly9_50, MiniLon_52, MiniMac_52
- Track 14 : Jobypre_51, Red305_51, MsGreen_50, Samty_50, Clautastrophe_50, Kingsolomon_50, Lumos_51, Bellis_50, Snenia_50, TriFive_51, Nicholas_50
- Track 15 : Whirlwind_51
- Track 16 : Krypton555_52
- Track 17 : Finnry_49
- Track 18 : Jubie_50
- Track 19 : Moostard_50
- Track 20 : Quby_49
- Track 21 : Chaser_48
- Track 22 : DyoEdafos_52
- Track 23 : BrainDrainer_50, PYPDinur_48, Douzhi_50, Sheng711_50, Douge_49
- Track 24 : Bromden_51
- Track 25 : FarmResident_50
- Track 26 : Kropertea_48
- Track 27 : Aegeus_59, Baudelaire_59

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

The start number called the most often in the published annotations is 6, it was called in 67 of the 69 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_51, Appletree2_49, Archie_53, AvadaKedavra_50, Baoshan_51, Bazzle_53, Bellis_50, BigCheese_53, BobsGarage_53, BourbonZero_51, BrainDrainer_50, Breezona_53, Bromden_51, Calm_51, Chaser_48, CicholasNage_50, Claus_53, Clautastrophe_50, Crossroads_53, DHan_54, DanBing_53, DirkDirk_49, Douge_49, Douzhi_50, DrSeegs_53, DuncansLeg_50, DyoEdafos_52, Ellson_50, Enceladus_49, Faith1_53, FarmResident_50, Finemlucis_53, Finnry_49, Gardann_53, GuuelaD_52, Hafay_54, Halena_49, Itos_52, Jobypre_51, JoeDirt_49, Jubie_50, Kahlid_53, Kingsolomon_50, KirDoubleO7_49, Kropertea_48, Krypton555_52, LeBron_50, Lewan_54, LilDestine_53, LiyuLake_50, Loadrie_52, Lolly9_50, Lumos_51, MAckerman_50, Miley16_53, MiniLon_52, MiniMac_52, MkaliMitinis3_54, Moostard_50, MsGreen_50, Netyap_54, Nicholas_50, Nicholasp3_53, OhShagHennessy_48, PYPDinur_48, Poochiewood_50, Quby_49, Red305_51, Rose5_50, Rumpelstiltskin_52, Samty_50, Sarshaun_53, Sheng711_50, Silverleaf_50, Snenia_50, Soap141_53, Tourach_52, TriFive_51, Tyson_50, UPIE_50, Vetrix_53, Wamburggrxpress_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:

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

- Aegeus_59, Baudelaire_59,

Summary by start number:

Start 6:

- Found in 90 of 92 (97.8%) of genes in pham
- Manual Annotations of this start: 67 of 69
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acquire49_51 (L1), Appletree2_49 (L1), Archie_53 (L2), AvadaKedavra_50 (L1), Baoshan_51 (L2), Bazzle_53 (L2), Bellis_50 (L3), BigCheese_53 (L2), BobsGarage_53 (L2), BourbonZero_51 (L3), BrainDrainer_50 (L4), Breezona_53 (L2), Bromden_51 (L4), Calm_51 (L1), Chaser_48 (L4), CicholasNage_50 (L1), Claus_53 (L2), Clautastrophe_50 (L3), Crossroads_53 (L2), DHan_54 (L2), DanBing_53 (L2), DirkDirk_49 (L1), Douge_49 (L4), Douzhi_50 (L4), DrSeegs_53 (L2), DuncansLeg_50 (L3), DyoEdafos_52 (L4), Ellson_50 (L3), Enceladus_49 (L1), Faith1_53 (L2), FarmResident_50 (L4), Finemlucis_53 (L2), Finnry_49 (L3), Gardann_53 (L2), GuuelaD_52 (L2), Hafay_54 (L2), Halena_49 (L1), Itos_52 (L2), Jobypre_51 (L3), JoeDirt_49 (L1), Jubie_50 (L3), Kahlid_53 (L2), Kingsolomon_50 (L3), KirDoubleO7_49 (L3), Kropertea_48 (L4), Krypton555_52 (L3), LeBron_50 (L1), Lewan_54 (L2), LilDestine_53 (L2), LiyuLake_50 (L3), Loadrie_52 (L2), Lolly9_50 (L3), Lumos_51 (L3), MAckerman_50 (L1), Miley16_53 (L2), MiniLon_52 (L3), MiniMac_52 (L3), MkaliMitinis3_54 (L2), Moostard_50 (L3), MsGreen_50 (L3), Netyap_54 (L2), Nicholas_50 (L3), Nicholasp3_53 (L2), OhShagHennessy_48 (L1), PYPDinur_48 (L4), Poochiewood_50

(L1), Quby_49 (L4), Red305_51 (L3), Rose5_50 (L1), Rumpelstiltskin_52 (L2), Samty_50 (L3), Sarshaun_53 (L2), Sheng711_50 (L4), Silverleaf_50 (L1), Snenia_50 (L3), Soap141_53 (L2), Tourach_52 (L2), TriFive_51 (L3), Tyson_50 (L1), UPIE_50 (L1), Vetrix_53 (L2), Wamburggrxpress_50 (L1), Whirlwind_51 (L3), Wigglewiggles_53 (L2), Wilder_53 (L2), Winky_53 (L2), Wyatt2_51 (L1), Zakai_53 (L2), Zaria_51 (L1), ZhongYanYuan_51 (L2),

Start 7:

- Found in 2 of 92 (2.2%) of genes in pham
- Manual Annotations of this start: 2 of 69
- 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 5 clusters represented in this pham: L4, L5, L2, L3, L1,

Info for manual annotations of cluster L1:

- Start number 6 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 6 was manually annotated 27 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 6 was manually annotated 17 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 6 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 7 was manually annotated 2 times for cluster L5.

Gene Information:

Gene: Acquire49_51 Start: 38005, Stop: 38421, Start Num: 6

Candidate Starts for Acquire49_51:

(Start: 6 @38005 has 67 MA's), (8, 38020), (14, 38089), (15, 38104), (16, 38113), (21, 38134), (22, 38164), (24, 38203), (37, 38335), (41, 38386), (45, 38404),

Gene: Aegeus_59 Start: 41204, Stop: 41521, Start Num: 7

Candidate Starts for Aegeus_59:

(Start: 7 @41204 has 2 MA's), (10, 41252), (12, 41264), (14, 41279), (18, 41312), (19, 41315), (22, 41354), (23, 41360), (29, 41441), (32, 41471), (33, 41474), (34, 41498),

Gene: Appletree2_49 Start: 37838, Stop: 38254, Start Num: 6

Candidate Starts for Appletree2_49:

(Start: 6 @37838 has 67 MA's), (8, 37853), (14, 37922), (15, 37937), (16, 37946), (21, 37967), (22, 37997), (24, 38036), (37, 38168), (41, 38219), (45, 38237),

Gene: Archie_53 Start: 39956, Stop: 40405, Start Num: 6

Candidate Starts for Archie_53:

(Start: 6 @39956 has 67 MA's), (9, 39998), (15, 40049), (16, 40058), (20, 40076), (28, 40199), (29, 40202), (31, 40229), (49, 40379),

Gene: AvadaKedavra_50 Start: 37907, Stop: 38323, Start Num: 6

Candidate Starts for AvadaKedavra_50:

(Start: 6 @37907 has 67 MA's), (8, 37922), (14, 37991), (15, 38006), (16, 38015), (21, 38036), (22, 38066), (24, 38105), (37, 38237), (41, 38288),

Gene: Baoshan_51 Start: 39640, Stop: 40089, Start Num: 6

Candidate Starts for Baoshan_51:

(Start: 6 @39640 has 67 MA's), (9, 39682), (15, 39733), (16, 39742), (20, 39760), (22, 39793), (26, 39862), (28, 39883), (29, 39886), (38, 39964), (43, 40039),

Gene: Baudelaire_59 Start: 41204, Stop: 41521, Start Num: 7

Candidate Starts for Baudelaire_59:

(Start: 7 @41204 has 2 MA's), (10, 41252), (12, 41264), (14, 41279), (18, 41312), (19, 41315), (22, 41354), (23, 41360), (29, 41441), (32, 41471), (33, 41474), (34, 41498),

Gene: Bazzle_53 Start: 40026, Stop: 40475, Start Num: 6

Candidate Starts for Bazzle_53:

(Start: 6 @40026 has 67 MA's), (9, 40068), (15, 40119), (16, 40128), (20, 40146), (28, 40269), (29, 40272), (31, 40299), (49, 40449),

Gene: Bellis_50 Start: 39683, Stop: 40078, Start Num: 6

Candidate Starts for Bellis_50:

(Start: 6 @39683 has 67 MA's), (9, 39725), (15, 39776), (16, 39785), (19, 39797), (20, 39803), (27, 39908), (28, 39926), (29, 39929), (47, 40070),

Gene: BigCheese_53 Start: 39745, Stop: 40164, Start Num: 6

Candidate Starts for BigCheese_53:

(Start: 6 @39745 has 67 MA's), (9, 39787), (15, 39838), (16, 39847), (20, 39865), (28, 39988), (32, 40021), (33, 40024), (36, 40057),

Gene: BobsGarage_53 Start: 39745, Stop: 40164, Start Num: 6

Candidate Starts for BobsGarage_53:

(Start: 6 @39745 has 67 MA's), (9, 39787), (15, 39838), (16, 39847), (20, 39865), (28, 39988), (32, 40021), (33, 40024), (36, 40057),

Gene: BourbonZero_51 Start: 39723, Stop: 40115, Start Num: 6

Candidate Starts for BourbonZero_51:

(Start: 6 @39723 has 67 MA's), (9, 39765), (15, 39816), (16, 39825), (19, 39837), (20, 39843), (22, 39876), (27, 39948), (47, 40110),

Gene: BrainDrainer_50 Start: 38369, Stop: 38800, Start Num: 6

Candidate Starts for BrainDrainer_50:

(Start: 6 @38369 has 67 MA's), (11, 38429), (13, 38435), (15, 38462), (16, 38471), (18, 38480), (20, 38489), (31, 38642), (36, 38681), (41, 38735), (44, 38756), (52, 38795),

Gene: Breezona_53 Start: 39745, Stop: 40164, Start Num: 6

Candidate Starts for Breezona_53:

(Start: 6 @39745 has 67 MA's), (9, 39787), (15, 39838), (16, 39847), (20, 39865), (28, 39988), (32, 40021), (33, 40024), (36, 40057),

Gene: Bromden_51 Start: 39185, Stop: 39598, Start Num: 6

Candidate Starts for Bromden_51:

(Start: 6 @39185 has 67 MA's), (9, 39227), (15, 39278), (17, 39293), (19, 39299), (25, 39383), (31, 39458), (35, 39494), (39, 39518), (41, 39551), (44, 39575),

Gene: Calm_51 Start: 38020, Stop: 38436, Start Num: 6

Candidate Starts for Calm_51:

(Start: 6 @38020 has 67 MA's), (8, 38035), (14, 38104), (15, 38119), (16, 38128), (21, 38149), (22, 38179), (24, 38218), (37, 38350), (41, 38401), (45, 38419),

Gene: Chaser_48 Start: 38128, Stop: 38559, Start Num: 6

Candidate Starts for Chaser_48:

(Start: 6 @38128 has 67 MA's), (15, 38221), (16, 38230), (18, 38239), (20, 38248), (30, 38398), (31, 38401), (36, 38440), (41, 38494), (44, 38515), (49, 38536), (52, 38554),

Gene: CicholasNage_50 Start: 38041, Stop: 38457, Start Num: 6

Candidate Starts for CicholasNage_50:

(Start: 6 @38041 has 67 MA's), (8, 38056), (14, 38125), (15, 38140), (16, 38149), (21, 38170), (22, 38200), (24, 38239), (37, 38371), (41, 38422), (45, 38440),

Gene: Claus_53 Start: 39792, Stop: 40241, Start Num: 6

Candidate Starts for Claus_53:

(Start: 6 @39792 has 67 MA's), (9, 39834), (15, 39885), (16, 39894), (20, 39912), (22, 39945), (26, 40014), (28, 40035), (29, 40038), (38, 40116), (48, 40212), (53, 40236),

Gene: Clautastrophe_50 Start: 39680, Stop: 40075, Start Num: 6

Candidate Starts for Clautastrophe_50:

(Start: 6 @39680 has 67 MA's), (9, 39722), (15, 39773), (16, 39782), (19, 39794), (20, 39800), (27, 39905), (28, 39923), (29, 39926), (47, 40067),

Gene: Crossroads_53 Start: 39815, Stop: 40234, Start Num: 6

Candidate Starts for Crossroads_53:

(Start: 6 @39815 has 67 MA's), (9, 39857), (15, 39908), (16, 39917), (20, 39935), (28, 40058), (32, 40091), (33, 40094), (36, 40127),

Gene: DHan_54 Start: 39695, Stop: 40144, Start Num: 6

Candidate Starts for DHan_54:

(Start: 6 @39695 has 67 MA's), (9, 39737), (15, 39788), (16, 39797), (20, 39815), (22, 39848), (26, 39917), (28, 39938), (29, 39941), (38, 40019), (48, 40115), (53, 40139),

Gene: DanBing_53 Start: 39645, Stop: 40094, Start Num: 6

Candidate Starts for DanBing_53:

(Start: 6 @39645 has 67 MA's), (9, 39687), (15, 39738), (16, 39747), (20, 39765), (22, 39798), (26, 39867), (28, 39888), (29, 39891), (38, 39969), (48, 40065),

Gene: DirkDirk_49 Start: 37884, Stop: 38300, Start Num: 6

Candidate Starts for DirkDirk_49:

(Start: 6 @37884 has 67 MA's), (8, 37899), (14, 37968), (15, 37983), (16, 37992), (21, 38013), (22, 38043), (24, 38082), (37, 38214), (41, 38265), (45, 38283),

Gene: Douge_49 Start: 38123, Stop: 38554, Start Num: 6

Candidate Starts for Douge_49:

(Start: 6 @38123 has 67 MA's), (11, 38183), (13, 38189), (15, 38216), (16, 38225), (18, 38234), (20, 38243), (31, 38396), (36, 38435), (41, 38489), (44, 38510), (52, 38549),

Gene: Douzhi_50 Start: 38197, Stop: 38628, Start Num: 6

Candidate Starts for Douzhi_50:

(Start: 6 @38197 has 67 MA's), (11, 38257), (13, 38263), (15, 38290), (16, 38299), (18, 38308), (20, 38317), (31, 38470), (36, 38509), (41, 38563), (44, 38584), (52, 38623),

Gene: DrSeegs_53 Start: 39745, Stop: 40164, Start Num: 6

Candidate Starts for DrSeegs_53:

(Start: 6 @39745 has 67 MA's), (9, 39787), (15, 39838), (16, 39847), (20, 39865), (28, 39988), (32, 40021), (33, 40024), (36, 40057),

Gene: DuncansLeg_50 Start: 39706, Stop: 40098, Start Num: 6

Candidate Starts for DuncansLeg_50:

(Start: 6 @39706 has 67 MA's), (9, 39748), (15, 39799), (16, 39808), (19, 39820), (20, 39826), (22, 39859), (27, 39931), (47, 40093),

Gene: DyoEdafos_52 Start: 38404, Stop: 38832, Start Num: 6

Candidate Starts for DyoEdafos_52:

(Start: 6 @38404 has 67 MA's), (14, 38482), (15, 38497), (20, 38524), (30, 38674), (39, 38737), (41, 38770), (42, 38785), (44, 38791), (52, 38827),

Gene: Ellson_50 Start: 39736, Stop: 40128, Start Num: 6

Candidate Starts for Ellson_50:

(Start: 6 @39736 has 67 MA's), (9, 39778), (15, 39829), (16, 39838), (19, 39850), (20, 39856), (22, 39889), (27, 39961), (47, 40123),

Gene: Enceladus_49 Start: 37879, Stop: 38295, Start Num: 6

Candidate Starts for Enceladus_49:

(Start: 6 @37879 has 67 MA's), (8, 37894), (14, 37963), (15, 37978), (16, 37987), (21, 38008), (22, 38038), (24, 38077), (37, 38209), (41, 38260), (45, 38278),

Gene: Faith1_53 Start: 39745, Stop: 40164, Start Num: 6

Candidate Starts for Faith1_53:

(Start: 6 @39745 has 67 MA's), (9, 39787), (15, 39838), (16, 39847), (20, 39865), (28, 39988), (32, 40021), (33, 40024), (36, 40057),

Gene: FarmResident_50 Start: 38125, Stop: 38589, Start Num: 6

Candidate Starts for FarmResident_50:

(Start: 6 @38125 has 67 MA's), (13, 38191), (15, 38218), (16, 38227), (18, 38236), (20, 38245), (30, 38395), (31, 38398), (36, 38437), (40, 38479), (41, 38491), (44, 38512), (51, 38545), (54, 38584),

Gene: Finemlucis_53 Start: 40066, Stop: 40485, Start Num: 6

Candidate Starts for Finemlucis_53:

(Start: 6 @40066 has 67 MA's), (9, 40108), (15, 40159), (16, 40168), (20, 40186), (28, 40309), (32, 40342), (33, 40345), (36, 40378),

Gene: Finnry_49 Start: 39945, Stop: 40340, Start Num: 6

Candidate Starts for Finnry_49:

(1, 39675), (3, 39729), (Start: 6 @39945 has 67 MA's), (9, 39987), (15, 40038), (16, 40047), (19, 40059), (20, 40065), (27, 40170), (28, 40188), (29, 40191), (47, 40332),

Gene: Gardann_53 Start: 39781, Stop: 40200, Start Num: 6
Candidate Starts for Gardann_53:
(Start: 6 @39781 has 67 MA's), (9, 39823), (15, 39874), (16, 39883), (20, 39901), (28, 40024), (32, 40057), (33, 40060), (36, 40093),

Gene: GuuelaD_52 Start: 39852, Stop: 40271, Start Num: 6
Candidate Starts for GuuelaD_52:
(Start: 6 @39852 has 67 MA's), (9, 39894), (15, 39945), (16, 39954), (20, 39972), (28, 40095), (32, 40128), (33, 40131), (36, 40164),

Gene: Hafay_54 Start: 39849, Stop: 40268, Start Num: 6
Candidate Starts for Hafay_54:
(Start: 6 @39849 has 67 MA's), (9, 39891), (15, 39942), (16, 39951), (20, 39969), (28, 40092), (32, 40125), (33, 40128), (36, 40161),

Gene: Halena_49 Start: 37921, Stop: 38337, Start Num: 6
Candidate Starts for Halena_49:
(Start: 6 @37921 has 67 MA's), (8, 37936), (14, 38005), (15, 38020), (16, 38029), (21, 38050), (22, 38080), (24, 38119), (37, 38251), (41, 38302), (45, 38320),

Gene: Itos_52 Start: 38651, Stop: 39070, Start Num: 6
Candidate Starts for Itos_52:
(Start: 6 @38651 has 67 MA's), (9, 38693), (15, 38744), (16, 38753), (20, 38771), (28, 38894), (32, 38927), (33, 38930), (36, 38963),

Gene: Jobypre_51 Start: 39680, Stop: 40075, Start Num: 6
Candidate Starts for Jobypre_51:
(Start: 6 @39680 has 67 MA's), (9, 39722), (15, 39773), (16, 39782), (19, 39794), (20, 39800), (27, 39905), (28, 39923), (29, 39926), (47, 40067),

Gene: JoeDirt_49 Start: 37878, Stop: 38294, Start Num: 6
Candidate Starts for JoeDirt_49:
(Start: 6 @37878 has 67 MA's), (8, 37893), (14, 37962), (15, 37977), (16, 37986), (21, 38007), (22, 38037), (24, 38076), (37, 38208), (41, 38259), (45, 38277),

Gene: Jubie_50 Start: 39815, Stop: 40210, Start Num: 6
Candidate Starts for Jubie_50:
(2, 39560), (4, 39677), (5, 39698), (Start: 6 @39815 has 67 MA's), (9, 39857), (15, 39908), (16, 39917), (19, 39929), (20, 39935), (27, 40040), (28, 40058), (29, 40061), (47, 40202),

Gene: Kahlid_53 Start: 39751, Stop: 40170, Start Num: 6
Candidate Starts for Kahlid_53:
(Start: 6 @39751 has 67 MA's), (9, 39793), (15, 39844), (16, 39853), (20, 39871), (28, 39994), (32, 40027), (33, 40030), (36, 40063),

Gene: Kingsolomon_50 Start: 39680, Stop: 40075, Start Num: 6
Candidate Starts for Kingsolomon_50:
(Start: 6 @39680 has 67 MA's), (9, 39722), (15, 39773), (16, 39782), (19, 39794), (20, 39800), (27, 39905), (28, 39923), (29, 39926), (47, 40067),

Gene: KirDoubleO7_49 Start: 39710, Stop: 40102, Start Num: 6
Candidate Starts for KirDoubleO7_49:

(Start: 6 @39710 has 67 MA's), (9, 39752), (15, 39803), (16, 39812), (19, 39824), (20, 39830), (22, 39863), (27, 39935), (47, 40097),

Gene: Kropertea_48 Start: 38303, Stop: 38731, Start Num: 6

Candidate Starts for Kropertea_48:

(Start: 6 @38303 has 67 MA's), (14, 38381), (15, 38396), (20, 38423), (30, 38573), (31, 38576), (39, 38636), (41, 38669), (42, 38684), (44, 38690), (52, 38726),

Gene: Krypton555_52 Start: 39917, Stop: 40312, Start Num: 6

Candidate Starts for Krypton555_52:

(1, 39647), (3, 39701), (Start: 6 @39917 has 67 MA's), (9, 39959), (13, 39983), (14, 39995), (15, 40010), (16, 40019), (19, 40031), (20, 40037), (22, 40070), (47, 40304),

Gene: LeBron_50 Start: 37922, Stop: 38338, Start Num: 6

Candidate Starts for LeBron_50:

(Start: 6 @37922 has 67 MA's), (8, 37937), (14, 38006), (15, 38021), (16, 38030), (21, 38051), (22, 38081), (24, 38120), (37, 38252), (41, 38303), (45, 38321),

Gene: Lewan_54 Start: 39804, Stop: 40223, Start Num: 6

Candidate Starts for Lewan_54:

(Start: 6 @39804 has 67 MA's), (9, 39846), (15, 39897), (16, 39906), (20, 39924), (28, 40047), (32, 40080), (33, 40083), (36, 40116),

Gene: LilDestine_53 Start: 39778, Stop: 40197, Start Num: 6

Candidate Starts for LilDestine_53:

(Start: 6 @39778 has 67 MA's), (9, 39820), (15, 39871), (16, 39880), (20, 39898), (28, 40021), (32, 40054), (33, 40057), (36, 40090),

Gene: LiyuLake_50 Start: 39726, Stop: 40118, Start Num: 6

Candidate Starts for LiyuLake_50:

(Start: 6 @39726 has 67 MA's), (9, 39768), (15, 39819), (16, 39828), (19, 39840), (20, 39846), (22, 39879), (27, 39951), (47, 40113),

Gene: Loadrie_52 Start: 39805, Stop: 40254, Start Num: 6

Candidate Starts for Loadrie_52:

(Start: 6 @39805 has 67 MA's), (9, 39847), (15, 39898), (16, 39907), (20, 39925), (26, 40027), (28, 40048), (29, 40051), (31, 40078), (48, 40225),

Gene: Lolly9_50 Start: 39499, Stop: 39897, Start Num: 6

Candidate Starts for Lolly9_50:

(Start: 6 @39499 has 67 MA's), (9, 39541), (15, 39592), (16, 39601), (19, 39613), (20, 39619), (27, 39724), (28, 39742), (29, 39745), (38, 39823), (47, 39886),

Gene: Lumos_51 Start: 39677, Stop: 40072, Start Num: 6

Candidate Starts for Lumos_51:

(Start: 6 @39677 has 67 MA's), (9, 39719), (15, 39770), (16, 39779), (19, 39791), (20, 39797), (27, 39902), (28, 39920), (29, 39923), (47, 40064),

Gene: MAckerman_50 Start: 37914, Stop: 38330, Start Num: 6

Candidate Starts for MAckerman_50:

(Start: 6 @37914 has 67 MA's), (8, 37929), (14, 37998), (15, 38013), (16, 38022), (21, 38043), (22, 38073), (24, 38112), (37, 38244), (41, 38295), (45, 38313),

Gene: Miley16_53 Start: 39745, Stop: 40164, Start Num: 6
Candidate Starts for Miley16_53:
(Start: 6 @39745 has 67 MA's), (9, 39787), (15, 39838), (16, 39847), (20, 39865), (28, 39988), (32, 40021), (33, 40024), (36, 40057),

Gene: MiniLon_52 Start: 39500, Stop: 39898, Start Num: 6
Candidate Starts for MiniLon_52:
(Start: 6 @39500 has 67 MA's), (9, 39542), (15, 39593), (16, 39602), (19, 39614), (20, 39620), (27, 39725), (28, 39743), (29, 39746), (38, 39824), (47, 39887),

Gene: MiniMac_52 Start: 39498, Stop: 39896, Start Num: 6
Candidate Starts for MiniMac_52:
(Start: 6 @39498 has 67 MA's), (9, 39540), (15, 39591), (16, 39600), (19, 39612), (20, 39618), (27, 39723), (28, 39741), (29, 39744), (38, 39822), (47, 39885),

Gene: MkaliMitinis3_54 Start: 39817, Stop: 40236, Start Num: 6
Candidate Starts for MkaliMitinis3_54:
(Start: 6 @39817 has 67 MA's), (9, 39859), (15, 39910), (16, 39919), (20, 39937), (28, 40060), (32, 40093), (33, 40096), (36, 40129),

Gene: Moostard_50 Start: 39683, Stop: 40078, Start Num: 6
Candidate Starts for Moostard_50:
(Start: 6 @39683 has 67 MA's), (9, 39725), (15, 39776), (16, 39785), (19, 39797), (20, 39803), (28, 39926), (29, 39929), (46, 40061), (47, 40070),

Gene: MsGreen_50 Start: 39680, Stop: 40075, Start Num: 6
Candidate Starts for MsGreen_50:
(Start: 6 @39680 has 67 MA's), (9, 39722), (15, 39773), (16, 39782), (19, 39794), (20, 39800), (27, 39905), (28, 39923), (29, 39926), (47, 40067),

Gene: Netyap_54 Start: 39746, Stop: 40165, Start Num: 6
Candidate Starts for Netyap_54:
(Start: 6 @39746 has 67 MA's), (9, 39788), (15, 39839), (16, 39848), (20, 39866), (28, 39989), (32, 40022), (33, 40025), (36, 40058),

Gene: Nicholas_50 Start: 39680, Stop: 40075, Start Num: 6
Candidate Starts for Nicholas_50:
(Start: 6 @39680 has 67 MA's), (9, 39722), (15, 39773), (16, 39782), (19, 39794), (20, 39800), (27, 39905), (28, 39923), (29, 39926), (47, 40067),

Gene: Nicholasp3_53 Start: 39781, Stop: 40200, Start Num: 6
Candidate Starts for Nicholasp3_53:
(Start: 6 @39781 has 67 MA's), (9, 39823), (15, 39874), (16, 39883), (20, 39901), (28, 40024), (32, 40057), (33, 40060), (36, 40093),

Gene: OhShagHennessy_48 Start: 36908, Stop: 37324, Start Num: 6
Candidate Starts for OhShagHennessy_48:
(Start: 6 @36908 has 67 MA's), (8, 36923), (14, 36992), (15, 37007), (16, 37016), (21, 37037), (22, 37067), (24, 37106), (41, 37289), (45, 37307),

Gene: PYPDinur_48 Start: 38230, Stop: 38661, Start Num: 6
Candidate Starts for PYPDinur_48:

(Start: 6 @38230 has 67 MA's), (11, 38290), (13, 38296), (15, 38323), (16, 38332), (18, 38341), (20, 38350), (31, 38503), (36, 38542), (41, 38596), (44, 38617), (52, 38656),

Gene: Poochiewood_50 Start: 37993, Stop: 38409, Start Num: 6

Candidate Starts for Poochiewood_50:

(Start: 6 @37993 has 67 MA's), (8, 38008), (14, 38077), (15, 38092), (16, 38101), (21, 38122), (22, 38152), (24, 38191), (37, 38323), (41, 38374), (45, 38392),

Gene: Quby_49 Start: 38083, Stop: 38514, Start Num: 6

Candidate Starts for Quby_49:

(Start: 6 @38083 has 67 MA's), (13, 38149), (15, 38176), (16, 38185), (18, 38194), (20, 38203), (31, 38356), (36, 38395), (41, 38449), (42, 38464), (44, 38470), (49, 38491), (52, 38509),

Gene: Red305_51 Start: 39680, Stop: 40075, Start Num: 6

Candidate Starts for Red305_51:

(Start: 6 @39680 has 67 MA's), (9, 39722), (15, 39773), (16, 39782), (19, 39794), (20, 39800), (27, 39905), (28, 39923), (29, 39926), (47, 40067),

Gene: Rose5_50 Start: 38005, Stop: 38421, Start Num: 6

Candidate Starts for Rose5_50:

(Start: 6 @38005 has 67 MA's), (8, 38020), (14, 38089), (15, 38104), (16, 38113), (21, 38134), (22, 38164), (24, 38203), (37, 38335), (41, 38386), (45, 38404),

Gene: Rumpelstiltskin_52 Start: 39174, Stop: 39593, Start Num: 6

Candidate Starts for Rumpelstiltskin_52:

(Start: 6 @39174 has 67 MA's), (9, 39216), (15, 39267), (16, 39276), (20, 39294), (28, 39417), (32, 39450), (33, 39453), (36, 39486),

Gene: Samty_50 Start: 39682, Stop: 40077, Start Num: 6

Candidate Starts for Samty_50:

(Start: 6 @39682 has 67 MA's), (9, 39724), (15, 39775), (16, 39784), (19, 39796), (20, 39802), (27, 39907), (28, 39925), (29, 39928), (47, 40069),

Gene: Sarshaun_53 Start: 39842, Stop: 40261, Start Num: 6

Candidate Starts for Sarshaun_53:

(Start: 6 @39842 has 67 MA's), (9, 39884), (15, 39935), (16, 39944), (20, 39962), (28, 40085), (32, 40118), (33, 40121), (36, 40154),

Gene: Sheng711_50 Start: 38207, Stop: 38638, Start Num: 6

Candidate Starts for Sheng711_50:

(Start: 6 @38207 has 67 MA's), (11, 38267), (13, 38273), (15, 38300), (16, 38309), (18, 38318), (20, 38327), (31, 38480), (36, 38519), (41, 38573), (44, 38594), (52, 38633),

Gene: Silverleaf_50 Start: 37900, Stop: 38316, Start Num: 6

Candidate Starts for Silverleaf_50:

(Start: 6 @37900 has 67 MA's), (8, 37915), (14, 37984), (15, 37999), (16, 38008), (21, 38029), (22, 38059), (24, 38098), (37, 38230), (41, 38281),

Gene: Snenia_50 Start: 39681, Stop: 40076, Start Num: 6

Candidate Starts for Snenia_50:

(Start: 6 @39681 has 67 MA's), (9, 39723), (15, 39774), (16, 39783), (19, 39795), (20, 39801), (27, 39906), (28, 39924), (29, 39927), (47, 40068),

Gene: Soap141_53 Start: 39842, Stop: 40261, Start Num: 6

Candidate Starts for Soap141_53:

(Start: 6 @39842 has 67 MA's), (9, 39884), (15, 39935), (16, 39944), (20, 39962), (28, 40085), (32, 40118), (33, 40121), (36, 40154),

Gene: Tourach_52 Start: 39805, Stop: 40230, Start Num: 6

Candidate Starts for Tourach_52:

(Start: 6 @39805 has 67 MA's), (9, 39847), (15, 39898), (16, 39907), (20, 39925), (28, 40048), (32, 40081), (36, 40117), (48, 40201), (50, 40213),

Gene: TriFive_51 Start: 39680, Stop: 40075, Start Num: 6

Candidate Starts for TriFive_51:

(Start: 6 @39680 has 67 MA's), (9, 39722), (15, 39773), (16, 39782), (19, 39794), (20, 39800), (27, 39905), (28, 39923), (29, 39926), (47, 40067),

Gene: Tyson_50 Start: 38007, Stop: 38423, Start Num: 6

Candidate Starts for Tyson_50:

(Start: 6 @38007 has 67 MA's), (8, 38022), (14, 38091), (15, 38106), (16, 38115), (21, 38136), (22, 38166), (24, 38205), (37, 38337), (41, 38388), (45, 38406),

Gene: UPIE_50 Start: 37893, Stop: 38309, Start Num: 6

Candidate Starts for UPIE_50:

(Start: 6 @37893 has 67 MA's), (8, 37908), (14, 37977), (15, 37992), (16, 38001), (21, 38022), (22, 38052), (24, 38091), (37, 38223), (41, 38274), (45, 38292),

Gene: Vetrix_53 Start: 39786, Stop: 40205, Start Num: 6

Candidate Starts for Vetrix_53:

(Start: 6 @39786 has 67 MA's), (9, 39828), (15, 39879), (16, 39888), (20, 39906), (28, 40029), (32, 40062), (33, 40065), (36, 40098),

Gene: Wamburgrxpress_50 Start: 37909, Stop: 38325, Start Num: 6

Candidate Starts for Wamburgrxpress_50:

(Start: 6 @37909 has 67 MA's), (8, 37924), (14, 37993), (15, 38008), (16, 38017), (21, 38038), (22, 38068), (24, 38107), (37, 38239), (41, 38290), (45, 38308),

Gene: Whirlwind_51 Start: 39496, Stop: 39891, Start Num: 6

Candidate Starts for Whirlwind_51:

(Start: 6 @39496 has 67 MA's), (9, 39538), (13, 39562), (14, 39574), (15, 39589), (16, 39598), (19, 39610), (20, 39616), (22, 39649), (47, 39883),

Gene: Wigglewigggle_53 Start: 39806, Stop: 40225, Start Num: 6

Candidate Starts for Wigglewigggle_53:

(Start: 6 @39806 has 67 MA's), (9, 39848), (15, 39899), (16, 39908), (20, 39926), (28, 40049), (32, 40082), (33, 40085), (36, 40118),

Gene: Wilder_53 Start: 39751, Stop: 40170, Start Num: 6

Candidate Starts for Wilder_53:

(Start: 6 @39751 has 67 MA's), (9, 39793), (15, 39844), (16, 39853), (20, 39871), (28, 39994), (32, 40027), (33, 40030), (36, 40063),

Gene: Winky_53 Start: 39745, Stop: 40164, Start Num: 6

Candidate Starts for Winky_53:

(Start: 6 @39745 has 67 MA's), (9, 39787), (15, 39838), (16, 39847), (20, 39865), (28, 39988), (32, 40021), (33, 40024), (36, 40057),

Gene: Wyatt2_51 Start: 38005, Stop: 38421, Start Num: 6

Candidate Starts for Wyatt2_51:

(Start: 6 @38005 has 67 MA's), (8, 38020), (14, 38089), (15, 38104), (16, 38113), (21, 38134), (22, 38164), (24, 38203), (37, 38335), (41, 38386), (45, 38404),

Gene: Zakai_53 Start: 40071, Stop: 40490, Start Num: 6

Candidate Starts for Zakai_53:

(Start: 6 @40071 has 67 MA's), (9, 40113), (15, 40164), (16, 40173), (20, 40191), (28, 40314), (32, 40347), (33, 40350), (36, 40383),

Gene: Zaria_51 Start: 38020, Stop: 38436, Start Num: 6

Candidate Starts for Zaria_51:

(Start: 6 @38020 has 67 MA's), (8, 38035), (14, 38104), (15, 38119), (16, 38128), (21, 38149), (22, 38179), (24, 38218), (37, 38350), (41, 38401), (45, 38419),

Gene: ZhongYanYuan_51 Start: 39605, Stop: 40054, Start Num: 6

Candidate Starts for ZhongYanYuan_51:

(Start: 6 @39605 has 67 MA's), (9, 39647), (15, 39698), (16, 39707), (20, 39725), (22, 39758), (26, 39827), (28, 39848), (29, 39851), (38, 39929), (48, 40025), (53, 40049),