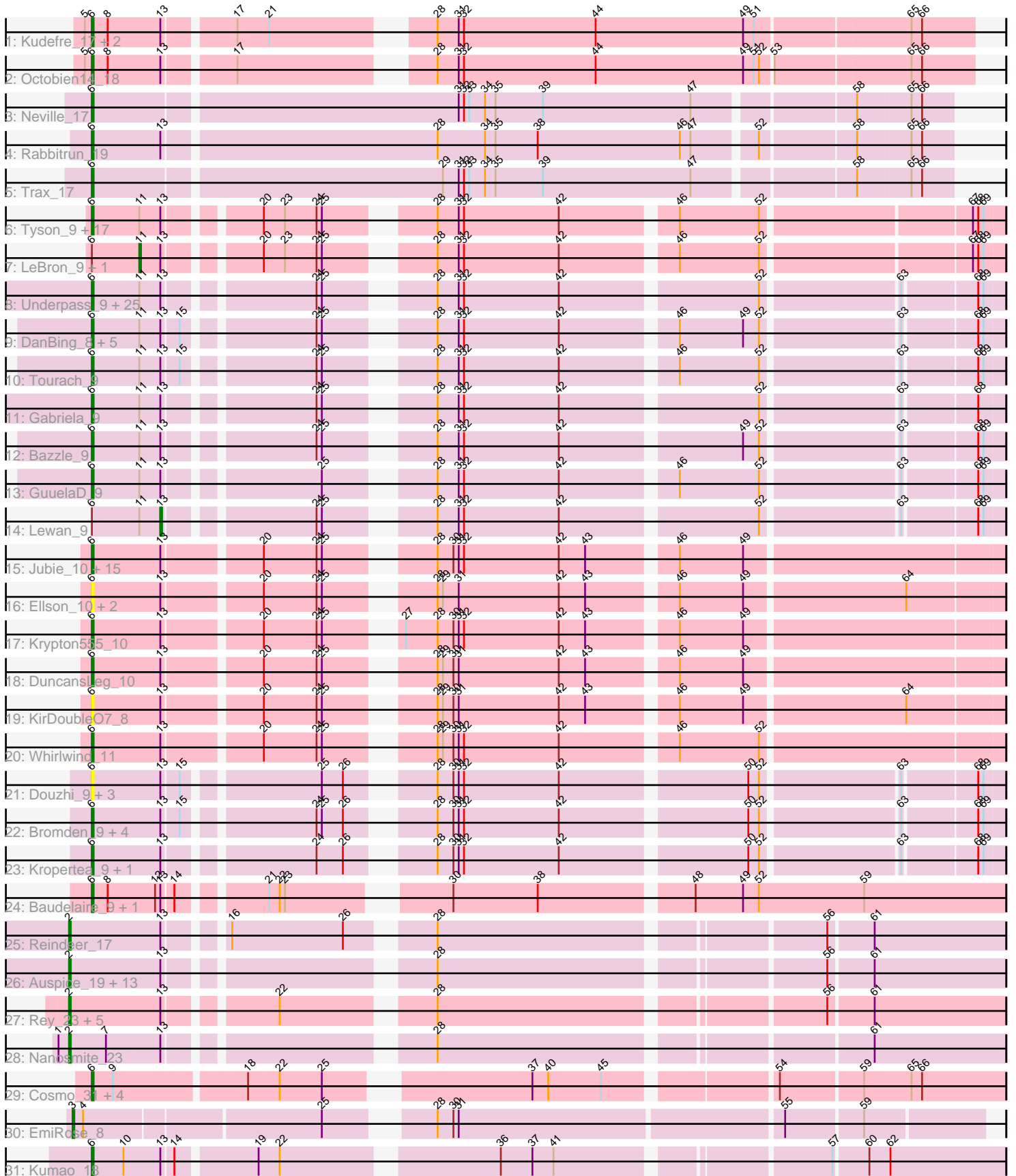


Pham 202772



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 202772 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202772 has 129 members, 26 are drafts.

Phages represented in each track:

- Track 1 : Kudrefre_17, Syleon_18, Sephiroth_18
- Track 2 : Octobien14_18
- Track 3 : Neville_17
- Track 4 : Rabbitrun_19
- Track 5 : Trax_17
- Track 6 : Tyson_9, Wyatt2_9, CicholasNage_9, AvadaKedavra_9, JoeDirt_9, Wamburgrxpress_9, Appletree2_9, Zaria_9, Rose5_9, MAckerman_9, Enceladus_9, Calm_9, DirkDirk_9, Poochiewood_9, Silverleaf_9, Halena_9, Acquire49_9, OhShagHennessy_9
- Track 7 : LeBron_9, UPIE_9
- Track 8 : Underpass_9, Nicholasp3_9, Vetrix_9, Soap141_9, BobsGarage_9, Miley16_9, Netyap_9, LilDestine_9, Faith1_9, Crossroads_9, Winky_9, Sarshaun_9, Finemlucis_9, Kahlid_9, Zakai_9, Loadrie_9, Gardann_9, DrSeegs_9, Breezona_9, Wilder_9, MkaliMitinis3_9, BigCheese_9, Itos_9, Hafay_9, Wigglewiggles_9, Rumpelstiltskin_9
- Track 9 : DanBing_8, Archie_9, ZhongYanYuan_8, DHan_9, Claus_9, Baoshan_8
- Track 10 : Tourach_9
- Track 11 : Gabriela_9
- Track 12 : Bazzle_9
- Track 13 : GuuelaD_9
- Track 14 : Lewan_9
- Track 15 : Jubie_10, Kingsolomon_10, TriFive_10, Snenia_10, Finnry_10, Nicholas_10, Moostard_10, MiniMac_10, MsGreen_10, Jobypre_10, Bellis_10, Clautastrophe_10, MiniLon_10, Samty_10, Lolly9_10, Lumos_10
- Track 16 : Ellson_10, LiyuLake_10, BourbonZero_9
- Track 17 : Krypton555_10
- Track 18 : DuncansLeg_10
- Track 19 : KirDoubleO7_8
- Track 20 : Whirlwind_11
- Track 21 : Douzhi_9, BrainDrainer_10, PYPDinur_9, Sheng711_9
- Track 22 : Bromden_9, Douge_9, Quby_9, FarmResident_9, Chaser_9
- Track 23 : Kropertea_9, DyoEdafos_10
- Track 24 : Baudelaire_9, Aegeus_9
- Track 25 : Reindeer_17
- Track 26 : Auspice_19, LilhomieP_18, Bricole_19, IPhane7_19, Izel_18, Skinny_20, Glaske16_20, FreakyGoo_19, PegLeg_19, TyDawg_19, Bongo_19, SlimJimmy_18, Dulcita_20, Diminimus_20

- Track 27 : Rey_23, Aziz_23, MrMagoo_23, GenevaB15_23, GardenSalsa_23, Estes_24
- Track 28 : Nanosmite_23
- Track 29 : Cosmo_31, MaryV_31, EniyanLRS_28, Azrael100_30, Wildcat_31
- Track 30 : EmiRose_8
- Track 31 : Kumao_18

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 79 of the 103 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_9, Aegeus_9, Appletree2_9, Archie_9, AvadaKedavra_9, Azrael100_30, Baoshan_8, Baudelaire_9, Bazzle_9, Bellis_10, BigCheese_9, BobsGarage_9, BourbonZero_9, BrainDrainer_10, Breezona_9, Bromden_9, Calm_9, Chaser_9, CicholasNage_9, Claus_9, Clautastrophe_10, Cosmo_31, Crossroads_9, DHan_9, DanBing_8, DirkDirk_9, Douge_9, Douzhi_9, DrSeegs_9, DuncansLeg_10, DyoEdafos_10, Ellson_10, Enceladus_9, EniyanLRS_28, Faith1_9, FarmResident_9, Finemlucis_9, Finnry_10, Gabriela_9, Gardann_9, GuuelaD_9, Hafay_9, Halena_9, Itos_9, Jobypre_10, JoeDirt_9, Jubie_10, Kahlid_9, Kingsolomon_10, KirDoubleO7_8, Kropertea_9, Krypton555_10, Kudfre_17, Kumao_18, LilDestine_9, LiyuLake_10, Loadrie_9, Lolly9_10, Lumos_10, MAckerman_9, MaryV_31, Miley16_9, MiniLon_10, MiniMac_10, MkaliMitinis3_9, Moostard_10, MsGreen_10, Netyap_9, Neville_17, Nicholas_10, Nicholasp3_9, Octobien14_18, OhShagHennessy_9, PYPDinur_9, Poochiewood_9, Quby_9, Rabbitrun_19, Rose5_9, Rumpelstiltskin_9, Samty_10, Sarshaun_9, Sephiroth_18, Sheng711_9, Silverleaf_9, Snenia_10, Soap141_9, Syleon_18, Tourach_9, Trax_17, TriFive_10, Tyson_9, Underpass_9, Vetrrix_9, Wamburggrxpress_9, Whirlwind_11, Wigglewiggles_9, Wildcat_31, Wilder_9, Winky_9, Wyatt2_9, Zakai_9, Zaria_9, ZhongYanYuan_8,

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

- LeBron_9, Lewan_9, UPIE_9,

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

- Auspice_19, Aziz_23, Bongo_19, Bricole_19, Diminimus_20, Dulcita_20, EmiRose_8, Estes_24, FreakyGoo_19, GardenSalsa_23, GenevaB15_23, Glaske16_20, IPhone7_19, Izel_18, LilhomieP_18, MrMagoo_23, Nanosmite_23, PegLeg_19, Reindeer_17, Rey_23, Skinny_20, SlimJimmy_18, TyDawg_19,

Summary by start number:

Start 2:

- Found in 22 of 129 (17.1%) of genes in pham
- Manual Annotations of this start: 20 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Auspice_19 (M1), Aziz_23 (M2), Bongo_19 (M1), Bricole_19 (M1), Diminimus_20 (M1), Dulcita_20 (M1), Estes_24 (M2), FreakyGoo_19 (M1), GardenSalsa_23 (M2), GenevaB15_23 (M2),

Glask16_20 (M1), IPhane7_19 (M1), Izel_18 (M1), LilhomieP_18 (M1), MrMagoo_23 (M2), Nanosmite_23 (M3), PegLeg_19 (M1), Reindeer_17 (M1), Rey_23 (M2), Skinny_20 (M1), SlimJimmy_18 (M1), TyDawg_19 (M1),

Start 3:

- Found in 1 of 129 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EmiRose_8 (singleton),

Start 6:

- Found in 106 of 129 (82.2%) of genes in pham
- Manual Annotations of this start: 79 of 103
- Called 97.2% of time when present
- Phage (with cluster) where this start called: Acquire49_9 (L1), Aegeus_9 (L5), Appletree2_9 (L1), Archie_9 (L2), AvadaKedavra_9 (L1), Azrael100_30 (V), Baoshan_8 (L2), Baudelaire_9 (L5), Bazzle_9 (L2), Bellis_10 (L3), BigCheese_9 (L2), BobsGarage_9 (L2), BourbonZero_9 (L3), BrainDrainer_10 (L4), Breezona_9 (L2), Bromden_9 (L4), Calm_9 (L1), Chaser_9 (L4), CicholasNage_9 (L1), Claus_9 (L2), Clautastrophe_10 (L3), Cosmo_31 (V), Crossroads_9 (L2), DHan_9 (L2), DanBing_8 (L2), DirkDirk_9 (L1), Douge_9 (L4), Douzhi_9 (L4), DrSeegs_9 (L2), DuncansLeg_10 (L3), DyoEdafos_10 (L4), Ellson_10 (L3), Enceladus_9 (L1), EniyanLRS_28 (V), Faith1_9 (L2), FarmResident_9 (L4), Finemlucis_9 (L2), Finnry_10 (L3), Gabriela_9 (L2), Gardann_9 (L2), GuuelaD_9 (L2), Hafay_9 (L2), Halena_9 (L1), Itos_9 (L2), Jobypre_10 (L3), JoeDirt_9 (L1), Jubie_10 (L3), Kahlid_9 (L2), Kingsolomon_10 (L3), KirDoubleO7_8 (L3), Kropertea_9 (L4), Krypton555_10 (L3), Kudrefre_17 (DU1), Kumao_18 (singleton), LilDestine_9 (L2), LiyuLake_10 (L3), Loadrie_9 (L2), Lolly9_10 (L3), Lumos_10 (L3), MAckerman_9 (L1), MaryV_31 (V), Miley16_9 (L2), MiniLon_10 (L3), MiniMac_10 (L3), MkaliMitinis3_9 (L2), Moostard_10 (L3), MsGreen_10 (L3), Netyap_9 (L2), Neville_17 (DU2), Nicholas_10 (L3), Nicholasp3_9 (L2), Octobien14_18 (DU1), OhShagHennessy_9 (L1), PYPDinur_9 (L4), Poochiewood_9 (L1), Quby_9 (L4), Rabbitrun_19 (DU2), Rose5_9 (L1), Rumpelstiltskin_9 (L2), Samty_10 (L3), Sarshaun_9 (L2), Sephiroth_18 (DU1), Sheng711_9 (L4), Silverleaf_9 (L1), Snenia_10 (L3), Soap141_9 (L2), Syleon_18 (DU1), Tourach_9 (L2), Trax_17 (DU2), TriFive_10 (L3), Tyson_9 (L1), Underpass_9 (L2), Vetrix_9 (L2), Wamburgrxpress_9 (L1), Whirlwind_11 (L3), Wigglewiggle_9 (L2), Wildcat_31 (V), Wilder_9 (L2), Winky_9 (L2), Wyatt2_9 (L1), Zakai_9 (L2), Zaria_9 (L1), ZhongYanYuan_8 (L2),

Start 11:

- Found in 57 of 129 (44.2%) of genes in pham
- Manual Annotations of this start: 2 of 103
- Called 3.5% of time when present
- Phage (with cluster) where this start called: LeBron_9 (L1), UPIE_9 (L1),

Start 13:

- Found in 121 of 129 (93.8%) of genes in pham
- Manual Annotations of this start: 1 of 103
- Called 0.8% of time when present
- Phage (with cluster) where this start called: Lewan_9 (L2),

Summary by clusters:

There are 12 clusters represented in this pham: V, M2, M1, singleton, L4, L5, L2, L3, M3, L1, DU1, DU2,

Info for manual annotations of cluster DU1:

- Start number 6 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 6 was manually annotated 3 times for cluster DU2.

Info for manual annotations of cluster L1:

- Start number 6 was manually annotated 17 times for cluster L1.
- Start number 11 was manually annotated 2 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 6 was manually annotated 27 times for cluster L2.
- Start number 13 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L3:

- Start number 6 was manually annotated 16 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 6 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:

- Start number 2 was manually annotated 13 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 2 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 2 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:

- Start number 6 was manually annotated 5 times for cluster V.

Gene Information:

Gene: Acquire49_9 Start: 7246, Stop: 7713, Start Num: 6

Candidate Starts for Acquire49_9:

(Start: 6 @7246 has 79 MA's), (Start: 11 @7273 has 2 MA's), (Start: 13 @7285 has 1 MA's), (20, 7330), (23, 7342), (24, 7360), (25, 7363), (28, 7411), (31, 7423), (32, 7426), (42, 7480), (46, 7540), (52, 7585), (67, 7696), (68, 7699), (69, 7702),

Gene: Aegeus_9 Start: 6856, Stop: 7332, Start Num: 6

Candidate Starts for Aegeus_9:

(Start: 6 @6856 has 79 MA's), (8, 6865), (12, 6892), (Start: 13 @6895 has 1 MA's), (14, 6901), (21, 6943), (22, 6949), (23, 6952), (30, 7027), (38, 7075), (48, 7156), (49, 7183), (52, 7192), (59, 7252),

Gene: Appletree2_9 Start: 7220, Stop: 7687, Start Num: 6

Candidate Starts for Appletree2_9:

(Start: 6 @7220 has 79 MA's), (Start: 11 @7247 has 2 MA's), (Start: 13 @7259 has 1 MA's), (20, 7304), (23, 7316), (24, 7334), (25, 7337), (28, 7385), (31, 7397), (32, 7400), (42, 7454), (46, 7514), (52, 7559), (67, 7670), (68, 7673), (69, 7676),

Gene: Archie_9 Start: 7204, Stop: 7668, Start Num: 6

Candidate Starts for Archie_9:

(Start: 6 @7204 has 79 MA's), (Start: 11 @7231 has 2 MA's), (Start: 13 @7243 has 1 MA's), (15, 7252), (24, 7318), (25, 7321), (28, 7369), (31, 7381), (32, 7384), (42, 7438), (46, 7498), (49, 7534), (52, 7543), (63, 7615), (68, 7654), (69, 7657),

Gene: Auspice_19 Start: 11031, Stop: 11513, Start Num: 2

Candidate Starts for Auspice_19:

(Start: 2 @11031 has 20 MA's), (Start: 13 @11082 has 1 MA's), (28, 11211), (56, 11415), (61, 11439),

Gene: AvadaKedavra_9 Start: 7246, Stop: 7713, Start Num: 6

Candidate Starts for AvadaKedavra_9:

(Start: 6 @7246 has 79 MA's), (Start: 11 @7273 has 2 MA's), (Start: 13 @7285 has 1 MA's), (20, 7330), (23, 7342), (24, 7360), (25, 7363), (28, 7411), (31, 7423), (32, 7426), (42, 7480), (46, 7540), (52, 7585), (67, 7696), (68, 7699), (69, 7702),

Gene: Aziz_23 Start: 11594, Stop: 12076, Start Num: 2

Candidate Starts for Aziz_23:

(Start: 2 @11594 has 20 MA's), (Start: 13 @11645 has 1 MA's), (22, 11699), (28, 11774), (56, 11978), (61, 12002),

Gene: Azrael100_30 Start: 14162, Stop: 14638, Start Num: 6

Candidate Starts for Azrael100_30:

(Start: 6 @14162 has 79 MA's), (9, 14174), (18, 14246), (22, 14264), (25, 14288), (37, 14387), (40, 14396), (45, 14426), (54, 14513), (59, 14558), (65, 14585), (66, 14591),

Gene: Baoshan_8 Start: 7059, Stop: 7523, Start Num: 6

Candidate Starts for Baoshan_8:

(Start: 6 @7059 has 79 MA's), (Start: 11 @7086 has 2 MA's), (Start: 13 @7098 has 1 MA's), (15, 7107), (24, 7173), (25, 7176), (28, 7224), (31, 7236), (32, 7239), (42, 7293), (46, 7353), (49, 7389), (52, 7398), (63, 7470), (68, 7509), (69, 7512),

Gene: Baudelaire_9 Start: 6856, Stop: 7332, Start Num: 6

Candidate Starts for Baudelaire_9:

(Start: 6 @6856 has 79 MA's), (8, 6865), (12, 6892), (Start: 13 @6895 has 1 MA's), (14, 6901), (21, 6943), (22, 6949), (23, 6952), (30, 7027), (38, 7075), (48, 7156), (49, 7183), (52, 7192), (59, 7252),

Gene: Bazzle_9 Start: 7180, Stop: 7644, Start Num: 6

Candidate Starts for Bazzle_9:

(Start: 6 @7180 has 79 MA's), (Start: 11 @7207 has 2 MA's), (Start: 13 @7219 has 1 MA's), (24, 7294), (25, 7297), (28, 7345), (31, 7357), (32, 7360), (42, 7414), (49, 7510), (52, 7519), (63, 7591), (68, 7630), (69, 7633),

Gene: Bellis_10 Start: 7367, Stop: 7843, Start Num: 6

Candidate Starts for Bellis_10:

(Start: 6 @7367 has 79 MA's), (Start: 13 @7406 has 1 MA's), (20, 7457), (24, 7487), (25, 7490), (28, 7538), (30, 7547), (31, 7550), (32, 7553), (42, 7607), (43, 7622), (46, 7667), (49, 7703),

Gene: BigCheese_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for BigCheese_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: BobsGarage_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for BobsGarage_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Bongo_19 Start: 11031, Stop: 11513, Start Num: 2

Candidate Starts for Bongo_19:

(Start: 2 @11031 has 20 MA's), (Start: 13 @11082 has 1 MA's), (28, 11211), (56, 11415), (61, 11439),

Gene: BourbonZero_9 Start: 7373, Stop: 7849, Start Num: 6

Candidate Starts for BourbonZero_9:

(Start: 6 @7373 has 79 MA's), (Start: 13 @7412 has 1 MA's), (20, 7463), (24, 7493), (25, 7496), (28, 7544), (29, 7547), (31, 7556), (42, 7613), (43, 7628), (46, 7673), (49, 7709), (64, 7796),

Gene: BrainDrainer_10 Start: 7050, Stop: 7514, Start Num: 6

Candidate Starts for BrainDrainer_10:

(Start: 6 @7050 has 79 MA's), (Start: 13 @7089 has 1 MA's), (15, 7098), (25, 7167), (26, 7179), (28, 7215), (30, 7224), (31, 7227), (32, 7230), (42, 7284), (50, 7383), (52, 7389), (63, 7461), (68, 7500), (69, 7503),

Gene: Breezona_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Breezona_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Bricole_19 Start: 11030, Stop: 11512, Start Num: 2

Candidate Starts for Bricole_19:

(Start: 2 @11030 has 20 MA's), (Start: 13 @11081 has 1 MA's), (28, 11210), (56, 11414), (61, 11438),

Gene: Bromden_9 Start: 6960, Stop: 7424, Start Num: 6

Candidate Starts for Bromden_9:

(Start: 6 @6960 has 79 MA's), (Start: 13 @6999 has 1 MA's), (15, 7008), (24, 7074), (25, 7077), (26, 7089), (28, 7125), (30, 7134), (31, 7137), (32, 7140), (42, 7194), (50, 7293), (52, 7299), (63, 7371), (68, 7410), (69, 7413),

Gene: Calm_9 Start: 7247, Stop: 7714, Start Num: 6

Candidate Starts for Calm_9:

(Start: 6 @7247 has 79 MA's), (Start: 11 @7274 has 2 MA's), (Start: 13 @7286 has 1 MA's), (20, 7331), (23, 7343), (24, 7361), (25, 7364), (28, 7412), (31, 7424), (32, 7427), (42, 7481), (46, 7541), (52, 7586), (67, 7697), (68, 7700), (69, 7703),

Gene: Chaser_9 Start: 6965, Stop: 7429, Start Num: 6

Candidate Starts for Chaser_9:

(Start: 6 @6965 has 79 MA's), (Start: 13 @7004 has 1 MA's), (15, 7013), (24, 7079), (25, 7082), (26, 7094), (28, 7130), (30, 7139), (31, 7142), (32, 7145), (42, 7199), (50, 7298), (52, 7304), (63, 7376), (68, 7415), (69, 7418),

Gene: CicholasNage_9 Start: 7247, Stop: 7714, Start Num: 6

Candidate Starts for CicholasNage_9:

(Start: 6 @7247 has 79 MA's), (Start: 11 @7274 has 2 MA's), (Start: 13 @7286 has 1 MA's), (20, 7331), (23, 7343), (24, 7361), (25, 7364), (28, 7412), (31, 7424), (32, 7427), (42, 7481), (46, 7541), (52, 7586), (67, 7697), (68, 7700), (69, 7703),

Gene: Claus_9 Start: 7239, Stop: 7703, Start Num: 6

Candidate Starts for Claus_9:

(Start: 6 @7239 has 79 MA's), (Start: 11 @7266 has 2 MA's), (Start: 13 @7278 has 1 MA's), (15, 7287), (24, 7353), (25, 7356), (28, 7404), (31, 7416), (32, 7419), (42, 7473), (46, 7533), (49, 7569), (52, 7578), (63, 7650), (68, 7689), (69, 7692),

Gene: Clautastrophe_10 Start: 7371, Stop: 7847, Start Num: 6

Candidate Starts for Clautastrophe_10:

(Start: 6 @7371 has 79 MA's), (Start: 13 @7410 has 1 MA's), (20, 7461), (24, 7491), (25, 7494), (28, 7542), (30, 7551), (31, 7554), (32, 7557), (42, 7611), (43, 7626), (46, 7671), (49, 7707),

Gene: Cosmo_31 Start: 14169, Stop: 14645, Start Num: 6

Candidate Starts for Cosmo_31:

(Start: 6 @14169 has 79 MA's), (9, 14181), (18, 14253), (22, 14271), (25, 14295), (37, 14394), (40, 14403), (45, 14433), (54, 14520), (59, 14565), (65, 14592), (66, 14598),

Gene: Crossroads_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Crossroads_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: DHan_9 Start: 7175, Stop: 7639, Start Num: 6

Candidate Starts for DHan_9:

(Start: 6 @7175 has 79 MA's), (Start: 11 @7202 has 2 MA's), (Start: 13 @7214 has 1 MA's), (15, 7223), (24, 7289), (25, 7292), (28, 7340), (31, 7352), (32, 7355), (42, 7409), (46, 7469), (49, 7505), (52, 7514), (63, 7586), (68, 7625), (69, 7628),

Gene: DanBing_8 Start: 7058, Stop: 7522, Start Num: 6

Candidate Starts for DanBing_8:

(Start: 6 @7058 has 79 MA's), (Start: 11 @7085 has 2 MA's), (Start: 13 @7097 has 1 MA's), (15, 7106), (24, 7172), (25, 7175), (28, 7223), (31, 7235), (32, 7238), (42, 7292), (46, 7352), (49, 7388), (52, 7397), (63, 7469), (68, 7508), (69, 7511),

Gene: Diminimus_20 Start: 11030, Stop: 11512, Start Num: 2

Candidate Starts for Diminimus_20:

(Start: 2 @11030 has 20 MA's), (Start: 13 @11081 has 1 MA's), (28, 11210), (56, 11414), (61, 11438),

Gene: DirkDirk_9 Start: 7248, Stop: 7715, Start Num: 6

Candidate Starts for DirkDirk_9:

(Start: 6 @7248 has 79 MA's), (Start: 11 @7275 has 2 MA's), (Start: 13 @7287 has 1 MA's), (20, 7332), (23, 7344), (24, 7362), (25, 7365), (28, 7413), (31, 7425), (32, 7428), (42, 7482), (46, 7542), (52, 7587), (67, 7698), (68, 7701), (69, 7704),

Gene: Douge_9 Start: 6911, Stop: 7375, Start Num: 6

Candidate Starts for Douge_9:

(Start: 6 @6911 has 79 MA's), (Start: 13 @6950 has 1 MA's), (15, 6959), (24, 7025), (25, 7028), (26, 7040), (28, 7076), (30, 7085), (31, 7088), (32, 7091), (42, 7145), (50, 7244), (52, 7250), (63, 7322), (68, 7361), (69, 7364),

Gene: Douzhi_9 Start: 6911, Stop: 7375, Start Num: 6

Candidate Starts for Douzhi_9:

(Start: 6 @6911 has 79 MA's), (Start: 13 @6950 has 1 MA's), (15, 6959), (25, 7028), (26, 7040), (28, 7076), (30, 7085), (31, 7088), (32, 7091), (42, 7145), (50, 7244), (52, 7250), (63, 7322), (68, 7361), (69, 7364),

Gene: DrSeegs_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for DrSeegs_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Dulcita_20 Start: 11030, Stop: 11512, Start Num: 2

Candidate Starts for Dulcita_20:

(Start: 2 @11030 has 20 MA's), (Start: 13 @11081 has 1 MA's), (28, 11210), (56, 11414), (61, 11438),

Gene: DuncansLeg_10 Start: 7375, Stop: 7851, Start Num: 6

Candidate Starts for DuncansLeg_10:

(Start: 6 @7375 has 79 MA's), (Start: 13 @7414 has 1 MA's), (20, 7465), (24, 7495), (25, 7498), (28, 7546), (29, 7549), (30, 7555), (31, 7558), (42, 7615), (43, 7630), (46, 7675), (49, 7711),

Gene: DyoEdafos_10 Start: 7121, Stop: 7585, Start Num: 6

Candidate Starts for DyoEdafos_10:

(Start: 6 @7121 has 79 MA's), (Start: 13 @7160 has 1 MA's), (24, 7235), (26, 7250), (28, 7286), (30, 7295), (31, 7298), (32, 7301), (42, 7355), (50, 7454), (52, 7460), (63, 7532), (68, 7571), (69, 7574),

Gene: Ellson_10 Start: 7383, Stop: 7859, Start Num: 6

Candidate Starts for Ellson_10:

(Start: 6 @7383 has 79 MA's), (Start: 13 @7422 has 1 MA's), (20, 7473), (24, 7503), (25, 7506), (28, 7554), (29, 7557), (31, 7566), (42, 7623), (43, 7638), (46, 7683), (49, 7719), (64, 7806),

Gene: EmiRose_8 Start: 7240, Stop: 7716, Start Num: 3

Candidate Starts for EmiRose_8:

(Start: 3 @7240 has 1 MA's), (4, 7246), (25, 7375), (28, 7420), (30, 7429), (31, 7432), (55, 7609), (59, 7651),

Gene: Enceladus_9 Start: 7248, Stop: 7715, Start Num: 6

Candidate Starts for Enceladus_9:

(Start: 6 @7248 has 79 MA's), (Start: 11 @7275 has 2 MA's), (Start: 13 @7287 has 1 MA's), (20, 7332), (23, 7344), (24, 7362), (25, 7365), (28, 7413), (31, 7425), (32, 7428), (42, 7482), (46, 7542), (52, 7587), (67, 7698), (68, 7701), (69, 7704),

Gene: EniyanLRS_28 Start: 13863, Stop: 14339, Start Num: 6

Candidate Starts for EniyanLRS_28:

(Start: 6 @13863 has 79 MA's), (9, 13875), (18, 13947), (22, 13965), (25, 13989), (37, 14088), (40, 14097), (45, 14127), (54, 14214), (59, 14259), (65, 14286), (66, 14292),

Gene: Estes_24 Start: 11731, Stop: 12213, Start Num: 2

Candidate Starts for Estes_24:

(Start: 2 @11731 has 20 MA's), (Start: 13 @11782 has 1 MA's), (22, 11836), (28, 11911), (56, 12115), (61, 12139),

Gene: Faith1_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Faith1_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: FarmResident_9 Start: 6956, Stop: 7420, Start Num: 6

Candidate Starts for FarmResident_9:

(Start: 6 @6956 has 79 MA's), (Start: 13 @6995 has 1 MA's), (15, 7004), (24, 7070), (25, 7073), (26, 7085), (28, 7121), (30, 7130), (31, 7133), (32, 7136), (42, 7190), (50, 7289), (52, 7295), (63, 7367), (68, 7406), (69, 7409),

Gene: Finemlucis_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Finemlucis_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Finnry_10 Start: 7368, Stop: 7844, Start Num: 6

Candidate Starts for Finnry_10:

(Start: 6 @7368 has 79 MA's), (Start: 13 @7407 has 1 MA's), (20, 7458), (24, 7488), (25, 7491), (28, 7539), (30, 7548), (31, 7551), (32, 7554), (42, 7608), (43, 7623), (46, 7668), (49, 7704),

Gene: FreakyGoo_19 Start: 11031, Stop: 11513, Start Num: 2

Candidate Starts for FreakyGoo_19:

(Start: 2 @11031 has 20 MA's), (Start: 13 @11082 has 1 MA's), (28, 11211), (56, 11415), (61, 11439),

Gene: Gabriela_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Gabriela_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681),

Gene: Gardann_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Gardann_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: GardenSalsa_23 Start: 11567, Stop: 12049, Start Num: 2

Candidate Starts for GardenSalsa_23:

(Start: 2 @11567 has 20 MA's), (Start: 13 @11618 has 1 MA's), (22, 11672), (28, 11747), (56, 11951), (61, 11975),

Gene: GenevaB15_23 Start: 11594, Stop: 12076, Start Num: 2

Candidate Starts for GenevaB15_23:

(Start: 2 @11594 has 20 MA's), (Start: 13 @11645 has 1 MA's), (22, 11699), (28, 11774), (56, 11978), (61, 12002),

Gene: Glaske16_20 Start: 11030, Stop: 11512, Start Num: 2

Candidate Starts for Glaske16_20:

(Start: 2 @11030 has 20 MA's), (Start: 13 @11081 has 1 MA's), (28, 11210), (56, 11414), (61, 11438),

Gene: GuuelaD_9 Start: 7264, Stop: 7728, Start Num: 6

Candidate Starts for GuuelaD_9:

(Start: 6 @7264 has 79 MA's), (Start: 11 @7291 has 2 MA's), (Start: 13 @7303 has 1 MA's), (25, 7381), (28, 7429), (31, 7441), (32, 7444), (42, 7498), (46, 7558), (52, 7603), (63, 7675), (68, 7714), (69, 7717),

Gene: Hafay_9 Start: 7264, Stop: 7728, Start Num: 6

Candidate Starts for Hafay_9:

(Start: 6 @7264 has 79 MA's), (Start: 11 @7291 has 2 MA's), (Start: 13 @7303 has 1 MA's), (24, 7378), (25, 7381), (28, 7429), (31, 7441), (32, 7444), (42, 7498), (52, 7603), (63, 7675), (68, 7714), (69, 7717),

Gene: Halena_9 Start: 7247, Stop: 7714, Start Num: 6

Candidate Starts for Halena_9:

(Start: 6 @7247 has 79 MA's), (Start: 11 @7274 has 2 MA's), (Start: 13 @7286 has 1 MA's), (20, 7331), (23, 7343), (24, 7361), (25, 7364), (28, 7412), (31, 7424), (32, 7427), (42, 7481), (46, 7541), (52, 7586), (67, 7697), (68, 7700), (69, 7703),

Gene: IPhane7_19 Start: 11031, Stop: 11513, Start Num: 2

Candidate Starts for IPhane7_19:

(Start: 2 @11031 has 20 MA's), (Start: 13 @11082 has 1 MA's), (28, 11211), (56, 11415), (61, 11439),

Gene: Itos_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Itos_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Izel_18 Start: 11030, Stop: 11512, Start Num: 2

Candidate Starts for Izel_18:

(Start: 2 @11030 has 20 MA's), (Start: 13 @11081 has 1 MA's), (28, 11210), (56, 11414), (61, 11438),

Gene: Jobypre_10 Start: 7371, Stop: 7847, Start Num: 6

Candidate Starts for Jobypre_10:

(Start: 6 @7371 has 79 MA's), (Start: 13 @7410 has 1 MA's), (20, 7461), (24, 7491), (25, 7494), (28, 7542), (30, 7551), (31, 7554), (32, 7557), (42, 7611), (43, 7626), (46, 7671), (49, 7707),

Gene: JoeDirt_9 Start: 7247, Stop: 7714, Start Num: 6

Candidate Starts for JoeDirt_9:

(Start: 6 @7247 has 79 MA's), (Start: 11 @7274 has 2 MA's), (Start: 13 @7286 has 1 MA's), (20, 7331), (23, 7343), (24, 7361), (25, 7364), (28, 7412), (31, 7424), (32, 7427), (42, 7481), (46, 7541), (52, 7586), (67, 7697), (68, 7700), (69, 7703),

Gene: Jubie_10 Start: 7371, Stop: 7847, Start Num: 6

Candidate Starts for Jubie_10:

(Start: 6 @7371 has 79 MA's), (Start: 13 @7410 has 1 MA's), (20, 7461), (24, 7491), (25, 7494), (28, 7542), (30, 7551), (31, 7554), (32, 7557), (42, 7611), (43, 7626), (46, 7671), (49, 7707),

Gene: Kahlid_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Kahlid_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Kingsolomon_10 Start: 7371, Stop: 7847, Start Num: 6

Candidate Starts for Kingsolomon_10:

(Start: 6 @7371 has 79 MA's), (Start: 13 @7410 has 1 MA's), (20, 7461), (24, 7491), (25, 7494), (28, 7542), (30, 7551), (31, 7554), (32, 7557), (42, 7611), (43, 7626), (46, 7671), (49, 7707),

Gene: KirDoubleO7_8 Start: 7384, Stop: 7860, Start Num: 6

Candidate Starts for KirDoubleO7_8:

(Start: 6 @7384 has 79 MA's), (Start: 13 @7423 has 1 MA's), (20, 7474), (24, 7504), (25, 7507), (28, 7555), (29, 7558), (30, 7564), (31, 7567), (42, 7624), (43, 7639), (46, 7684), (49, 7720), (64, 7807),

Gene: Kropertea_9 Start: 6927, Stop: 7391, Start Num: 6

Candidate Starts for Kropertea_9:

(Start: 6 @6927 has 79 MA's), (Start: 13 @6966 has 1 MA's), (24, 7041), (26, 7056), (28, 7092), (30, 7101), (31, 7104), (32, 7107), (42, 7161), (50, 7260), (52, 7266), (63, 7338), (68, 7377), (69, 7380),

Gene: Krypton555_10 Start: 7360, Stop: 7836, Start Num: 6

Candidate Starts for Krypton555_10:

(Start: 6 @7360 has 79 MA's), (Start: 13 @7399 has 1 MA's), (20, 7450), (24, 7480), (25, 7483), (27, 7513), (28, 7531), (30, 7540), (31, 7543), (32, 7546), (42, 7600), (43, 7615), (46, 7660), (49, 7696),

Gene: Kudrefre_17 Start: 10644, Stop: 11111, Start Num: 6

Candidate Starts for Kudrefre_17:

(5, 10641), (Start: 6 @10644 has 79 MA's), (8, 10653), (Start: 13 @10683 has 1 MA's), (17, 10719), (21, 10737), (28, 10812), (31, 10824), (32, 10827), (44, 10902), (49, 10986), (51, 10992), (65, 11076), (66, 11082),

Gene: Kumao_18 Start: 10373, Stop: 10849, Start Num: 6

Candidate Starts for Kumao_18:

(Start: 6 @10373 has 79 MA's), (10, 10391), (Start: 13 @10412 has 1 MA's), (14, 10418), (19, 10460), (22, 10472), (36, 10583), (37, 10601), (41, 10613), (57, 10754), (60, 10772), (62, 10784),

Gene: LeBron_9 Start: 7274, Stop: 7714, Start Num: 11

Candidate Starts for LeBron_9:

(Start: 6 @7247 has 79 MA's), (Start: 11 @7274 has 2 MA's), (Start: 13 @7286 has 1 MA's), (20, 7331), (23, 7343), (24, 7361), (25, 7364), (28, 7412), (31, 7424), (32, 7427), (42, 7481), (46, 7541), (52, 7586), (67, 7697), (68, 7700), (69, 7703),

Gene: Lewan_9 Start: 7270, Stop: 7695, Start Num: 13

Candidate Starts for Lewan_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: LilDestine_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for LilDestine_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69,

7684),

Gene: LilhomieP_18 Start: 11031, Stop: 11513, Start Num: 2

Candidate Starts for LilhomieP_18:

(Start: 2 @11031 has 20 MA's), (Start: 13 @11082 has 1 MA's), (28, 11211), (56, 11415), (61, 11439),

Gene: LiyuLake_10 Start: 7375, Stop: 7851, Start Num: 6

Candidate Starts for LiyuLake_10:

(Start: 6 @7375 has 79 MA's), (Start: 13 @7414 has 1 MA's), (20, 7465), (24, 7495), (25, 7498), (28, 7546), (29, 7549), (31, 7558), (42, 7615), (43, 7630), (46, 7675), (49, 7711), (64, 7798),

Gene: Loadrie_9 Start: 7264, Stop: 7728, Start Num: 6

Candidate Starts for Loadrie_9:

(Start: 6 @7264 has 79 MA's), (Start: 11 @7291 has 2 MA's), (Start: 13 @7303 has 1 MA's), (24, 7378), (25, 7381), (28, 7429), (31, 7441), (32, 7444), (42, 7498), (52, 7603), (63, 7675), (68, 7714), (69, 7717),

Gene: Lolly9_10 Start: 7378, Stop: 7854, Start Num: 6

Candidate Starts for Lolly9_10:

(Start: 6 @7378 has 79 MA's), (Start: 13 @7417 has 1 MA's), (20, 7468), (24, 7498), (25, 7501), (28, 7549), (30, 7558), (31, 7561), (32, 7564), (42, 7618), (43, 7633), (46, 7678), (49, 7714),

Gene: Lumos_10 Start: 7371, Stop: 7847, Start Num: 6

Candidate Starts for Lumos_10:

(Start: 6 @7371 has 79 MA's), (Start: 13 @7410 has 1 MA's), (20, 7461), (24, 7491), (25, 7494), (28, 7542), (30, 7551), (31, 7554), (32, 7557), (42, 7611), (43, 7626), (46, 7671), (49, 7707),

Gene: MAckerman_9 Start: 7246, Stop: 7713, Start Num: 6

Candidate Starts for MAckerman_9:

(Start: 6 @7246 has 79 MA's), (Start: 11 @7273 has 2 MA's), (Start: 13 @7285 has 1 MA's), (20, 7330), (23, 7342), (24, 7360), (25, 7363), (28, 7411), (31, 7423), (32, 7426), (42, 7480), (46, 7540), (52, 7585), (67, 7696), (68, 7699), (69, 7702),

Gene: MaryV_31 Start: 14135, Stop: 14611, Start Num: 6

Candidate Starts for MaryV_31:

(Start: 6 @14135 has 79 MA's), (9, 14147), (18, 14219), (22, 14237), (25, 14261), (37, 14360), (40, 14369), (45, 14399), (54, 14486), (59, 14531), (65, 14558), (66, 14564),

Gene: Miley16_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Miley16_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: MiniLon_10 Start: 7378, Stop: 7854, Start Num: 6

Candidate Starts for MiniLon_10:

(Start: 6 @7378 has 79 MA's), (Start: 13 @7417 has 1 MA's), (20, 7468), (24, 7498), (25, 7501), (28, 7549), (30, 7558), (31, 7561), (32, 7564), (42, 7618), (43, 7633), (46, 7678), (49, 7714),

Gene: MiniMac_10 Start: 7379, Stop: 7855, Start Num: 6

Candidate Starts for MiniMac_10:

(Start: 6 @7379 has 79 MA's), (Start: 13 @7418 has 1 MA's), (20, 7469), (24, 7499), (25, 7502), (28, 7550), (30, 7559), (31, 7562), (32, 7565), (42, 7619), (43, 7634), (46, 7679), (49, 7715),

Gene: MkaliMitinis3_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for MkaliMitinis3_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Moostard_10 Start: 7367, Stop: 7843, Start Num: 6

Candidate Starts for Moostard_10:

(Start: 6 @7367 has 79 MA's), (Start: 13 @7406 has 1 MA's), (20, 7457), (24, 7487), (25, 7490), (28, 7538), (30, 7547), (31, 7550), (32, 7553), (42, 7607), (43, 7622), (46, 7667), (49, 7703),

Gene: MrMagoo_23 Start: 11567, Stop: 12049, Start Num: 2

Candidate Starts for MrMagoo_23:

(Start: 2 @11567 has 20 MA's), (Start: 13 @11618 has 1 MA's), (22, 11672), (28, 11747), (56, 11951), (61, 11975),

Gene: MsGreen_10 Start: 7371, Stop: 7847, Start Num: 6

Candidate Starts for MsGreen_10:

(Start: 6 @7371 has 79 MA's), (Start: 13 @7410 has 1 MA's), (20, 7461), (24, 7491), (25, 7494), (28, 7542), (30, 7551), (31, 7554), (32, 7557), (42, 7611), (43, 7626), (46, 7671), (49, 7707),

Gene: Nanosmite_23 Start: 11785, Stop: 12267, Start Num: 2

Candidate Starts for Nanosmite_23:

(1, 11779), (Start: 2 @11785 has 20 MA's), (7, 11806), (Start: 13 @11836 has 1 MA's), (28, 11965), (61, 12193),

Gene: Netyap_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Netyap_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Neville_17 Start: 10452, Stop: 10922, Start Num: 6

Candidate Starts for Neville_17:

(Start: 6 @10452 has 79 MA's), (31, 10653), (32, 10656), (33, 10659), (34, 10668), (35, 10674), (39, 10701), (47, 10785), (58, 10869), (65, 10899), (66, 10905),

Gene: Nicholas_10 Start: 7371, Stop: 7847, Start Num: 6

Candidate Starts for Nicholas_10:

(Start: 6 @7371 has 79 MA's), (Start: 13 @7410 has 1 MA's), (20, 7461), (24, 7491), (25, 7494), (28, 7542), (30, 7551), (31, 7554), (32, 7557), (42, 7611), (43, 7626), (46, 7671), (49, 7707),

Gene: Nicholasp3_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Nicholasp3_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Octobien14_18 Start: 11707, Stop: 12174, Start Num: 6

Candidate Starts for Octobien14_18:

(5, 11704), (Start: 6 @11707 has 79 MA's), (8, 11716), (Start: 13 @11746 has 1 MA's), (17, 11782), (28, 11875), (31, 11887), (32, 11890), (44, 11965), (49, 12049), (51, 12055), (52, 12058), (53, 12064),

(65, 12139), (66, 12145),

Gene: OhShagHennessy_9 Start: 7220, Stop: 7687, Start Num: 6

Candidate Starts for OhShagHennessy_9:

(Start: 6 @7220 has 79 MA's), (Start: 11 @7247 has 2 MA's), (Start: 13 @7259 has 1 MA's), (20, 7304), (23, 7316), (24, 7334), (25, 7337), (28, 7385), (31, 7397), (32, 7400), (42, 7454), (46, 7514), (52, 7559), (67, 7670), (68, 7673), (69, 7676),

Gene: PYPDinur_9 Start: 6911, Stop: 7375, Start Num: 6

Candidate Starts for PYPDinur_9:

(Start: 6 @6911 has 79 MA's), (Start: 13 @6950 has 1 MA's), (15, 6959), (25, 7028), (26, 7040), (28, 7076), (30, 7085), (31, 7088), (32, 7091), (42, 7145), (50, 7244), (52, 7250), (63, 7322), (68, 7361), (69, 7364),

Gene: PegLeg_19 Start: 11030, Stop: 11512, Start Num: 2

Candidate Starts for PegLeg_19:

(Start: 2 @11030 has 20 MA's), (Start: 13 @11081 has 1 MA's), (28, 11210), (56, 11414), (61, 11438),

Gene: Poochiewood_9 Start: 7246, Stop: 7713, Start Num: 6

Candidate Starts for Poochiewood_9:

(Start: 6 @7246 has 79 MA's), (Start: 11 @7273 has 2 MA's), (Start: 13 @7285 has 1 MA's), (20, 7330), (23, 7342), (24, 7360), (25, 7363), (28, 7411), (31, 7423), (32, 7426), (42, 7480), (46, 7540), (52, 7585), (67, 7696), (68, 7699), (69, 7702),

Gene: Quby_9 Start: 6910, Stop: 7374, Start Num: 6

Candidate Starts for Quby_9:

(Start: 6 @6910 has 79 MA's), (Start: 13 @6949 has 1 MA's), (15, 6958), (24, 7024), (25, 7027), (26, 7039), (28, 7075), (30, 7084), (31, 7087), (32, 7090), (42, 7144), (50, 7243), (52, 7249), (63, 7321), (68, 7360), (69, 7363),

Gene: Rabbitrun_19 Start: 10976, Stop: 11446, Start Num: 6

Candidate Starts for Rabbitrun_19:

(Start: 6 @10976 has 79 MA's), (Start: 13 @11015 has 1 MA's), (28, 11165), (34, 11192), (35, 11198), (38, 11222), (46, 11303), (47, 11309), (52, 11342), (58, 11393), (65, 11423), (66, 11429),

Gene: Reindeer_17 Start: 10883, Stop: 11365, Start Num: 2

Candidate Starts for Reindeer_17:

(Start: 2 @10883 has 20 MA's), (Start: 13 @10934 has 1 MA's), (16, 10961), (26, 11024), (28, 11063), (56, 11267), (61, 11291),

Gene: Rey_23 Start: 11802, Stop: 12284, Start Num: 2

Candidate Starts for Rey_23:

(Start: 2 @11802 has 20 MA's), (Start: 13 @11853 has 1 MA's), (22, 11907), (28, 11982), (56, 12186), (61, 12210),

Gene: Rose5_9 Start: 7246, Stop: 7713, Start Num: 6

Candidate Starts for Rose5_9:

(Start: 6 @7246 has 79 MA's), (Start: 11 @7273 has 2 MA's), (Start: 13 @7285 has 1 MA's), (20, 7330), (23, 7342), (24, 7360), (25, 7363), (28, 7411), (31, 7423), (32, 7426), (42, 7480), (46, 7540), (52, 7585), (67, 7696), (68, 7699), (69, 7702),

Gene: Rumpelstiltskin_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Rumpelstiltskin_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Samty_10 Start: 7367, Stop: 7843, Start Num: 6

Candidate Starts for Samty_10:

(Start: 6 @7367 has 79 MA's), (Start: 13 @7406 has 1 MA's), (20, 7457), (24, 7487), (25, 7490), (28, 7538), (30, 7547), (31, 7550), (32, 7553), (42, 7607), (43, 7622), (46, 7667), (49, 7703),

Gene: Sarshaun_9 Start: 7264, Stop: 7728, Start Num: 6

Candidate Starts for Sarshaun_9:

(Start: 6 @7264 has 79 MA's), (Start: 11 @7291 has 2 MA's), (Start: 13 @7303 has 1 MA's), (24, 7378), (25, 7381), (28, 7429), (31, 7441), (32, 7444), (42, 7498), (52, 7603), (63, 7675), (68, 7714), (69, 7717),

Gene: Sephiroth_18 Start: 10815, Stop: 11282, Start Num: 6

Candidate Starts for Sephiroth_18:

(5, 10812), (Start: 6 @10815 has 79 MA's), (8, 10824), (Start: 13 @10854 has 1 MA's), (17, 10890), (21, 10908), (28, 10983), (31, 10995), (32, 10998), (44, 11073), (49, 11157), (51, 11163), (65, 11247), (66, 11253),

Gene: Sheng711_9 Start: 6911, Stop: 7375, Start Num: 6

Candidate Starts for Sheng711_9:

(Start: 6 @6911 has 79 MA's), (Start: 13 @6950 has 1 MA's), (15, 6959), (25, 7028), (26, 7040), (28, 7076), (30, 7085), (31, 7088), (32, 7091), (42, 7145), (50, 7244), (52, 7250), (63, 7322), (68, 7361), (69, 7364),

Gene: Silverleaf_9 Start: 7246, Stop: 7713, Start Num: 6

Candidate Starts for Silverleaf_9:

(Start: 6 @7246 has 79 MA's), (Start: 11 @7273 has 2 MA's), (Start: 13 @7285 has 1 MA's), (20, 7330), (23, 7342), (24, 7360), (25, 7363), (28, 7411), (31, 7423), (32, 7426), (42, 7480), (46, 7540), (52, 7585), (67, 7696), (68, 7699), (69, 7702),

Gene: Skinny_20 Start: 11031, Stop: 11513, Start Num: 2

Candidate Starts for Skinny_20:

(Start: 2 @11031 has 20 MA's), (Start: 13 @11082 has 1 MA's), (28, 11211), (56, 11415), (61, 11439),

Gene: SlimJimmy_18 Start: 11030, Stop: 11512, Start Num: 2

Candidate Starts for SlimJimmy_18:

(Start: 2 @11030 has 20 MA's), (Start: 13 @11081 has 1 MA's), (28, 11210), (56, 11414), (61, 11438),

Gene: Snenia_10 Start: 7372, Stop: 7848, Start Num: 6

Candidate Starts for Snenia_10:

(Start: 6 @7372 has 79 MA's), (Start: 13 @7411 has 1 MA's), (20, 7462), (24, 7492), (25, 7495), (28, 7543), (30, 7552), (31, 7555), (32, 7558), (42, 7612), (43, 7627), (46, 7672), (49, 7708),

Gene: Soap141_9 Start: 7264, Stop: 7728, Start Num: 6

Candidate Starts for Soap141_9:

(Start: 6 @7264 has 79 MA's), (Start: 11 @7291 has 2 MA's), (Start: 13 @7303 has 1 MA's), (24, 7378), (25, 7381), (28, 7429), (31, 7441), (32, 7444), (42, 7498), (52, 7603), (63, 7675), (68, 7714), (69, 7717),

Gene: Syleon_18 Start: 10737, Stop: 11204, Start Num: 6

Candidate Starts for Syleon_18:

(5, 10734), (Start: 6 @10737 has 79 MA's), (8, 10746), (Start: 13 @10776 has 1 MA's), (17, 10812), (21, 10830), (28, 10905), (31, 10917), (32, 10920), (44, 10995), (49, 11079), (51, 11085), (65, 11169), (66, 11175),

Gene: Tourach_9 Start: 7244, Stop: 7708, Start Num: 6

Candidate Starts for Tourach_9:

(Start: 6 @7244 has 79 MA's), (Start: 11 @7271 has 2 MA's), (Start: 13 @7283 has 1 MA's), (15, 7292), (24, 7358), (25, 7361), (28, 7409), (31, 7421), (32, 7424), (42, 7478), (46, 7538), (52, 7583), (63, 7655), (68, 7694), (69, 7697),

Gene: Trax_17 Start: 10452, Stop: 10922, Start Num: 6

Candidate Starts for Trax_17:

(Start: 6 @10452 has 79 MA's), (29, 10644), (31, 10653), (32, 10656), (33, 10659), (34, 10668), (35, 10674), (39, 10701), (47, 10785), (58, 10869), (65, 10899), (66, 10905),

Gene: TriFive_10 Start: 7371, Stop: 7847, Start Num: 6

Candidate Starts for TriFive_10:

(Start: 6 @7371 has 79 MA's), (Start: 13 @7410 has 1 MA's), (20, 7461), (24, 7491), (25, 7494), (28, 7542), (30, 7551), (31, 7554), (32, 7557), (42, 7611), (43, 7626), (46, 7671), (49, 7707),

Gene: TyDawg_19 Start: 11031, Stop: 11513, Start Num: 2

Candidate Starts for TyDawg_19:

(Start: 2 @11031 has 20 MA's), (Start: 13 @11082 has 1 MA's), (28, 11211), (56, 11415), (61, 11439),

Gene: Tyson_9 Start: 7246, Stop: 7713, Start Num: 6

Candidate Starts for Tyson_9:

(Start: 6 @7246 has 79 MA's), (Start: 11 @7273 has 2 MA's), (Start: 13 @7285 has 1 MA's), (20, 7330), (23, 7342), (24, 7360), (25, 7363), (28, 7411), (31, 7423), (32, 7426), (42, 7480), (46, 7540), (52, 7585), (67, 7696), (68, 7699), (69, 7702),

Gene: UPIE_9 Start: 7271, Stop: 7711, Start Num: 11

Candidate Starts for UPIE_9:

(Start: 6 @7244 has 79 MA's), (Start: 11 @7271 has 2 MA's), (Start: 13 @7283 has 1 MA's), (20, 7328), (23, 7340), (24, 7358), (25, 7361), (28, 7409), (31, 7421), (32, 7424), (42, 7478), (46, 7538), (52, 7583), (67, 7694), (68, 7697), (69, 7700),

Gene: Underpass_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Underpass_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Vetrrix_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Vetrrix_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Wamburgexpress_9 Start: 7246, Stop: 7713, Start Num: 6

Candidate Starts for Wamburgexpress_9:

(Start: 6 @7246 has 79 MA's), (Start: 11 @7273 has 2 MA's), (Start: 13 @7285 has 1 MA's), (20, 7330), (23, 7342), (24, 7360), (25, 7363), (28, 7411), (31, 7423), (32, 7426), (42, 7480), (46, 7540), (52,

7585), (67, 7696), (68, 7699), (69, 7702),

Gene: Whirlwind_11 Start: 7365, Stop: 7841, Start Num: 6

Candidate Starts for Whirlwind_11:

(Start: 6 @7365 has 79 MA's), (Start: 13 @7404 has 1 MA's), (20, 7455), (24, 7485), (25, 7488), (28, 7536), (29, 7539), (30, 7545), (31, 7548), (32, 7551), (42, 7605), (46, 7665), (52, 7710),

Gene: Wigglewigggle_9 Start: 7264, Stop: 7728, Start Num: 6

Candidate Starts for Wigglewigggle_9:

(Start: 6 @7264 has 79 MA's), (Start: 11 @7291 has 2 MA's), (Start: 13 @7303 has 1 MA's), (24, 7378), (25, 7381), (28, 7429), (31, 7441), (32, 7444), (42, 7498), (52, 7603), (63, 7675), (68, 7714), (69, 7717),

Gene: Wildcat_31 Start: 14145, Stop: 14621, Start Num: 6

Candidate Starts for Wildcat_31:

(Start: 6 @14145 has 79 MA's), (9, 14157), (18, 14229), (22, 14247), (25, 14271), (37, 14370), (40, 14379), (45, 14409), (54, 14496), (59, 14541), (65, 14568), (66, 14574),

Gene: Wilder_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Wilder_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Winky_9 Start: 7231, Stop: 7695, Start Num: 6

Candidate Starts for Winky_9:

(Start: 6 @7231 has 79 MA's), (Start: 11 @7258 has 2 MA's), (Start: 13 @7270 has 1 MA's), (24, 7345), (25, 7348), (28, 7396), (31, 7408), (32, 7411), (42, 7465), (52, 7570), (63, 7642), (68, 7681), (69, 7684),

Gene: Wyatt2_9 Start: 7246, Stop: 7713, Start Num: 6

Candidate Starts for Wyatt2_9:

(Start: 6 @7246 has 79 MA's), (Start: 11 @7273 has 2 MA's), (Start: 13 @7285 has 1 MA's), (20, 7330), (23, 7342), (24, 7360), (25, 7363), (28, 7411), (31, 7423), (32, 7426), (42, 7480), (46, 7540), (52, 7585), (67, 7696), (68, 7699), (69, 7702),

Gene: Zakai_9 Start: 7219, Stop: 7683, Start Num: 6

Candidate Starts for Zakai_9:

(Start: 6 @7219 has 79 MA's), (Start: 11 @7246 has 2 MA's), (Start: 13 @7258 has 1 MA's), (24, 7333), (25, 7336), (28, 7384), (31, 7396), (32, 7399), (42, 7453), (52, 7558), (63, 7630), (68, 7669), (69, 7672),

Gene: Zaria_9 Start: 7247, Stop: 7714, Start Num: 6

Candidate Starts for Zaria_9:

(Start: 6 @7247 has 79 MA's), (Start: 11 @7274 has 2 MA's), (Start: 13 @7286 has 1 MA's), (20, 7331), (23, 7343), (24, 7361), (25, 7364), (28, 7412), (31, 7424), (32, 7427), (42, 7481), (46, 7541), (52, 7586), (67, 7697), (68, 7700), (69, 7703),

Gene: ZhongYanYuan_8 Start: 7059, Stop: 7523, Start Num: 6

Candidate Starts for ZhongYanYuan_8:

(Start: 6 @7059 has 79 MA's), (Start: 11 @7086 has 2 MA's), (Start: 13 @7098 has 1 MA's), (15, 7107), (24, 7173), (25, 7176), (28, 7224), (31, 7236), (32, 7239), (42, 7293), (46, 7353), (49, 7389), (52, 7398), (63, 7470), (68, 7509), (69, 7512),

