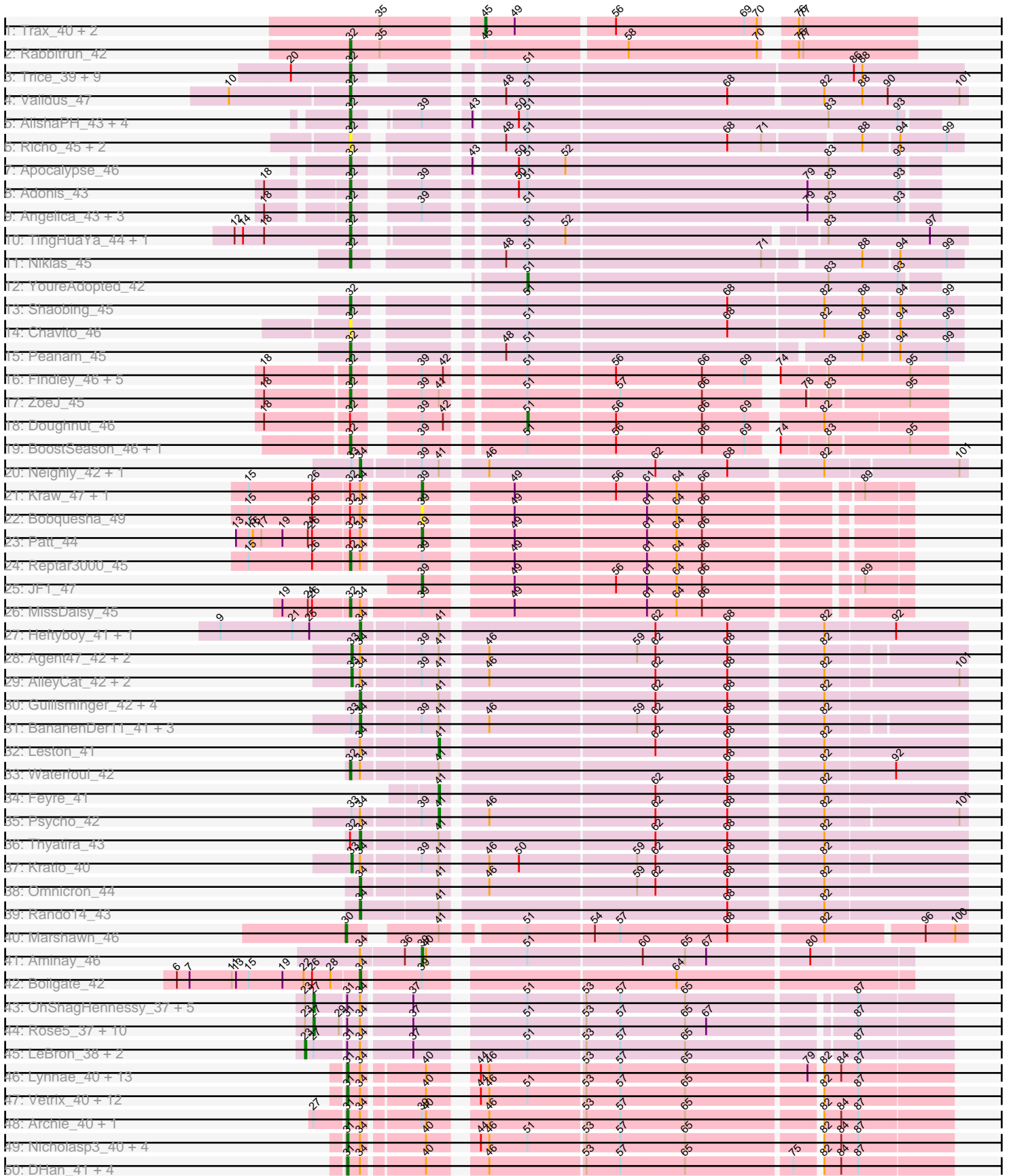
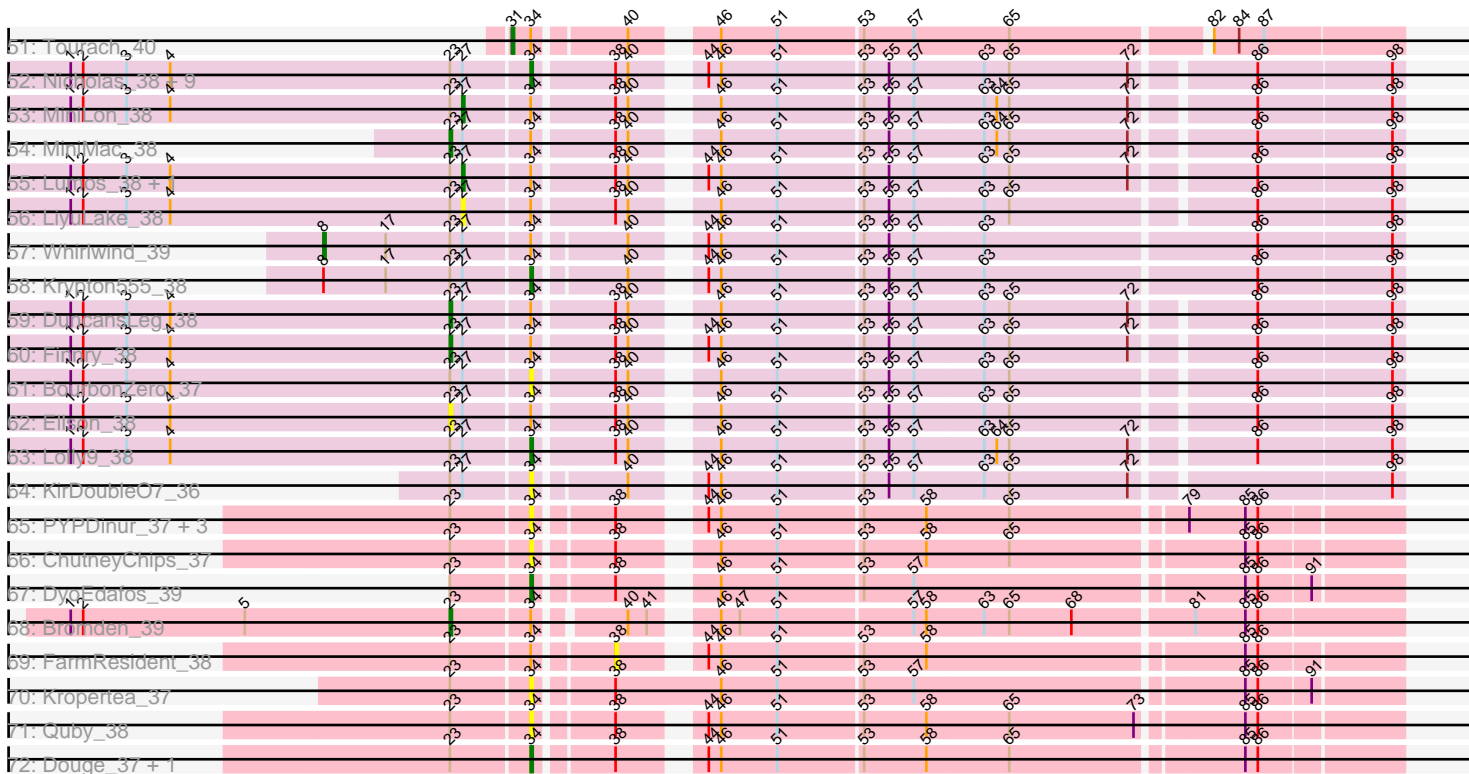


Pham 296280



Pham 296280



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 296280 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296280 has 178 members, 38 are drafts.

Phages represented in each track:

- Track 1 : Trax_40, LilJank_41, Neville_40
- Track 2 : Rabbitrun_42
- Track 3 : Trice_39, Biglebops_38, Nikao_41, Teejan_41, Amelie_38, Torres_41, SgtBeansprout_38, Mdavu_39, Nutello_38, Enkosi_41
- Track 4 : Validus_47
- Track 5 : AlishaPH_43, Geraldini_45, BaghaKamala_42, Pokerus_42, Clipper_46
- Track 6 : Richo_45, Dartin_45, McMater_45
- Track 7 : Apocalypse_46
- Track 8 : Adonis_43
- Track 9 : Angelica_43, Anaya_45, Deby_43, Sulley_43
- Track 10 : TingHuaYa_44, LastHope_46
- Track 11 : Niklas_45
- Track 12 : YoureAdopted_42
- Track 13 : Shaobing_45
- Track 14 : Chavito_46
- Track 15 : Peanam_45
- Track 16 : Findley_46, Strobilo_46, DismalStressor_46, Milly_46, Marcoliusprime_46, DismalFunk_46
- Track 17 : ZoeJ_45
- Track 18 : Doughnut_46
- Track 19 : BoostSeason_46, Mufasa_46
- Track 20 : Neighly_42, Edugator_41
- Track 21 : Kraw_47, Qhanda_49
- Track 22 : Bobquesha_49
- Track 23 : Patt_44
- Track 24 : Reptar3000_45
- Track 25 : JF1_47
- Track 26 : MissDaisy_45
- Track 27 : Heftyboy_41, SoSeph_41
- Track 28 : Agent47_42, InvictusManeo_41, Collard_41
- Track 29 : AlleyCat_42, Larva_42, Dadosky_42
- Track 30 : Guillsminger_42, Gengar_41, OkiRoe_41, Paola_41, Miryou_43
- Track 31 : BananenDer11_41, LilDirt_41, ViviJ_41, DoubleChamp_41
- Track 32 : Leston_41
- Track 33 : Waterfoul_42
- Track 34 : Feyre_41
- Track 35 : Psycho_42

- Track 36 : Thyatira_43
- Track 37 : Kratio_40
- Track 38 : Omnicron_44
- Track 39 : Rando14_43
- Track 40 : Marshawn_46
- Track 41 : Aminay_46
- Track 42 : Boilgate_42
- Track 43 : OhShagHennessy_37, Poochiewood_37, Wamburgrxpress_38, DirkDirk_37, Enceladus_37, Appletree2_37
- Track 44 : Rose5_37, Calm_38, Tyson_37, CicholasNage_38, Halena_37, Wyatt2_38, MAckerman_38, Acquire49_38, Zaria_38, Silverleaf_37, AvadaKedavra_38
- Track 45 : LeBron_38, UPIE_38, JoeDirt_37
- Track 46 : Lynnae_40, Lewan_40, GuuelaD_40, Sarshaun_40, Kahlid_40, Hafay_40, Crossroads_40, Loadrie_40, Wilder_40, MkaliMitinis3_40, OverPar_41, Soap141_40, Wigglewiggle_40, Zakai_40
- Track 47 : Vetrix_40, Winky_40, SoJulia_41, Gabriela_40, Rumpelstiltskin_40, BobsGarage_40, Netyap_40, Breezona_40, DrSeegs_40, Faith1_40, Miley16_40, BigCheese_40, LilDestine_40
- Track 48 : Archie_40, Bazzle_40
- Track 49 : Nicholasp3_40, Rossetti_40, Gardann_40, Finemlucis_40, Underpass_40
- Track 50 : DHan_41, Claus_40, Baoshan_39, ZhongYanYuan_39, DanBing_40
- Track 51 : Tourach_40
- Track 52 : Nicholas_38, Red305_38, Jubie_38, Snenia_38, Moostard_38, Clautastrophe_38, Bellis_38, MsGreen_38, Jobypre_38, TriFive_38
- Track 53 : MiniLon_38
- Track 54 : MiniMac_38
- Track 55 : Lumos_38, Kingsolomon_38
- Track 56 : LiyuLake_38
- Track 57 : Whirlwind_39
- Track 58 : Krypton555_38
- Track 59 : DuncansLeg_38
- Track 60 : Finnry_38
- Track 61 : BourbonZero_37
- Track 62 : Ellson_38
- Track 63 : Lolly9_38
- Track 64 : KirDoubleO7_36
- Track 65 : PYPDinur_37, Douzhi_37, BrainDrainer_38, Sheng711_38
- Track 66 : ChutneyChips_37
- Track 67 : DyoEdafos_39
- Track 68 : Bromden_39
- Track 69 : FarmResident_38
- Track 70 : Kropertea_37
- Track 71 : Quby_38
- Track 72 : Douge_37, Chaser_37

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

The start number called the most often in the published annotations is 32, it was called in 37 of the 140 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adonis_43, AlishaPH_43, Amelie_38, Anaya_45, Angelica_43, Apocalypse_46, BaghaKamala_42, Biglebops_38, BoostSeason_46, Chavito_46, Clipper_46, Dartin_45, Deby_43, DismalFunk_46, DismalStressor_46, Enkosi_41, Findley_46, Geraldini_45, LastHope_46, Marcoliusprime_46, McMater_45, Mdavu_39, Milly_46, MissDaisy_45, Mufasa_46, Nikao_41, Niklas_45, Nutello_38, Peanam_45, Pokerus_42, Rabbitrun_42, Reptar3000_45, Richo_45, SgtBeansprout_38, Shaobing_45, Strobilo_46, Sulley_43, Teejan_41, TingHuaYa_44, Torres_41, Trice_39, Validus_47, Waterfoul_42, ZoeJ_45,

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

- Bobquesha_49, Doughnut_46, Kraw_47, Patt_44, Qhanda_49, Thyatira_43,

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

- Acquire49_38, Agent47_42, AlleyCat_42, Aminay_46, Appletree2_37, Archie_40, AvadaKedavra_38, BananenDer11_41, Baoshan_39, Bazzle_40, Bellis_38, BigCheese_40, BobsGarage_40, Boilgate_42, BourbonZero_37, BrainDrainer_38, Breezona_40, Bromden_39, Calm_38, Chaser_37, ChutneyChips_37, CicholasNage_38, Claus_40, Clautastrophe_38, Collard_41, Crossroads_40, DHan_41, Dadosky_42, DanBing_40, DirkDirk_37, DoubleChamp_41, Douge_37, Douzhi_37, DrSeegs_40, DuncansLeg_38, DyoEdafos_39, Edugator_41, Ellson_38, Enceladus_37, Faith1_40, FarmResident_38, Feyre_41, Finemlucis_40, Finnry_38, Gabriela_40, Gardann_40, Gengar_41, Guillsminger_42, GuuelaD_40, Hafay_40, Halena_37, Heftyboy_41, InvictusManeo_41, JF1_47, Jobypre_38, JoeDirt_37, Jubie_38, Kahlid_40, Kingsolomon_38, KirDoubleO7_36, Kratio_40, Kropertea_37, Krypton555_38, Larva_42, LeBron_38, Leston_41, Lewan_40, LilDestine_40, LilDirt_41, LilJank_41, LiyuLake_38, Loadrie_40, Lolly9_38, Lumos_38, Lynnae_40, MAckerman_38, Marshawn_46, Miley16_40, MiniLon_38, MiniMac_38, Miryou_43, MkaliMitinis3_40, Moostard_38, MsGreen_38, Neighly_42, Netyap_40, Neville_40, Nicholas_38, Nicholasp3_40, OhShagHennessey_37, OkiRoe_41, Omnicron_44, OverPar_41, PYPDinur_37, Paola_41, Pochiewood_37, Psycho_42, Quby_38, Rando14_43, Red305_38, Rose5_37, Rossetti_40, Rumpelstiltskin_40, Sarshaun_40, Sheng711_38, Silverleaf_37, Snenia_38, SoJulia_41, SoSeph_41, Soap141_40, Tourach_40, Trax_40, TriFive_38, Tyson_37, UPIE_38, Underpass_40, Vetrix_40, ViviJ_41, Wamburggrxpress_38, Whirlwind_39, Wigglewiggle_40, Wilder_40, Winky_40, Wyatt2_38, YoureAdopted_42, Zakai_40, Zaria_38, ZhongYanYuan_39,

Summary by start number:

Start 8:

- Found in 2 of 178 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 140
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Whirlwind_39 (L3),

Start 23:

- Found in 55 of 178 (30.9%) of genes in pham
- Manual Annotations of this start: 7 of 140
- Called 14.5% of time when present
- Phage (with cluster) where this start called: Bromden_39 (L4), DuncansLeg_38 (L3), Ellson_38 (L3), Finnry_38 (L3), JoeDirt_37 (L1), LeBron_38 (L1), MiniMac_38 (L3),

UPIE_38 (L1),

Start 27:

- Found in 45 of 178 (25.3%) of genes in pham
- Manual Annotations of this start: 19 of 140
- Called 46.7% of time when present
- Phage (with cluster) where this start called: Acquire49_38 (L1), Appletree2_37 (L1), AvadaKedavra_38 (L1), Calm_38 (L1), CicholasNage_38 (L1), DirkDirk_37 (L1), Enceladus_37 (L1), Halena_37 (L1), Kingsolomon_38 (L3), LiyuLake_38 (L3), Lumos_38 (L3), MAckerman_38 (L1), MiniLon_38 (L3), OhShagHennessy_37 (L1), Pochiewood_37 (L1), Rose5_37 (L1), Silverleaf_37 (L1), Tyson_37 (L1), Wamburgxpress_38 (L1), Wyatt2_38 (L1), Zaria_38 (L1),

Start 30:

- Found in 1 of 178 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 140
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Marshawn_46 (K6),

Start 31:

- Found in 60 of 178 (33.7%) of genes in pham
- Manual Annotations of this start: 30 of 140
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Archie_40 (L2), Baoshan_39 (L2), Bazzle_40 (L2), BigCheese_40 (L2), BobsGarage_40 (L2), Breezona_40 (L2), Claus_40 (L2), Crossroads_40 (L2), DHan_41 (L2), DanBing_40 (L2), DrSeegs_40 (L2), Faith1_40 (L2), Finemlucis_40 (L2), Gabriela_40 (L2), Gardann_40 (L2), GuuelaD_40 (L2), Hafay_40 (L2), Kahlid_40 (L2), Lewan_40 (L2), LilDestine_40 (L2), Loadrie_40 (L2), Lynnae_40 (L2), Miley16_40 (L2), MkaliMitinis3_40 (L2), Netyap_40 (L2), Nicholasp3_40 (L2), OverPar_41 (L2), Rossetti_40 (L2), Rumpelstiltskin_40 (L2), Sarshaun_40 (L2), SoJulia_41 (L2), Soap141_40 (L2), Tourach_40 (L2), Underpass_40 (L2), Vetrix_40 (L2), Wigglewiggle_40 (L2), Wilder_40 (L2), Winky_40 (L2), Zakai_40 (L2), ZhongYanYuan_39 (L2),

Start 32:

- Found in 50 of 178 (28.1%) of genes in pham
- Manual Annotations of this start: 37 of 140
- Called 88.0% of time when present
- Phage (with cluster) where this start called: Adonis_43 (K1), AlishaPH_43 (K1), Amelie_38 (K1), Anaya_45 (K1), Angelica_43 (K1), Apocalypse_46 (K1), BaghaKamala_42 (K1), Binglebops_38 (K1), BoostSeason_46 (K2), Chavito_46 (K1), Clipper_46 (K1), Dartin_45 (K1), Deby_43 (K1), DismalFunk_46 (K2), DismalStressor_46 (K2), Enkosi_41 (K1), Findley_46 (K2), Geraldini_45 (K1), LastHope_46 (K1), Marcoliusprime_46 (K2), McMater_45 (K1), Mdavu_39 (K1), Milly_46 (K2), MissDaisy_45 (K4), Mufasa_46 (K2), Nikao_41 (K1), Niklas_45 (K1), Nutello_38 (K1), Peanam_45 (K1), Pokerus_42 (K1), Rabbitrun_42 (DU2), Reptar3000_45 (K4), Richo_45 (K1), SgtBeansprout_38 (K1), Shaobing_45 (K1), Strobilo_46 (K2), Sulley_43 (K1), Teejan_41 (K1), TingHuaYa_44 (K1), Torres_41 (K1), Trice_39 (K1), Validus_47 (K1), Waterfoul_42 (K5), ZoeJ_45 (K2),

Start 33:

- Found in 14 of 178 (7.9%) of genes in pham
- Manual Annotations of this start: 7 of 140

- Called 50.0% of time when present
- Phage (with cluster) where this start called: Agent47_42 (K5), AlleyCat_42 (K5), Collard_41 (K5), Dadosky_42 (K5), InvictusManeo_41 (K5), Kratio_40 (K5), Larva_42 (K5),

Start 34:

- Found in 129 of 178 (72.5%) of genes in pham
- Manual Annotations of this start: 27 of 140
- Called 31.8% of time when present
- Phage (with cluster) where this start called: BananenDer11_41 (K5), Bellis_38 (L3), Boilgate_42 (K8), BourbonZero_37 (L3), BrainDrainer_38 (L4), Chaser_37 (L4), ChutneyChips_37 (L4), Clautastrophe_38 (L3), DoubleChamp_41 (K5), Douge_37 (L4), Douzhi_37 (L4), DyoEdafos_39 (L4), Edugator_41 (K5), Gengar_41 (K5), Guillsminger_42 (K5), Heftyboy_41 (K5), Jobypre_38 (L3), Jubie_38 (L3), KirDoubleO7_36 (L3), Kropertea_37 (L4), Krypton555_38 (L3), LilDirt_41 (K5), Lolly9_38 (L3), Miryou_43 (K5), Moostard_38 (L3), MsGreen_38 (L3), Neighly_42 (K3), Nicholas_38 (L3), OkiRoe_41 (K5), Omnicron_44 (K5), PYPDinur_37 (L4), Paola_41 (K5), Quby_38 (L4), Rando14_43 (K5), Red305_38 (L3), Sheng711_38 (L4), Snenia_38 (L3), SoSeph_41 (K5), Thyatira_43 (K5), TriFive_38 (L3), ViviJ_41 (K5),

Start 38:

- Found in 31 of 178 (17.4%) of genes in pham
- No Manual Annotations of this start.
- Called 3.2% of time when present
- Phage (with cluster) where this start called: FarmResident_38 (L4),

Start 39:

- Found in 45 of 178 (25.3%) of genes in pham
- Manual Annotations of this start: 4 of 140
- Called 13.3% of time when present
- Phage (with cluster) where this start called: Aminay_46 (K7), Bobquesha_49 (K4), JF1_47 (K4), Kraw_47 (K4), Patt_44 (K4), Qhanda_49 (K4),

Start 41:

- Found in 30 of 178 (16.9%) of genes in pham
- Manual Annotations of this start: 3 of 140
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Feyre_41 (K5), Leston_41 (K5), Psycho_42 (K5),

Start 45:

- Found in 4 of 178 (2.2%) of genes in pham
- Manual Annotations of this start: 2 of 140
- Called 75.0% of time when present
- Phage (with cluster) where this start called: LilJank_41 (DU2), Neville_40 (DU2), Trax_40 (DU2),

Start 51:

- Found in 118 of 178 (66.3%) of genes in pham
- Manual Annotations of this start: 2 of 140
- Called 1.7% of time when present

- Phage (with cluster) where this start called: Doughnut_46 (K2), YoureAdopted_42 (K1),

Summary by clusters:

There are 13 clusters represented in this pham: L1, L4, K3, K2, K1, L2, L3, K5, K4, K7, DU2, K8, K6,

Info for manual annotations of cluster DU2:

- Start number 32 was manually annotated 1 time for cluster DU2.
- Start number 45 was manually annotated 2 times for cluster DU2.

Info for manual annotations of cluster K1:

- Start number 32 was manually annotated 24 times for cluster K1.
- Start number 51 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K2:

- Start number 32 was manually annotated 9 times for cluster K2.
- Start number 51 was manually annotated 1 time for cluster K2.

Info for manual annotations of cluster K4:

- Start number 32 was manually annotated 2 times for cluster K4.
- Start number 39 was manually annotated 3 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 32 was manually annotated 1 time for cluster K5.
- Start number 33 was manually annotated 7 times for cluster K5.
- Start number 34 was manually annotated 12 times for cluster K5.
- Start number 41 was manually annotated 3 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 30 was manually annotated 1 time for cluster K6.

Info for manual annotations of cluster K7:

- Start number 39 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 34 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster L1:

- Start number 23 was manually annotated 3 times for cluster L1.
- Start number 27 was manually annotated 16 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 31 was manually annotated 30 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 8 was manually annotated 1 time for cluster L3.
- Start number 23 was manually annotated 3 times for cluster L3.
- Start number 27 was manually annotated 3 times for cluster L3.
- Start number 34 was manually annotated 11 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 23 was manually annotated 1 time for cluster L4.
- Start number 34 was manually annotated 3 times for cluster L4.

Gene Information:

Gene: Acquire49_38 Start: 32935, Stop: 32525, Start Num: 27

Candidate Starts for Acquire49_38:

(Start: 23 @32941 has 7 MA's), (Start: 27 @32935 has 19 MA's), (29, 32917), (Start: 31 @32914 has 30 MA's), (Start: 34 @32905 has 27 MA's), (37, 32872), (Start: 51 @32806 has 2 MA's), (53, 32767), (57, 32743), (65, 32698), (67, 32683), (87, 32590),

Gene: Adonis_43 Start: 35277, Stop: 34897, Start Num: 32

Candidate Starts for Adonis_43:

(18, 35328), (Start: 32 @35277 has 37 MA's), (Start: 39 @35241 has 4 MA's), (50, 35187), (Start: 51 @35181 has 2 MA's), (79, 34986), (83, 34971), (93, 34923),

Gene: Agent47_42 Start: 34530, Stop: 34129, Start Num: 33

Candidate Starts for Agent47_42:

(Start: 33 @34530 has 7 MA's), (Start: 34 @34524 has 27 MA's), (Start: 39 @34485 has 4 MA's), (Start: 41 @34473 has 3 MA's), (46, 34446), (59, 34344), (62, 34332), (68, 34281), (82, 34221),

Gene: AlishaPH_43 Start: 35250, Stop: 34873, Start Num: 32

Candidate Starts for AlishaPH_43:

(Start: 32 @35250 has 37 MA's), (Start: 39 @35217 has 4 MA's), (43, 35190), (50, 35163), (Start: 51 @35157 has 2 MA's), (83, 34947), (93, 34899),

Gene: AlleyCat_42 Start: 34384, Stop: 33980, Start Num: 33

Candidate Starts for AlleyCat_42:

(Start: 33 @34384 has 7 MA's), (Start: 34 @34378 has 27 MA's), (Start: 39 @34339 has 4 MA's), (Start: 41 @34327 has 3 MA's), (46, 34300), (62, 34186), (68, 34135), (82, 34075), (101, 33985),

Gene: Amelie_38 Start: 34527, Stop: 34129, Start Num: 32

Candidate Starts for Amelie_38:

(20, 34566), (Start: 32 @34527 has 37 MA's), (Start: 51 @34431 has 2 MA's), (86, 34206), (88, 34200),

Gene: Aminay_46 Start: 36466, Stop: 36146, Start Num: 39

Candidate Starts for Aminay_46:

(Start: 34 @36508 has 27 MA's), (36, 36478), (Start: 39 @36466 has 4 MA's), (40, 36463), (Start: 51 @36406 has 2 MA's), (60, 36328), (65, 36298), (67, 36283), (80, 36214),

Gene: Anaya_45 Start: 35589, Stop: 35209, Start Num: 32

Candidate Starts for Anaya_45:

(18, 35640), (Start: 32 @35589 has 37 MA's), (Start: 39 @35553 has 4 MA's), (Start: 51 @35493 has 2 MA's), (79, 35298), (83, 35283), (93, 35235),

Gene: Angelica_43 Start: 35209, Stop: 34829, Start Num: 32

Candidate Starts for Angelica_43:

(18, 35260), (Start: 32 @35209 has 37 MA's), (Start: 39 @35173 has 4 MA's), (Start: 51 @35113 has 2 MA's), (79, 34918), (83, 34903), (93, 34855),

Gene: Apocalypse_46 Start: 35992, Stop: 35615, Start Num: 32

Candidate Starts for Apocalypse_46:

(Start: 32 @35992 has 37 MA's), (43, 35932), (50, 35905), (Start: 51 @35899 has 2 MA's), (52, 35872), (83, 35689), (93, 35641),

Gene: Appletree2_37 Start: 32877, Stop: 32467, Start Num: 27

Candidate Starts for Appletree2_37:

(Start: 23 @32883 has 7 MA's), (Start: 27 @32877 has 19 MA's), (Start: 31 @32856 has 30 MA's), (Start: 34 @32847 has 27 MA's), (37, 32814), (Start: 51 @32748 has 2 MA's), (53, 32709), (57, 32685), (65, 32640), (87, 32532),

Gene: Archie_40 Start: 34485, Stop: 34096, Start Num: 31

Candidate Starts for Archie_40:

(Start: 27 @34506 has 19 MA's), (Start: 31 @34485 has 30 MA's), (Start: 34 @34476 has 27 MA's), (Start: 39 @34440 has 4 MA's), (40, 34437), (46, 34407), (53, 34341), (57, 34317), (65, 34272), (82, 34185), (84, 34173), (87, 34161),

Gene: AvadaKedavra_38 Start: 32944, Stop: 32534, Start Num: 27

Candidate Starts for AvadaKedavra_38:

(Start: 23 @32950 has 7 MA's), (Start: 27 @32944 has 19 MA's), (29, 32926), (Start: 31 @32923 has 30 MA's), (Start: 34 @32914 has 27 MA's), (37, 32881), (Start: 51 @32815 has 2 MA's), (53, 32776), (57, 32752), (65, 32707), (67, 32692), (87, 32599),

Gene: BaghaKamala_42 Start: 34415, Stop: 34038, Start Num: 32

Candidate Starts for BaghaKamala_42:

(Start: 32 @34415 has 37 MA's), (Start: 39 @34382 has 4 MA's), (43, 34355), (50, 34328), (Start: 51 @34322 has 2 MA's), (83, 34112), (93, 34064),

Gene: BananenDer11_41 Start: 34485, Stop: 34090, Start Num: 34

Candidate Starts for BananenDer11_41:

(Start: 33 @34491 has 7 MA's), (Start: 34 @34485 has 27 MA's), (Start: 39 @34446 has 4 MA's), (Start: 41 @34434 has 3 MA's), (46, 34407), (59, 34305), (62, 34293), (68, 34242), (82, 34182),

Gene: Baoshan_39 Start: 34142, Stop: 33753, Start Num: 31

Candidate Starts for Baoshan_39:

(Start: 31 @34142 has 30 MA's), (Start: 34 @34133 has 27 MA's), (40, 34094), (46, 34064), (53, 33998), (57, 33974), (65, 33929), (75, 33857), (82, 33842), (84, 33830), (87, 33818),

Gene: Bazzle_40 Start: 34517, Stop: 34128, Start Num: 31

Candidate Starts for Bazzle_40:

(Start: 27 @34538 has 19 MA's), (Start: 31 @34517 has 30 MA's), (Start: 34 @34508 has 27 MA's), (Start: 39 @34472 has 4 MA's), (40, 34469), (46, 34439), (53, 34373), (57, 34349), (65, 34304), (82, 34217), (84, 34205), (87, 34193),

Gene: Bellis_38 Start: 34518, Stop: 34135, Start Num: 34

Candidate Starts for Bellis_38:

(1, 34737), (2, 34731), (3, 34710), (4, 34689), (Start: 23 @34554 has 7 MA's), (Start: 27 @34548 has 19 MA's), (Start: 34 @34518 has 27 MA's), (38, 34482), (40, 34476), (44, 34452), (46, 34446), (Start: 51 @34419 has 2 MA's), (53, 34380), (55, 34368), (57, 34356), (63, 34323), (65, 34311), (72, 34254), (86, 34203), (98, 34140),

Gene: BigCheese_40 Start: 34280, Stop: 33891, Start Num: 31

Candidate Starts for BigCheese_40:

(Start: 31 @34280 has 30 MA's), (Start: 34 @34271 has 27 MA's), (40, 34232), (44, 34208), (46, 34202), (Start: 51 @34175 has 2 MA's), (53, 34136), (57, 34112), (65, 34067), (82, 33980), (87, 33956),

Gene: Biglebops_38 Start: 34527, Stop: 34129, Start Num: 32

Candidate Starts for Biglebops_38:

(20, 34566), (Start: 32 @34527 has 37 MA's), (Start: 51 @34431 has 2 MA's), (86, 34206), (88, 34200),

Gene: Bobquesha_49 Start: 35368, Stop: 35057, Start Num: 39

Candidate Starts for Bobquesha_49:

(15, 35482), (26, 35437), (Start: 32 @35413 has 37 MA's), (Start: 34 @35407 has 27 MA's), (Start: 39 @35368 has 4 MA's), (49, 35317), (61, 35227), (64, 35206), (66, 35188),

Gene: BobsGarage_40 Start: 34280, Stop: 33891, Start Num: 31

Candidate Starts for BobsGarage_40:

(Start: 31 @34280 has 30 MA's), (Start: 34 @34271 has 27 MA's), (40, 34232), (44, 34208), (46, 34202), (Start: 51 @34175 has 2 MA's), (53, 34136), (57, 34112), (65, 34067), (82, 33980), (87, 33956),

Gene: Boilgate_42 Start: 36179, Stop: 35817, Start Num: 34

Candidate Starts for Boilgate_42:

(6, 36305), (7, 36296), (11, 36266), (13, 36263), (15, 36254), (19, 36230), (22, 36215), (26, 36209), (28, 36197), (Start: 34 @36179 has 27 MA's), (Start: 39 @36140 has 4 MA's), (64, 35978),

Gene: BoostSeason_46 Start: 36618, Stop: 36250, Start Num: 32

Candidate Starts for BoostSeason_46:

(Start: 32 @36618 has 37 MA's), (Start: 39 @36582 has 4 MA's), (Start: 51 @36522 has 2 MA's), (56, 36462), (66, 36402), (69, 36372), (74, 36360), (83, 36330), (95, 36276),

Gene: BourbonZero_37 Start: 34497, Stop: 34114, Start Num: 34

Candidate Starts for BourbonZero_37:

(1, 34716), (2, 34710), (3, 34689), (4, 34668), (Start: 23 @34533 has 7 MA's), (Start: 27 @34527 has 19 MA's), (Start: 34 @34497 has 27 MA's), (38, 34461), (40, 34455), (46, 34425), (Start: 51 @34398 has 2 MA's), (53, 34359), (55, 34347), (57, 34335), (63, 34302), (65, 34290), (86, 34182), (98, 34119),

Gene: BrainDrainer_38 Start: 33181, Stop: 32801, Start Num: 34

Candidate Starts for BrainDrainer_38:

(Start: 23 @33217 has 7 MA's), (Start: 34 @33181 has 27 MA's), (38, 33148), (44, 33118), (46, 33112), (Start: 51 @33085 has 2 MA's), (53, 33046), (58, 33016), (65, 32977), (79, 32899), (85, 32872), (86, 32866),

Gene: Breezona_40 Start: 34280, Stop: 33891, Start Num: 31

Candidate Starts for Breezona_40:

(Start: 31 @34280 has 30 MA's), (Start: 34 @34271 has 27 MA's), (40, 34232), (44, 34208), (46, 34202), (Start: 51 @34175 has 2 MA's), (53, 34136), (57, 34112), (65, 34067), (82, 33980), (87, 33956),

Gene: Bromden_39 Start: 33770, Stop: 33351, Start Num: 23

Candidate Starts for Bromden_39:

(1, 33953), (2, 33947), (5, 33869), (Start: 23 @33770 has 7 MA's), (Start: 34 @33734 has 27 MA's), (40, 33698), (Start: 41 @33689 has 3 MA's), (46, 33668), (47, 33659), (Start: 51 @33641 has 2 MA's), (57, 33578), (58, 33572), (63, 33545), (65, 33533), (68, 33503), (81, 33449), (85, 33425), (86, 33419),

Gene: Calm_38 Start: 32950, Stop: 32540, Start Num: 27

Candidate Starts for Calm_38:

(Start: 23 @32956 has 7 MA's), (Start: 27 @32950 has 19 MA's), (29, 32932), (Start: 31 @32929 has 30 MA's), (Start: 34 @32920 has 27 MA's), (37, 32887), (Start: 51 @32821 has 2 MA's), (53, 32782), (57, 32758), (65, 32713), (67, 32698), (87, 32605),

Gene: Chaser_37 Start: 32998, Stop: 32618, Start Num: 34

Candidate Starts for Chaser_37:

(Start: 23 @33034 has 7 MA's), (Start: 34 @32998 has 27 MA's), (38, 32965), (44, 32935), (46, 32929), (Start: 51 @32902 has 2 MA's), (53, 32863), (58, 32833), (65, 32794), (85, 32689), (86, 32683),

Gene: Chavito_46 Start: 36294, Stop: 35896, Start Num: 32

Candidate Starts for Chavito_46:

(Start: 32 @36294 has 37 MA's), (Start: 51 @36195 has 2 MA's), (68, 36057), (82, 35991), (88, 35964), (94, 35940), (99, 35907),

Gene: ChutneyChips_37 Start: 33178, Stop: 32798, Start Num: 34

Candidate Starts for ChutneyChips_37:

(Start: 23 @33214 has 7 MA's), (Start: 34 @33178 has 27 MA's), (38, 33145), (46, 33109), (Start: 51 @33082 has 2 MA's), (53, 33043), (58, 33013), (65, 32974), (85, 32869), (86, 32863),

Gene: CicholasNage_38 Start: 32971, Stop: 32561, Start Num: 27

Candidate Starts for CicholasNage_38:

(Start: 23 @32977 has 7 MA's), (Start: 27 @32971 has 19 MA's), (29, 32953), (Start: 31 @32950 has 30 MA's), (Start: 34 @32941 has 27 MA's), (37, 32908), (Start: 51 @32842 has 2 MA's), (53, 32803), (57, 32779), (65, 32734), (67, 32719), (87, 32626),

Gene: Claus_40 Start: 34300, Stop: 33911, Start Num: 31

Candidate Starts for Claus_40:

(Start: 31 @34300 has 30 MA's), (Start: 34 @34291 has 27 MA's), (40, 34252), (46, 34222), (53, 34156), (57, 34132), (65, 34087), (75, 34015), (82, 34000), (84, 33988), (87, 33976),

Gene: Clautastrophe_38 Start: 34516, Stop: 34133, Start Num: 34

Candidate Starts for Clautastrophe_38:

(1, 34735), (2, 34729), (3, 34708), (4, 34687), (Start: 23 @34552 has 7 MA's), (Start: 27 @34546 has 19 MA's), (Start: 34 @34516 has 27 MA's), (38, 34480), (40, 34474), (44, 34450), (46, 34444), (Start: 51 @34417 has 2 MA's), (53, 34378), (55, 34366), (57, 34354), (63, 34321), (65, 34309), (72, 34252), (86, 34201), (98, 34138),

Gene: Clipper_46 Start: 35611, Stop: 35234, Start Num: 32

Candidate Starts for Clipper_46:

(Start: 32 @35611 has 37 MA's), (Start: 39 @35578 has 4 MA's), (43, 35551), (50, 35524), (Start: 51 @35518 has 2 MA's), (83, 35308), (93, 35260),

Gene: Collard_41 Start: 34491, Stop: 34090, Start Num: 33

Candidate Starts for Collard_41:

(Start: 33 @34491 has 7 MA's), (Start: 34 @34485 has 27 MA's), (Start: 39 @34446 has 4 MA's), (Start: 41 @34434 has 3 MA's), (46, 34407), (59, 34305), (62, 34293), (68, 34242), (82, 34182),

Gene: Crossroads_40 Start: 34282, Stop: 33893, Start Num: 31

Candidate Starts for Crossroads_40:

(Start: 31 @34282 has 30 MA's), (Start: 34 @34273 has 27 MA's), (40, 34234), (44, 34210), (46, 34204), (53, 34138), (57, 34114), (65, 34069), (79, 33988), (82, 33982), (84, 33970), (87, 33958),

Gene: DHan_41 Start: 34241, Stop: 33852, Start Num: 31

Candidate Starts for DHan_41:

(Start: 31 @34241 has 30 MA's), (Start: 34 @34232 has 27 MA's), (40, 34193), (46, 34163), (53, 34097), (57, 34073), (65, 34028), (75, 33956), (82, 33941), (84, 33929), (87, 33917),

Gene: Dadosky_42 Start: 34386, Stop: 33982, Start Num: 33

Candidate Starts for Dadosky_42:

(Start: 33 @34386 has 7 MA's), (Start: 34 @34380 has 27 MA's), (Start: 39 @34341 has 4 MA's), (Start: 41 @34329 has 3 MA's), (46, 34302), (62, 34188), (68, 34137), (82, 34077), (101, 33987),

Gene: DanBing_40 Start: 34133, Stop: 33744, Start Num: 31

Candidate Starts for DanBing_40:

(Start: 31 @34133 has 30 MA's), (Start: 34 @34124 has 27 MA's), (40, 34085), (46, 34055), (53, 33989), (57, 33965), (65, 33920), (75, 33848), (82, 33833), (84, 33821), (87, 33809),

Gene: Dartin_45 Start: 35648, Stop: 35256, Start Num: 32

Candidate Starts for Dartin_45:

(Start: 32 @35648 has 37 MA's), (48, 35564), (Start: 51 @35549 has 2 MA's), (68, 35411), (71, 35387), (88, 35324), (94, 35300), (99, 35267),

Gene: Deby_43 Start: 35225, Stop: 34845, Start Num: 32

Candidate Starts for Deby_43:

(18, 35276), (Start: 32 @35225 has 37 MA's), (Start: 39 @35189 has 4 MA's), (Start: 51 @35129 has 2 MA's), (79, 34934), (83, 34919), (93, 34871),

Gene: DirkDirk_37 Start: 32937, Stop: 32527, Start Num: 27

Candidate Starts for DirkDirk_37:

(Start: 23 @32943 has 7 MA's), (Start: 27 @32937 has 19 MA's), (Start: 31 @32916 has 30 MA's), (Start: 34 @32907 has 27 MA's), (37, 32874), (Start: 51 @32808 has 2 MA's), (53, 32769), (57, 32745), (65, 32700), (87, 32592),

Gene: DismalFunk_46 Start: 37051, Stop: 36680, Start Num: 32

Candidate Starts for DismalFunk_46:

(18, 37105), (Start: 32 @37051 has 37 MA's), (Start: 39 @37015 has 4 MA's), (42, 37000), (Start: 51 @36955 has 2 MA's), (56, 36895), (66, 36835), (69, 36805), (74, 36793), (83, 36763), (95, 36706),

Gene: DismalStressor_46 Start: 37051, Stop: 36680, Start Num: 32

Candidate Starts for DismalStressor_46:

(18, 37105), (Start: 32 @37051 has 37 MA's), (Start: 39 @37015 has 4 MA's), (42, 37000), (Start: 51 @36955 has 2 MA's), (56, 36895), (66, 36835), (69, 36805), (74, 36793), (83, 36763), (95, 36706),

Gene: DoubleChamp_41 Start: 34485, Stop: 34090, Start Num: 34

Candidate Starts for DoubleChamp_41:

(Start: 33 @34491 has 7 MA's), (Start: 34 @34485 has 27 MA's), (Start: 39 @34446 has 4 MA's), (Start: 41 @34434 has 3 MA's), (46, 34407), (59, 34305), (62, 34293), (68, 34242), (82, 34182),

Gene: Douge_37 Start: 32936, Stop: 32556, Start Num: 34

Candidate Starts for Douge_37:

(Start: 23 @32972 has 7 MA's), (Start: 34 @32936 has 27 MA's), (38, 32903), (44, 32873), (46, 32867), (Start: 51 @32840 has 2 MA's), (53, 32801), (58, 32771), (65, 32732), (85, 32627), (86, 32621),

Gene: Doughnut_46 Start: 36568, Stop: 36287, Start Num: 51

Candidate Starts for Doughnut_46:

(18, 36718), (Start: 32 @36664 has 37 MA's), (Start: 39 @36628 has 4 MA's), (42, 36613), (Start: 51 @36568 has 2 MA's), (56, 36508), (66, 36448), (69, 36418), (82, 36370),

Gene: Douzhi_37 Start: 33042, Stop: 32662, Start Num: 34

Candidate Starts for Douzhi_37:

(Start: 23 @33078 has 7 MA's), (Start: 34 @33042 has 27 MA's), (38, 33009), (44, 32979), (46, 32973), (Start: 51 @32946 has 2 MA's), (53, 32907), (58, 32877), (65, 32838), (79, 32760), (85, 32733), (86, 32727),

Gene: DrSeegs_40 Start: 34280, Stop: 33891, Start Num: 31

Candidate Starts for DrSeegs_40:

(Start: 31 @34280 has 30 MA's), (Start: 34 @34271 has 27 MA's), (40, 34232), (44, 34208), (46, 34202), (Start: 51 @34175 has 2 MA's), (53, 34136), (57, 34112), (65, 34067), (82, 33980), (87, 33956),

Gene: DuncansLeg_38 Start: 34570, Stop: 34151, Start Num: 23

Candidate Starts for DuncansLeg_38:

(1, 34753), (2, 34747), (3, 34726), (4, 34705), (Start: 23 @34570 has 7 MA's), (Start: 27 @34564 has 19 MA's), (Start: 34 @34534 has 27 MA's), (38, 34498), (40, 34492), (46, 34462), (Start: 51 @34435 has 2 MA's), (53, 34396), (55, 34384), (57, 34372), (63, 34339), (65, 34327), (72, 34270), (86, 34219), (98, 34156),

Gene: DyoEdafos_39 Start: 33270, Stop: 32890, Start Num: 34

Candidate Starts for DyoEdafos_39:

(Start: 23 @33306 has 7 MA's), (Start: 34 @33270 has 27 MA's), (38, 33237), (46, 33201), (Start: 51 @33174 has 2 MA's), (53, 33135), (57, 33111), (85, 32961), (86, 32955), (91, 32931),

Gene: Edugator_41 Start: 34805, Stop: 34407, Start Num: 34

Candidate Starts for Edugator_41:

(Start: 33 @34811 has 7 MA's), (Start: 34 @34805 has 27 MA's), (Start: 39 @34766 has 4 MA's), (Start: 41 @34754 has 3 MA's), (46, 34727), (62, 34613), (68, 34562), (82, 34502), (101, 34412),

Gene: Ellson_38 Start: 34546, Stop: 34127, Start Num: 23

Candidate Starts for Ellson_38:

(1, 34729), (2, 34723), (3, 34702), (4, 34681), (Start: 23 @34546 has 7 MA's), (Start: 27 @34540 has 19 MA's), (Start: 34 @34510 has 27 MA's), (38, 34474), (40, 34468), (46, 34438), (Start: 51 @34411 has 2 MA's), (53, 34372), (55, 34360), (57, 34348), (63, 34315), (65, 34303), (86, 34195), (98, 34132),

Gene: Enceladus_37 Start: 32920, Stop: 32510, Start Num: 27

Candidate Starts for Enceladus_37:

(Start: 23 @32926 has 7 MA's), (Start: 27 @32920 has 19 MA's), (Start: 31 @32899 has 30 MA's), (Start: 34 @32890 has 27 MA's), (37, 32857), (Start: 51 @32791 has 2 MA's), (53, 32752), (57, 32728), (65, 32683), (87, 32575),

Gene: Enkosi_41 Start: 37140, Stop: 36742, Start Num: 32

Candidate Starts for Enkosi_41:

(20, 37179), (Start: 32 @37140 has 37 MA's), (Start: 51 @37044 has 2 MA's), (86, 36819), (88, 36813),

Gene: Faith1_40 Start: 34280, Stop: 33891, Start Num: 31

Candidate Starts for Faith1_40:

(Start: 31 @34280 has 30 MA's), (Start: 34 @34271 has 27 MA's), (40, 34232), (44, 34208), (46, 34202), (Start: 51 @34175 has 2 MA's), (53, 34136), (57, 34112), (65, 34067), (82, 33980), (87,

33956),

Gene: FarmResident_38 Start: 32947, Stop: 32600, Start Num: 38

Candidate Starts for FarmResident_38:

(Start: 23 @33016 has 7 MA's), (Start: 34 @32980 has 27 MA's), (38, 32947), (44, 32917), (46, 32911), (Start: 51 @32884 has 2 MA's), (53, 32845), (58, 32815), (85, 32671), (86, 32665),

Gene: Feyre_41 Start: 34186, Stop: 33836, Start Num: 41

Candidate Starts for Feyre_41:

(Start: 41 @34186 has 3 MA's), (62, 34045), (68, 33994), (82, 33934),

Gene: Findley_46 Start: 37044, Stop: 36673, Start Num: 32

Candidate Starts for Findley_46:

(18, 37098), (Start: 32 @37044 has 37 MA's), (Start: 39 @37008 has 4 MA's), (42, 36993), (Start: 51 @36948 has 2 MA's), (56, 36888), (66, 36828), (69, 36798), (74, 36786), (83, 36756), (95, 36699),

Gene: Finemlucis_40 Start: 34556, Stop: 34167, Start Num: 31

Candidate Starts for Finemlucis_40:

(Start: 31 @34556 has 30 MA's), (Start: 34 @34547 has 27 MA's), (40, 34508), (44, 34484), (46, 34478), (Start: 51 @34451 has 2 MA's), (53, 34412), (57, 34388), (65, 34343), (82, 34256), (84, 34244), (87, 34232),

Gene: Finnry_38 Start: 34555, Stop: 34136, Start Num: 23

Candidate Starts for Finnry_38:

(1, 34738), (2, 34732), (3, 34711), (4, 34690), (Start: 23 @34555 has 7 MA's), (Start: 27 @34549 has 19 MA's), (Start: 34 @34519 has 27 MA's), (38, 34483), (40, 34477), (44, 34453), (46, 34447), (Start: 51 @34420 has 2 MA's), (53, 34381), (55, 34369), (57, 34357), (63, 34324), (65, 34312), (72, 34255), (86, 34204), (98, 34141),

Gene: Gabriela_40 Start: 34542, Stop: 34153, Start Num: 31

Candidate Starts for Gabriela_40:

(Start: 31 @34542 has 30 MA's), (Start: 34 @34533 has 27 MA's), (40, 34494), (44, 34470), (46, 34464), (Start: 51 @34437 has 2 MA's), (53, 34398), (57, 34374), (65, 34329), (82, 34242), (87, 34218),

Gene: Gardann_40 Start: 34281, Stop: 33892, Start Num: 31

Candidate Starts for Gardann_40:

(Start: 31 @34281 has 30 MA's), (Start: 34 @34272 has 27 MA's), (40, 34233), (44, 34209), (46, 34203), (Start: 51 @34176 has 2 MA's), (53, 34137), (57, 34113), (65, 34068), (82, 33981), (84, 33969), (87, 33957),

Gene: Gengar_41 Start: 34347, Stop: 33946, Start Num: 34

Candidate Starts for Gengar_41:

(Start: 34 @34347 has 27 MA's), (Start: 41 @34296 has 3 MA's), (62, 34155), (68, 34104), (82, 34044),

Gene: Geraldini_45 Start: 36027, Stop: 35650, Start Num: 32

Candidate Starts for Geraldini_45:

(Start: 32 @36027 has 37 MA's), (Start: 39 @35994 has 4 MA's), (43, 35967), (50, 35940), (Start: 51 @35934 has 2 MA's), (83, 35724), (93, 35676),

Gene: Guillsminger_42 Start: 34318, Stop: 33917, Start Num: 34

Candidate Starts for Guillsminger_42:

(Start: 34 @34318 has 27 MA's), (Start: 41 @34267 has 3 MA's), (62, 34126), (68, 34075), (82, 34015),

Gene: GuuelaD_40 Start: 34319, Stop: 33930, Start Num: 31

Candidate Starts for GuuelaD_40:

(Start: 31 @34319 has 30 MA's), (Start: 34 @34310 has 27 MA's), (40, 34271), (44, 34247), (46, 34241), (53, 34175), (57, 34151), (65, 34106), (79, 34025), (82, 34019), (84, 34007), (87, 33995),

Gene: Hafay_40 Start: 34314, Stop: 33925, Start Num: 31

Candidate Starts for Hafay_40:

(Start: 31 @34314 has 30 MA's), (Start: 34 @34305 has 27 MA's), (40, 34266), (44, 34242), (46, 34236), (53, 34170), (57, 34146), (65, 34101), (79, 34020), (82, 34014), (84, 34002), (87, 33990),

Gene: Halena_37 Start: 32946, Stop: 32536, Start Num: 27

Candidate Starts for Halena_37:

(Start: 23 @32952 has 7 MA's), (Start: 27 @32946 has 19 MA's), (29, 32928), (Start: 31 @32925 has 30 MA's), (Start: 34 @32916 has 27 MA's), (37, 32883), (Start: 51 @32817 has 2 MA's), (53, 32778), (57, 32754), (65, 32709), (67, 32694), (87, 32601),

Gene: Heftyboy_41 Start: 34467, Stop: 34066, Start Num: 34

Candidate Starts for Heftyboy_41:

(9, 34566), (21, 34515), (25, 34503), (Start: 34 @34467 has 27 MA's), (Start: 41 @34416 has 3 MA's), (62, 34275), (68, 34224), (82, 34164), (92, 34116),

Gene: InvictusManeo_41 Start: 34534, Stop: 34133, Start Num: 33

Candidate Starts for InvictusManeo_41:

(Start: 33 @34534 has 7 MA's), (Start: 34 @34528 has 27 MA's), (Start: 39 @34489 has 4 MA's), (Start: 41 @34477 has 3 MA's), (46, 34450), (59, 34348), (62, 34336), (68, 34285), (82, 34225),

Gene: JF1_47 Start: 36061, Stop: 35747, Start Num: 39

Candidate Starts for JF1_47:

(Start: 39 @36061 has 4 MA's), (49, 36010), (56, 35941), (61, 35920), (64, 35899), (66, 35881), (89, 35779),

Gene: Jobypre_38 Start: 34516, Stop: 34133, Start Num: 34

Candidate Starts for Jobypre_38:

(1, 34735), (2, 34729), (3, 34708), (4, 34687), (Start: 23 @34552 has 7 MA's), (Start: 27 @34546 has 19 MA's), (Start: 34 @34516 has 27 MA's), (38, 34480), (40, 34474), (44, 34450), (46, 34444), (Start: 51 @34417 has 2 MA's), (53, 34378), (55, 34366), (57, 34354), (63, 34321), (65, 34309), (72, 34252), (86, 34201), (98, 34138),

Gene: JoeDirt_37 Start: 32924, Stop: 32508, Start Num: 23

Candidate Starts for JoeDirt_37:

(Start: 23 @32924 has 7 MA's), (Start: 27 @32918 has 19 MA's), (Start: 31 @32897 has 30 MA's), (Start: 34 @32888 has 27 MA's), (37, 32855), (Start: 51 @32789 has 2 MA's), (53, 32750), (57, 32726), (65, 32681), (87, 32573),

Gene: Jubie_38 Start: 34517, Stop: 34134, Start Num: 34

Candidate Starts for Jubie_38:

(1, 34736), (2, 34730), (3, 34709), (4, 34688), (Start: 23 @34553 has 7 MA's), (Start: 27 @34547 has 19 MA's), (Start: 34 @34517 has 27 MA's), (38, 34481), (40, 34475), (44, 34451), (46, 34445), (Start: 51 @34418 has 2 MA's), (53, 34379), (55, 34367), (57, 34355), (63, 34322), (65, 34310), (72, 34253), (86, 34202), (98, 34139),

Gene: Kahlid_40 Start: 34286, Stop: 33897, Start Num: 31

Candidate Starts for Kahlid_40:

(Start: 31 @34286 has 30 MA's), (Start: 34 @34277 has 27 MA's), (40, 34238), (44, 34214), (46, 34208), (53, 34142), (57, 34118), (65, 34073), (79, 33992), (82, 33986), (84, 33974), (87, 33962),

Gene: Kingsolomon_38 Start: 34546, Stop: 34133, Start Num: 27

Candidate Starts for Kingsolomon_38:

(1, 34735), (2, 34729), (3, 34708), (4, 34687), (Start: 23 @34552 has 7 MA's), (Start: 27 @34546 has 19 MA's), (Start: 34 @34516 has 27 MA's), (38, 34480), (40, 34474), (44, 34450), (46, 34444), (Start: 51 @34417 has 2 MA's), (53, 34378), (55, 34366), (57, 34354), (63, 34321), (65, 34309), (72, 34252), (86, 34201), (98, 34138),

Gene: KirDoubleO7_36 Start: 34538, Stop: 34158, Start Num: 34

Candidate Starts for KirDoubleO7_36:

(Start: 23 @34574 has 7 MA's), (Start: 27 @34568 has 19 MA's), (Start: 34 @34538 has 27 MA's), (40, 34499), (44, 34475), (46, 34469), (Start: 51 @34442 has 2 MA's), (53, 34403), (55, 34391), (57, 34379), (63, 34346), (65, 34334), (72, 34277), (98, 34163),

Gene: Kratio_40 Start: 34085, Stop: 33681, Start Num: 33

Candidate Starts for Kratio_40:

(Start: 33 @34085 has 7 MA's), (Start: 34 @34079 has 27 MA's), (Start: 39 @34040 has 4 MA's), (Start: 41 @34028 has 3 MA's), (46, 34001), (50, 33980), (59, 33899), (62, 33887), (68, 33836), (82, 33776),

Gene: Kraw_47 Start: 35905, Stop: 35591, Start Num: 39

Candidate Starts for Kraw_47:

(15, 36019), (26, 35974), (Start: 32 @35950 has 37 MA's), (Start: 34 @35944 has 27 MA's), (Start: 39 @35905 has 4 MA's), (49, 35854), (56, 35785), (61, 35764), (64, 35743), (66, 35725), (89, 35623),

Gene: Kropertea_37 Start: 33093, Stop: 32698, Start Num: 34

Candidate Starts for Kropertea_37:

(Start: 23 @33129 has 7 MA's), (Start: 34 @33093 has 27 MA's), (38, 33060), (46, 33009), (Start: 51 @32982 has 2 MA's), (53, 32943), (57, 32919), (85, 32769), (86, 32763), (91, 32739),

Gene: Krypton555_38 Start: 34434, Stop: 34048, Start Num: 34

Candidate Starts for Krypton555_38:

(Start: 8 @34530 has 1 MA's), (17, 34500), (Start: 23 @34470 has 7 MA's), (Start: 27 @34464 has 19 MA's), (Start: 34 @34434 has 27 MA's), (40, 34395), (44, 34371), (46, 34365), (Start: 51 @34338 has 2 MA's), (53, 34299), (55, 34287), (57, 34275), (63, 34242), (86, 34116), (98, 34053),

Gene: Larva_42 Start: 34253, Stop: 33849, Start Num: 33

Candidate Starts for Larva_42:

(Start: 33 @34253 has 7 MA's), (Start: 34 @34247 has 27 MA's), (Start: 39 @34208 has 4 MA's), (Start: 41 @34196 has 3 MA's), (46, 34169), (62, 34055), (68, 34004), (82, 33944), (101, 33854),

Gene: LastHope_46 Start: 34433, Stop: 34047, Start Num: 32

Candidate Starts for LastHope_46:

(12, 34514), (14, 34508), (18, 34493), (Start: 32 @34433 has 37 MA's), (Start: 51 @34340 has 2 MA's), (52, 34313), (83, 34142), (97, 34073),

Gene: LeBron_38 Start: 32968, Stop: 32552, Start Num: 23

Candidate Starts for LeBron_38:

(Start: 23 @32968 has 7 MA's), (Start: 27 @32962 has 19 MA's), (Start: 31 @32941 has 30 MA's), (Start: 34 @32932 has 27 MA's), (37, 32899), (Start: 51 @32833 has 2 MA's), (53, 32794), (57,

32770), (65, 32725), (87, 32617),

Gene: Leston_41 Start: 34396, Stop: 34046, Start Num: 41

Candidate Starts for Leston_41:

(Start: 34 @34447 has 27 MA's), (Start: 41 @34396 has 3 MA's), (62, 34255), (68, 34204), (82, 34144),

Gene: Lewan_40 Start: 34274, Stop: 33885, Start Num: 31

Candidate Starts for Lewan_40:

(Start: 31 @34274 has 30 MA's), (Start: 34 @34265 has 27 MA's), (40, 34226), (44, 34202), (46, 34196), (53, 34130), (57, 34106), (65, 34061), (79, 33980), (82, 33974), (84, 33962), (87, 33950),

Gene: LilDestine_40 Start: 34278, Stop: 33889, Start Num: 31

Candidate Starts for LilDestine_40:

(Start: 31 @34278 has 30 MA's), (Start: 34 @34269 has 27 MA's), (40, 34230), (44, 34206), (46, 34200), (Start: 51 @34173 has 2 MA's), (53, 34134), (57, 34110), (65, 34065), (82, 33978), (87, 33954),

Gene: LilDirt_41 Start: 34286, Stop: 33891, Start Num: 34

Candidate Starts for LilDirt_41:

(Start: 33 @34292 has 7 MA's), (Start: 34 @34286 has 27 MA's), (Start: 39 @34247 has 4 MA's), (Start: 41 @34235 has 3 MA's), (46, 34208), (59, 34106), (62, 34094), (68, 34043), (82, 33983),

Gene: LilJank_41 Start: 33717, Stop: 33433, Start Num: 45

Candidate Starts for LilJank_41:

(35, 33777), (Start: 45 @33717 has 2 MA's), (49, 33696), (56, 33630), (69, 33540), (70, 33531), (76, 33516), (77, 33513),

Gene: LiyuLake_38 Start: 34530, Stop: 34117, Start Num: 27

Candidate Starts for LiyuLake_38:

(1, 34719), (2, 34713), (3, 34692), (4, 34671), (Start: 23 @34536 has 7 MA's), (Start: 27 @34530 has 19 MA's), (Start: 34 @34500 has 27 MA's), (38, 34464), (40, 34458), (46, 34428), (Start: 51 @34401 has 2 MA's), (53, 34362), (55, 34350), (57, 34338), (63, 34305), (65, 34293), (86, 34185), (98, 34122),

Gene: Loadrie_40 Start: 34312, Stop: 33923, Start Num: 31

Candidate Starts for Loadrie_40:

(Start: 31 @34312 has 30 MA's), (Start: 34 @34303 has 27 MA's), (40, 34264), (44, 34240), (46, 34234), (53, 34168), (57, 34144), (65, 34099), (79, 34018), (82, 34012), (84, 34000), (87, 33988),

Gene: Lolly9_38 Start: 34324, Stop: 33941, Start Num: 34

Candidate Starts for Lolly9_38:

(1, 34543), (2, 34537), (3, 34516), (4, 34495), (Start: 23 @34360 has 7 MA's), (Start: 27 @34354 has 19 MA's), (Start: 34 @34324 has 27 MA's), (38, 34288), (40, 34282), (46, 34252), (Start: 51 @34225 has 2 MA's), (53, 34186), (55, 34174), (57, 34162), (63, 34129), (64, 34123), (65, 34117), (72, 34060), (86, 34009), (98, 33946),

Gene: Lumos_38 Start: 34543, Stop: 34130, Start Num: 27

Candidate Starts for Lumos_38:

(1, 34732), (2, 34726), (3, 34705), (4, 34684), (Start: 23 @34549 has 7 MA's), (Start: 27 @34543 has 19 MA's), (Start: 34 @34513 has 27 MA's), (38, 34477), (40, 34471), (44, 34447), (46, 34441), (Start: 51 @34414 has 2 MA's), (53, 34375), (55, 34363), (57, 34351), (63, 34318), (65, 34306), (72, 34249), (86, 34198), (98, 34135),

Gene: Lynnae_40 Start: 34269, Stop: 33880, Start Num: 31

Candidate Starts for Lynnae_40:

(Start: 31 @34269 has 30 MA's), (Start: 34 @34260 has 27 MA's), (40, 34221), (44, 34197), (46, 34191), (53, 34125), (57, 34101), (65, 34056), (79, 33975), (82, 33969), (84, 33957), (87, 33945),

Gene: MAckerman_38 Start: 32940, Stop: 32530, Start Num: 27

Candidate Starts for MAckerman_38:

(Start: 23 @32946 has 7 MA's), (Start: 27 @32940 has 19 MA's), (29, 32922), (Start: 31 @32919 has 30 MA's), (Start: 34 @32910 has 27 MA's), (37, 32877), (Start: 51 @32811 has 2 MA's), (53, 32772), (57, 32748), (65, 32703), (67, 32688), (87, 32595),

Gene: Marcoliusprime_46 Start: 37051, Stop: 36680, Start Num: 32

Candidate Starts for Marcoliusprime_46:

(18, 37105), (Start: 32 @37051 has 37 MA's), (Start: 39 @37015 has 4 MA's), (42, 37000), (Start: 51 @36955 has 2 MA's), (56, 36895), (66, 36835), (69, 36805), (74, 36793), (83, 36763), (95, 36706),

Gene: Marshawn_46 Start: 35965, Stop: 35570, Start Num: 30

Candidate Starts for Marshawn_46:

(Start: 30 @35965 has 1 MA's), (Start: 41 @35914 has 3 MA's), (Start: 51 @35866 has 2 MA's), (54, 35821), (57, 35803), (68, 35728), (82, 35665), (96, 35599), (100, 35578),

Gene: McMater_45 Start: 35648, Stop: 35256, Start Num: 32

Candidate Starts for McMater_45:

(Start: 32 @35648 has 37 MA's), (48, 35564), (Start: 51 @35549 has 2 MA's), (68, 35411), (71, 35387), (88, 35324), (94, 35300), (99, 35267),

Gene: Mdavu_39 Start: 34516, Stop: 34118, Start Num: 32

Candidate Starts for Mdavu_39:

(20, 34555), (Start: 32 @34516 has 37 MA's), (Start: 51 @34420 has 2 MA's), (86, 34195), (88, 34189),

Gene: Miley16_40 Start: 34280, Stop: 33891, Start Num: 31

Candidate Starts for Miley16_40:

(Start: 31 @34280 has 30 MA's), (Start: 34 @34271 has 27 MA's), (40, 34232), (44, 34208), (46, 34202), (Start: 51 @34175 has 2 MA's), (53, 34136), (57, 34112), (65, 34067), (82, 33980), (87, 33956),

Gene: Milly_46 Start: 37024, Stop: 36653, Start Num: 32

Candidate Starts for Milly_46:

(18, 37078), (Start: 32 @37024 has 37 MA's), (Start: 39 @36988 has 4 MA's), (42, 36973), (Start: 51 @36928 has 2 MA's), (56, 36868), (66, 36808), (69, 36778), (74, 36766), (83, 36736), (95, 36679),

Gene: MiniLon_38 Start: 34355, Stop: 33942, Start Num: 27

Candidate Starts for MiniLon_38:

(1, 34544), (2, 34538), (3, 34517), (4, 34496), (Start: 23 @34361 has 7 MA's), (Start: 27 @34355 has 19 MA's), (Start: 34 @34325 has 27 MA's), (38, 34289), (40, 34283), (46, 34253), (Start: 51 @34226 has 2 MA's), (53, 34187), (55, 34175), (57, 34163), (63, 34130), (64, 34124), (65, 34118), (72, 34061), (86, 34010), (98, 33947),

Gene: MiniMac_38 Start: 34358, Stop: 33939, Start Num: 23

Candidate Starts for MiniMac_38:

(Start: 23 @34358 has 7 MA's), (Start: 27 @34352 has 19 MA's), (Start: 34 @34322 has 27 MA's), (38, 34286), (40, 34280), (46, 34250), (Start: 51 @34223 has 2 MA's), (53, 34184), (55, 34172), (57, 34160), (63, 34127), (64, 34121), (65, 34115), (72, 34058), (86, 34007), (98, 33944),

Gene: Miryou_43 Start: 36650, Stop: 36249, Start Num: 34
Candidate Starts for Miryou_43:
(Start: 34 @36650 has 27 MA's), (Start: 41 @36599 has 3 MA's), (62, 36458), (68, 36407), (82, 36347),

Gene: MissDaisy_45 Start: 35425, Stop: 35069, Start Num: 32
Candidate Starts for MissDaisy_45:
(19, 35470), (24, 35452), (26, 35449), (Start: 32 @35425 has 37 MA's), (Start: 34 @35419 has 27 MA's), (Start: 39 @35380 has 4 MA's), (49, 35329), (61, 35239), (64, 35218), (66, 35200),

Gene: MkaliMitinis3_40 Start: 34282, Stop: 33893, Start Num: 31
Candidate Starts for MkaliMitinis3_40:
(Start: 31 @34282 has 30 MA's), (Start: 34 @34273 has 27 MA's), (40, 34234), (44, 34210), (46, 34204), (53, 34138), (57, 34114), (65, 34069), (79, 33988), (82, 33982), (84, 33970), (87, 33958),

Gene: Moostard_38 Start: 34518, Stop: 34135, Start Num: 34
Candidate Starts for Moostard_38:
(1, 34737), (2, 34731), (3, 34710), (4, 34689), (Start: 23 @34554 has 7 MA's), (Start: 27 @34548 has 19 MA's), (Start: 34 @34518 has 27 MA's), (38, 34482), (40, 34476), (44, 34452), (46, 34446), (Start: 51 @34419 has 2 MA's), (53, 34380), (55, 34368), (57, 34356), (63, 34323), (65, 34311), (72, 34254), (86, 34203), (98, 34140),

Gene: MsGreen_38 Start: 34516, Stop: 34133, Start Num: 34
Candidate Starts for MsGreen_38:
(1, 34735), (2, 34729), (3, 34708), (4, 34687), (Start: 23 @34552 has 7 MA's), (Start: 27 @34546 has 19 MA's), (Start: 34 @34516 has 27 MA's), (38, 34480), (40, 34474), (44, 34450), (46, 34444), (Start: 51 @34417 has 2 MA's), (53, 34378), (55, 34366), (57, 34354), (63, 34321), (65, 34309), (72, 34252), (86, 34201), (98, 34138),

Gene: Mufasa_46 Start: 36609, Stop: 36241, Start Num: 32
Candidate Starts for Mufasa_46:
(Start: 32 @36609 has 37 MA's), (Start: 39 @36573 has 4 MA's), (Start: 51 @36513 has 2 MA's), (56, 36453), (66, 36393), (69, 36363), (74, 36351), (83, 36321), (95, 36267),

Gene: Neighly_42 Start: 34246, Stop: 33848, Start Num: 34
Candidate Starts for Neighly_42:
(Start: 33 @34252 has 7 MA's), (Start: 34 @34246 has 27 MA's), (Start: 39 @34207 has 4 MA's), (Start: 41 @34195 has 3 MA's), (46, 34168), (62, 34054), (68, 34003), (82, 33943), (101, 33853),

Gene: Netyap_40 Start: 34280, Stop: 33891, Start Num: 31
Candidate Starts for Netyap_40:
(Start: 31 @34280 has 30 MA's), (Start: 34 @34271 has 27 MA's), (40, 34232), (44, 34208), (46, 34202), (Start: 51 @34175 has 2 MA's), (53, 34136), (57, 34112), (65, 34067), (82, 33980), (87, 33956),

Gene: Neville_40 Start: 33358, Stop: 33074, Start Num: 45
Candidate Starts for Neville_40:
(35, 33418), (Start: 45 @33358 has 2 MA's), (49, 33337), (56, 33271), (69, 33181), (70, 33172), (76, 33157), (77, 33154),

Gene: Nicholas_38 Start: 34516, Stop: 34133, Start Num: 34
Candidate Starts for Nicholas_38:
(1, 34735), (2, 34729), (3, 34708), (4, 34687), (Start: 23 @34552 has 7 MA's), (Start: 27 @34546 has 19 MA's), (Start: 34 @34516 has 27 MA's), (38, 34480), (40, 34474), (44, 34450), (46, 34444), (Start:

51 @34417 has 2 MA's), (53, 34378), (55, 34366), (57, 34354), (63, 34321), (65, 34309), (72, 34252), (86, 34201), (98, 34138),

Gene: Nicholasp3_40 Start: 34281, Stop: 33892, Start Num: 31

Candidate Starts for Nicholasp3_40:

(Start: 31 @34281 has 30 MA's), (Start: 34 @34272 has 27 MA's), (40, 34233), (44, 34209), (46, 34203), (Start: 51 @34176 has 2 MA's), (53, 34137), (57, 34113), (65, 34068), (82, 33981), (84, 33969), (87, 33957),

Gene: Nikao_41 Start: 37140, Stop: 36742, Start Num: 32

Candidate Starts for Nikao_41:

(20, 37179), (Start: 32 @37140 has 37 MA's), (Start: 51 @37044 has 2 MA's), (86, 36819), (88, 36813),

Gene: Niklas_45 Start: 35707, Stop: 35315, Start Num: 32

Candidate Starts for Niklas_45:

(Start: 32 @35707 has 37 MA's), (48, 35623), (Start: 51 @35608 has 2 MA's), (71, 35446), (88, 35383), (94, 35359), (99, 35326),

Gene: Nutello_38 Start: 34527, Stop: 34129, Start Num: 32

Candidate Starts for Nutello_38:

(20, 34566), (Start: 32 @34527 has 37 MA's), (Start: 51 @34431 has 2 MA's), (86, 34206), (88, 34200),

Gene: OhShagHennessy_37 Start: 32908, Stop: 32498, Start Num: 27

Candidate Starts for OhShagHennessy_37:

(Start: 23 @32914 has 7 MA's), (Start: 27 @32908 has 19 MA's), (Start: 31 @32887 has 30 MA's), (Start: 34 @32878 has 27 MA's), (37, 32845), (Start: 51 @32779 has 2 MA's), (53, 32740), (57, 32716), (65, 32671), (87, 32563),

Gene: OkiRoe_41 Start: 34320, Stop: 33919, Start Num: 34

Candidate Starts for OkiRoe_41:

(Start: 34 @34320 has 27 MA's), (Start: 41 @34269 has 3 MA's), (62, 34128), (68, 34077), (82, 34017),

Gene: Omnicron_44 Start: 33930, Stop: 33529, Start Num: 34

Candidate Starts for Omnicron_44:

(Start: 34 @33930 has 27 MA's), (Start: 41 @33879 has 3 MA's), (46, 33852), (59, 33750), (62, 33738), (68, 33687), (82, 33627),

Gene: OverPar_41 Start: 34312, Stop: 33923, Start Num: 31

Candidate Starts for OverPar_41:

(Start: 31 @34312 has 30 MA's), (Start: 34 @34303 has 27 MA's), (40, 34264), (44, 34240), (46, 34234), (53, 34168), (57, 34144), (65, 34099), (79, 34018), (82, 34012), (84, 34000), (87, 33988),

Gene: PYPDinur_37 Start: 33042, Stop: 32662, Start Num: 34

Candidate Starts for PYPDinur_37:

(Start: 23 @33078 has 7 MA's), (Start: 34 @33042 has 27 MA's), (38, 33009), (44, 32979), (46, 32973), (Start: 51 @32946 has 2 MA's), (53, 32907), (58, 32877), (65, 32838), (79, 32760), (85, 32733), (86, 32727),

Gene: Paola_41 Start: 34318, Stop: 33917, Start Num: 34

Candidate Starts for Paola_41:

(Start: 34 @34318 has 27 MA's), (Start: 41 @34267 has 3 MA's), (62, 34126), (68, 34075), (82, 34015),

Gene: Patt_44 Start: 35104, Stop: 34793, Start Num: 39

Candidate Starts for Patt_44:

(13, 35227), (15, 35218), (16, 35215), (17, 35209), (19, 35194), (24, 35176), (26, 35173), (Start: 32 @35149 has 37 MA's), (Start: 34 @35143 has 27 MA's), (Start: 39 @35104 has 4 MA's), (49, 35053), (61, 34963), (64, 34942), (66, 34924),

Gene: Peanam_45 Start: 35664, Stop: 35272, Start Num: 32

Candidate Starts for Peanam_45:

(Start: 32 @35664 has 37 MA's), (48, 35580), (Start: 51 @35565 has 2 MA's), (88, 35340), (94, 35316), (99, 35283),

Gene: Pokerus_42 Start: 35018, Stop: 34638, Start Num: 32

Candidate Starts for Pokerus_42:

(Start: 32 @35018 has 37 MA's), (Start: 39 @34985 has 4 MA's), (43, 34958), (50, 34931), (Start: 51 @34925 has 2 MA's), (83, 34712), (93, 34664),

Gene: Poochiewood_37 Start: 32936, Stop: 32526, Start Num: 27

Candidate Starts for Poochiewood_37:

(Start: 23 @32942 has 7 MA's), (Start: 27 @32936 has 19 MA's), (Start: 31 @32915 has 30 MA's), (Start: 34 @32906 has 27 MA's), (37, 32873), (Start: 51 @32807 has 2 MA's), (53, 32768), (57, 32744), (65, 32699), (87, 32591),

Gene: Psycho_42 Start: 34326, Stop: 33979, Start Num: 41

Candidate Starts for Psycho_42:

(Start: 33 @34383 has 7 MA's), (Start: 34 @34377 has 27 MA's), (Start: 39 @34338 has 4 MA's), (Start: 41 @34326 has 3 MA's), (46, 34299), (62, 34185), (68, 34134), (82, 34074), (101, 33984),

Gene: Qhanda_49 Start: 36002, Stop: 35688, Start Num: 39

Candidate Starts for Qhanda_49:

(15, 36116), (26, 36071), (Start: 32 @36047 has 37 MA's), (Start: 34 @36041 has 27 MA's), (Start: 39 @36002 has 4 MA's), (49, 35951), (56, 35882), (61, 35861), (64, 35840), (66, 35822), (89, 35720),

Gene: Quby_38 Start: 32936, Stop: 32556, Start Num: 34

Candidate Starts for Quby_38:

(Start: 23 @32972 has 7 MA's), (Start: 34 @32936 has 27 MA's), (38, 32903), (44, 32873), (46, 32867), (Start: 51 @32840 has 2 MA's), (53, 32801), (58, 32771), (65, 32732), (73, 32672), (85, 32627), (86, 32621),

Gene: Rabbitrun_42 Start: 33899, Stop: 33534, Start Num: 32

Candidate Starts for Rabbitrun_42:

(Start: 32 @33899 has 37 MA's), (35, 33878), (Start: 45 @33818 has 2 MA's), (58, 33722), (70, 33632), (76, 33617), (77, 33614),

Gene: Rando14_43 Start: 33501, Stop: 33097, Start Num: 34

Candidate Starts for Rando14_43:

(Start: 34 @33501 has 27 MA's), (Start: 41 @33447 has 3 MA's), (68, 33255), (82, 33195),

Gene: Red305_38 Start: 34516, Stop: 34133, Start Num: 34

Candidate Starts for Red305_38:

(1, 34735), (2, 34729), (3, 34708), (4, 34687), (Start: 23 @34552 has 7 MA's), (Start: 27 @34546 has 19 MA's), (Start: 34 @34516 has 27 MA's), (38, 34480), (40, 34474), (44, 34450), (46, 34444), (Start: 51 @34417 has 2 MA's), (53, 34378), (55, 34366), (57, 34354), (63, 34321), (65, 34309), (72, 34252), (86, 34201), (98, 34138),

Gene: Reptar3000_45 Start: 35140, Stop: 34784, Start Num: 32

Candidate Starts for Reptar3000_45:

(15, 35209), (26, 35164), (Start: 32 @35140 has 37 MA's), (Start: 34 @35134 has 27 MA's), (Start: 39 @35095 has 4 MA's), (49, 35044), (61, 34954), (64, 34933), (66, 34915),

Gene: Richo_45 Start: 35648, Stop: 35256, Start Num: 32

Candidate Starts for Richo_45:

(Start: 32 @35648 has 37 MA's), (48, 35564), (Start: 51 @35549 has 2 MA's), (68, 35411), (71, 35387), (88, 35324), (94, 35300), (99, 35267),

Gene: Rose5_37 Start: 32935, Stop: 32525, Start Num: 27

Candidate Starts for Rose5_37:

(Start: 23 @32941 has 7 MA's), (Start: 27 @32935 has 19 MA's), (29, 32917), (Start: 31 @32914 has 30 MA's), (Start: 34 @32905 has 27 MA's), (37, 32872), (Start: 51 @32806 has 2 MA's), (53, 32767), (57, 32743), (65, 32698), (67, 32683), (87, 32590),

Gene: Rossetti_40 Start: 34547, Stop: 34158, Start Num: 31

Candidate Starts for Rossetti_40:

(Start: 31 @34547 has 30 MA's), (Start: 34 @34538 has 27 MA's), (40, 34499), (44, 34475), (46, 34469), (Start: 51 @34442 has 2 MA's), (53, 34403), (57, 34379), (65, 34334), (82, 34247), (84, 34235), (87, 34223),

Gene: Rumpelstiltskin_40 Start: 34547, Stop: 34158, Start Num: 31

Candidate Starts for Rumpelstiltskin_40:

(Start: 31 @34547 has 30 MA's), (Start: 34 @34538 has 27 MA's), (40, 34499), (44, 34475), (46, 34469), (Start: 51 @34442 has 2 MA's), (53, 34403), (57, 34379), (65, 34334), (82, 34247), (87, 34223),

Gene: Sarshaun_40 Start: 34314, Stop: 33925, Start Num: 31

Candidate Starts for Sarshaun_40:

(Start: 31 @34314 has 30 MA's), (Start: 34 @34305 has 27 MA's), (40, 34266), (44, 34242), (46, 34236), (53, 34170), (57, 34146), (65, 34101), (79, 34020), (82, 34014), (84, 34002), (87, 33990),

Gene: SgtBeansprout_38 Start: 34527, Stop: 34063, Start Num: 32

Candidate Starts for SgtBeansprout_38:

(20, 34566), (Start: 32 @34527 has 37 MA's), (Start: 51 @34431 has 2 MA's), (86, 34206), (88, 34200),

Gene: Shaobing_45 Start: 35682, Stop: 35284, Start Num: 32

Candidate Starts for Shaobing_45:

(Start: 32 @35682 has 37 MA's), (Start: 51 @35583 has 2 MA's), (68, 35445), (82, 35379), (88, 35352), (94, 35328), (99, 35295),

Gene: Sheng711_38 Start: 33042, Stop: 32662, Start Num: 34

Candidate Starts for Sheng711_38:

(Start: 23 @33078 has 7 MA's), (Start: 34 @33042 has 27 MA's), (38, 33009), (44, 32979), (46, 32973), (Start: 51 @32946 has 2 MA's), (53, 32907), (58, 32877), (65, 32838), (79, 32760), (85, 32733), (86, 32727),

Gene: Silverleaf_37 Start: 32935, Stop: 32525, Start Num: 27

Candidate Starts for Silverleaf_37:

(Start: 23 @32941 has 7 MA's), (Start: 27 @32935 has 19 MA's), (29, 32917), (Start: 31 @32914 has 30 MA's), (Start: 34 @32905 has 27 MA's), (37, 32872), (Start: 51 @32806 has 2 MA's), (53, 32767), (57, 32743), (65, 32698), (67, 32683), (87, 32590),

Gene: Snenia_38 Start: 34517, Stop: 34134, Start Num: 34

Candidate Starts for Snenia_38:

(1, 34736), (2, 34730), (3, 34709), (4, 34688), (Start: 23 @34553 has 7 MA's), (Start: 27 @34547 has 19 MA's), (Start: 34 @34517 has 27 MA's), (38, 34481), (40, 34475), (44, 34451), (46, 34445), (Start: 51 @34418 has 2 MA's), (53, 34379), (55, 34367), (57, 34355), (63, 34322), (65, 34310), (72, 34253), (86, 34202), (98, 34139),

Gene: SoJulia_41 Start: 34540, Stop: 34151, Start Num: 31

Candidate Starts for SoJulia_41:

(Start: 31 @34540 has 30 MA's), (Start: 34 @34531 has 27 MA's), (40, 34492), (44, 34468), (46, 34462), (Start: 51 @34435 has 2 MA's), (53, 34396), (57, 34372), (65, 34327), (82, 34240), (87, 34216),

Gene: SoSeph_41 Start: 34467, Stop: 34066, Start Num: 34

Candidate Starts for SoSeph_41:

(9, 34566), (21, 34515), (25, 34503), (Start: 34 @34467 has 27 MA's), (Start: 41 @34416 has 3 MA's), (62, 34275), (68, 34224), (82, 34164), (92, 34116),

Gene: Soap141_40 Start: 34314, Stop: 33925, Start Num: 31

Candidate Starts for Soap141_40:

(Start: 31 @34314 has 30 MA's), (Start: 34 @34305 has 27 MA's), (40, 34266), (44, 34242), (46, 34236), (53, 34170), (57, 34146), (65, 34101), (79, 34020), (82, 34014), (84, 34002), (87, 33990),

Gene: Strobilo_46 Start: 37026, Stop: 36655, Start Num: 32

Candidate Starts for Strobilo_46:

(18, 37080), (Start: 32 @37026 has 37 MA's), (Start: 39 @36990 has 4 MA's), (42, 36975), (Start: 51 @36930 has 2 MA's), (56, 36870), (66, 36810), (69, 36780), (74, 36768), (83, 36738), (95, 36681),

Gene: Sulley_43 Start: 35224, Stop: 34844, Start Num: 32

Candidate Starts for Sulley_43:

(18, 35275), (Start: 32 @35224 has 37 MA's), (Start: 39 @35188 has 4 MA's), (Start: 51 @35128 has 2 MA's), (79, 34933), (83, 34918), (93, 34870),

Gene: Teejan_41 Start: 37140, Stop: 36742, Start Num: 32

Candidate Starts for Teejan_41:

(20, 37179), (Start: 32 @37140 has 37 MA's), (Start: 51 @37044 has 2 MA's), (86, 36819), (88, 36813),

Gene: Thyatira_43 Start: 36667, Stop: 36266, Start Num: 34

Candidate Starts for Thyatira_43:

(Start: 32 @36673 has 37 MA's), (Start: 34 @36667 has 27 MA's), (Start: 41 @36616 has 3 MA's), (62, 36475), (68, 36424), (82, 36364),

Gene: TingHuaYa_44 Start: 34216, Stop: 33830, Start Num: 32

Candidate Starts for TingHuaYa_44:

(12, 34297), (14, 34291), (18, 34276), (Start: 32 @34216 has 37 MA's), (Start: 51 @34123 has 2 MA's), (52, 34096), (83, 33925), (97, 33856),

Gene: Torres_41 Start: 37141, Stop: 36743, Start Num: 32

Candidate Starts for Torres_41:

(20, 37180), (Start: 32 @37141 has 37 MA's), (Start: 51 @37045 has 2 MA's), (86, 36820), (88, 36814),

Gene: Tourach_40 Start: 34296, Stop: 33907, Start Num: 31

Candidate Starts for Tourach_40:

(Start: 31 @34296 has 30 MA's), (Start: 34 @34287 has 27 MA's), (40, 34248), (46, 34218), (Start: 51 @34191 has 2 MA's), (53, 34152), (57, 34128), (65, 34083), (82, 33996), (84, 33984), (87, 33972),

Gene: Trax_40 Start: 33664, Stop: 33380, Start Num: 45

Candidate Starts for Trax_40:

(35, 33724), (Start: 45 @33664 has 2 MA's), (49, 33643), (56, 33577), (69, 33487), (70, 33478), (76, 33463), (77, 33460),

Gene: TriFive_38 Start: 34516, Stop: 34133, Start Num: 34

Candidate Starts for TriFive_38:

(1, 34735), (2, 34729), (3, 34708), (4, 34687), (Start: 23 @34552 has 7 MA's), (Start: 27 @34546 has 19 MA's), (Start: 34 @34516 has 27 MA's), (38, 34480), (40, 34474), (44, 34450), (46, 34444), (Start: 51 @34417 has 2 MA's), (53, 34378), (55, 34366), (57, 34354), (63, 34321), (65, 34309), (72, 34252), (86, 34201), (98, 34138),

Gene: Trice_39 Start: 34528, Stop: 34130, Start Num: 32

Candidate Starts for Trice_39:

(20, 34567), (Start: 32 @34528 has 37 MA's), (Start: 51 @34432 has 2 MA's), (86, 34207), (88, 34201),

Gene: Tyson_37 Start: 32936, Stop: 32526, Start Num: 27

Candidate Starts for Tyson_37:

(Start: 23 @32942 has 7 MA's), (Start: 27 @32936 has 19 MA's), (29, 32918), (Start: 31 @32915 has 30 MA's), (Start: 34 @32906 has 27 MA's), (37, 32873), (Start: 51 @32807 has 2 MA's), (53, 32768), (57, 32744), (65, 32699), (67, 32684), (87, 32591),

Gene: UPIE_38 Start: 32940, Stop: 32524, Start Num: 23

Candidate Starts for UPIE_38:

(Start: 23 @32940 has 7 MA's), (Start: 27 @32934 has 19 MA's), (Start: 31 @32913 has 30 MA's), (Start: 34 @32904 has 27 MA's), (37, 32871), (Start: 51 @32805 has 2 MA's), (53, 32766), (57, 32742), (65, 32697), (87, 32589),

Gene: Underpass_40 Start: 34281, Stop: 33892, Start Num: 31

Candidate Starts for Underpass_40:

(Start: 31 @34281 has 30 MA's), (Start: 34 @34272 has 27 MA's), (40, 34233), (44, 34209), (46, 34203), (Start: 51 @34176 has 2 MA's), (53, 34137), (57, 34113), (65, 34068), (82, 33981), (84, 33969), (87, 33957),

Gene: Validus_47 Start: 35733, Stop: 35320, Start Num: 32

Candidate Starts for Validus_47:

(10, 35814), (Start: 32 @35733 has 37 MA's), (48, 35637), (Start: 51 @35622 has 2 MA's), (68, 35484), (82, 35421), (88, 35394), (90, 35376), (101, 35325),

Gene: Vetric_40 Start: 34287, Stop: 33898, Start Num: 31

Candidate Starts for Vetric_40:

(Start: 31 @34287 has 30 MA's), (Start: 34 @34278 has 27 MA's), (40, 34239), (44, 34215), (46, 34209), (Start: 51 @34182 has 2 MA's), (53, 34143), (57, 34119), (65, 34074), (82, 33987), (87, 33963),

Gene: ViviJ_41 Start: 34285, Stop: 33890, Start Num: 34

Candidate Starts for ViviJ_41:

(Start: 33 @34291 has 7 MA's), (Start: 34 @34285 has 27 MA's), (Start: 39 @34246 has 4 MA's), (Start: 41 @34234 has 3 MA's), (46, 34207), (59, 34105), (62, 34093), (68, 34042), (82, 33982),

Gene: Wamburgexpress_38 Start: 32949, Stop: 32539, Start Num: 27

Candidate Starts for Wamburgexpress_38:

(Start: 23 @32955 has 7 MA's), (Start: 27 @32949 has 19 MA's), (Start: 31 @32928 has 30 MA's), (Start: 34 @32919 has 27 MA's), (37, 32886), (Start: 51 @32820 has 2 MA's), (53, 32781), (57, 32757), (65, 32712), (87, 32604),

Gene: Waterfoul_42 Start: 34567, Stop: 34160, Start Num: 32

Candidate Starts for Waterfoul_42:

(Start: 32 @34567 has 37 MA's), (Start: 34 @34561 has 27 MA's), (Start: 41 @34510 has 3 MA's), (68, 34318), (82, 34258), (92, 34210),

Gene: Whirlwind_39 Start: 34372, Stop: 33890, Start Num: 8

Candidate Starts for Whirlwind_39:

(Start: 8 @34372 has 1 MA's), (17, 34342), (Start: 23 @34312 has 7 MA's), (Start: 27 @34306 has 19 MA's), (Start: 34 @34276 has 27 MA's), (40, 34237), (44, 34213), (46, 34207), (Start: 51 @34180 has 2 MA's), (53, 34141), (55, 34129), (57, 34117), (63, 34084), (86, 33958), (98, 33895),

Gene: Wigglewobble_40 Start: 34313, Stop: 33924, Start Num: 31

Candidate Starts for Wigglewobble_40:

(Start: 31 @34313 has 30 MA's), (Start: 34 @34304 has 27 MA's), (40, 34265), (44, 34241), (46, 34235), (53, 34169), (57, 34145), (65, 34100), (79, 34019), (82, 34013), (84, 34001), (87, 33989),

Gene: Wilder_40 Start: 34286, Stop: 33897, Start Num: 31

Candidate Starts for Wilder_40:

(Start: 31 @34286 has 30 MA's), (Start: 34 @34277 has 27 MA's), (40, 34238), (44, 34214), (46, 34208), (53, 34142), (57, 34118), (65, 34073), (79, 33992), (82, 33986), (84, 33974), (87, 33962),

Gene: Winky_40 Start: 34280, Stop: 33891, Start Num: 31

Candidate Starts for Winky_40:

(Start: 31 @34280 has 30 MA's), (Start: 34 @34271 has 27 MA's), (40, 34232), (44, 34208), (46, 34202), (Start: 51 @34175 has 2 MA's), (53, 34136), (57, 34112), (65, 34067), (82, 33980), (87, 33956),

Gene: Wyatt2_38 Start: 32935, Stop: 32525, Start Num: 27

Candidate Starts for Wyatt2_38:

(Start: 23 @32941 has 7 MA's), (Start: 27 @32935 has 19 MA's), (29, 32917), (Start: 31 @32914 has 30 MA's), (Start: 34 @32905 has 27 MA's), (37, 32872), (Start: 51 @32806 has 2 MA's), (53, 32767), (57, 32743), (65, 32698), (67, 32683), (87, 32590),

Gene: YoureAdopted_42 Start: 35085, Stop: 34804, Start Num: 51

Candidate Starts for YoureAdopted_42:

(Start: 51 @35085 has 2 MA's), (83, 34878), (93, 34830),

Gene: Zakai_40 Start: 34538, Stop: 34149, Start Num: 31

Candidate Starts for Zakai_40:

(Start: 31 @34538 has 30 MA's), (Start: 34 @34529 has 27 MA's), (40, 34490), (44, 34466), (46, 34460), (53, 34394), (57, 34370), (65, 34325), (79, 34244), (82, 34238), (84, 34226), (87, 34214),

Gene: Zaria_38 Start: 32950, Stop: 32540, Start Num: 27

Candidate Starts for Zaria_38:

(Start: 23 @32956 has 7 MA's), (Start: 27 @32950 has 19 MA's), (29, 32932), (Start: 31 @32929 has 30 MA's), (Start: 34 @32920 has 27 MA's), (37, 32887), (Start: 51 @32821 has 2 MA's), (53, 32782),

(57, 32758), (65, 32713), (67, 32698), (87, 32605),

Gene: ZhongYanYuan_39 Start: 34142, Stop: 33753, Start Num: 31

Candidate Starts for ZhongYanYuan_39:

(Start: 31 @34142 has 30 MA's), (Start: 34 @34133 has 27 MA's), (40, 34094), (46, 34064), (53, 33998), (57, 33974), (65, 33929), (75, 33857), (82, 33842), (84, 33830), (87, 33818),

Gene: ZoeJ_45 Start: 36489, Stop: 36121, Start Num: 32

Candidate Starts for ZoeJ_45:

(18, 36546), (Start: 32 @36489 has 37 MA's), (Start: 39 @36453 has 4 MA's), (Start: 41 @36441 has 3 MA's), (Start: 51 @36393 has 2 MA's), (57, 36330), (66, 36273), (78, 36213), (83, 36201), (95, 36147),