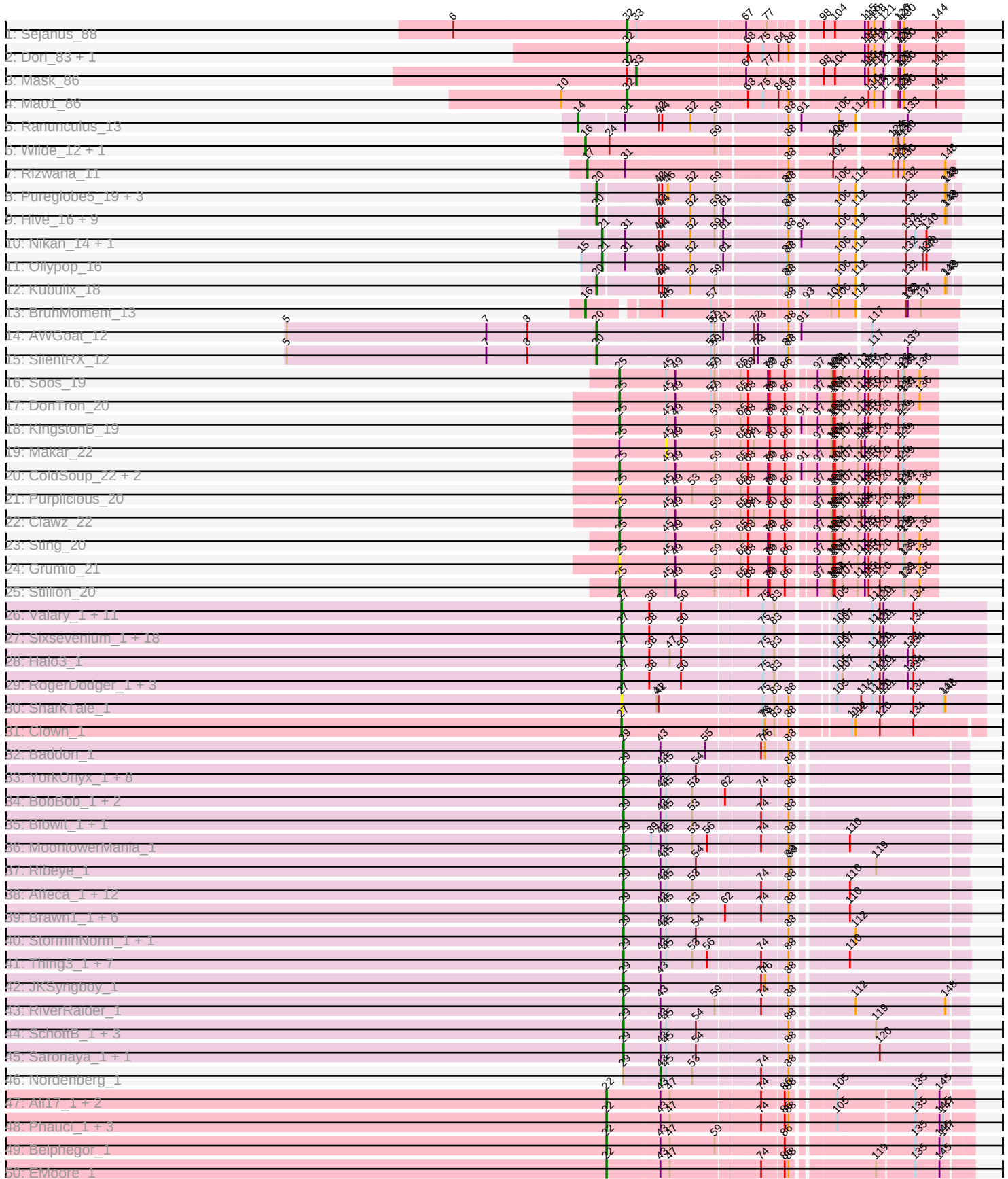
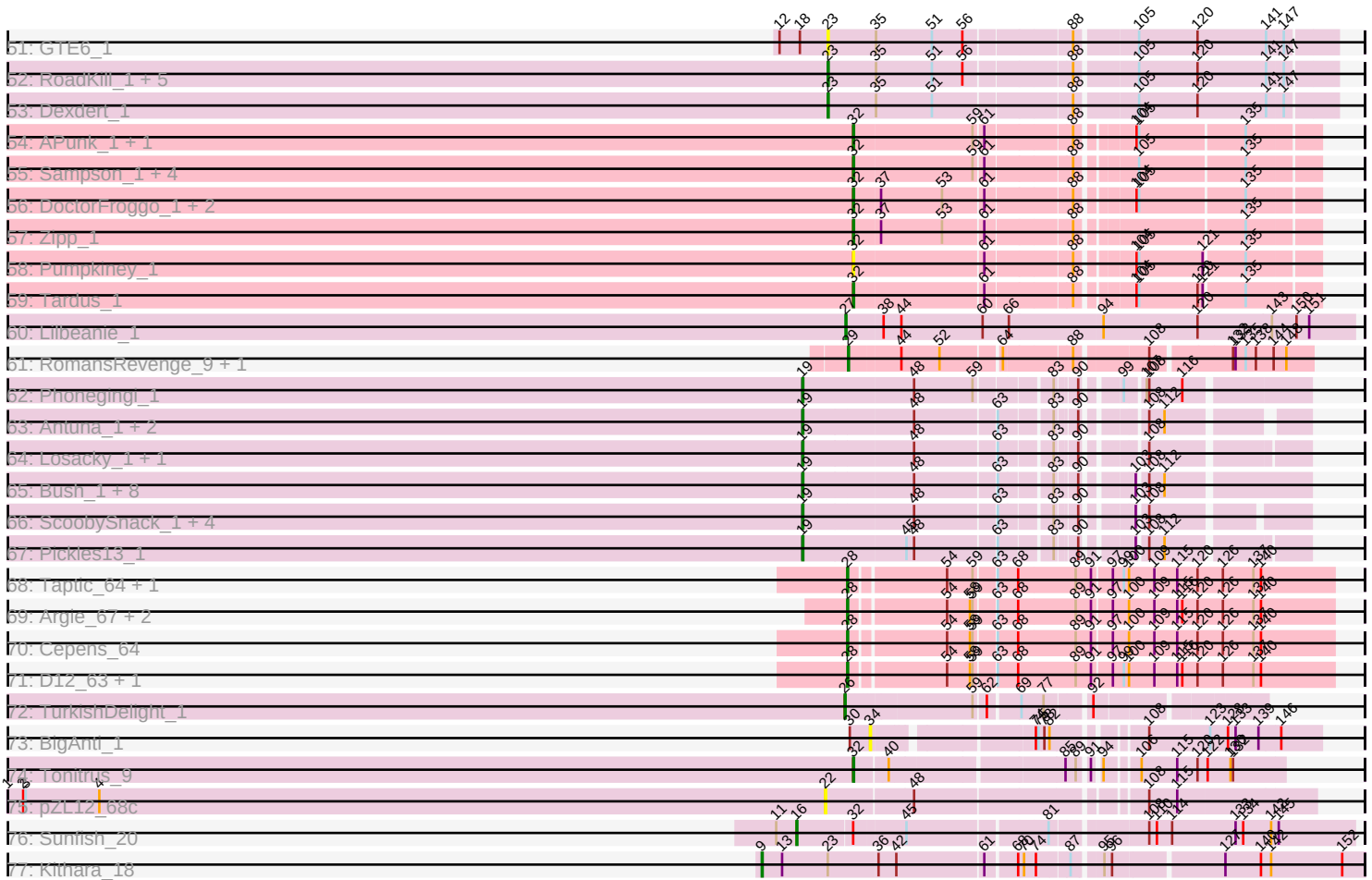






Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 330497 Report

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

Pham number 330497 has 204 members, 27 are drafts.

Phages represented in each track:

- Track 1 : Sejanus_88
- Track 2 : Dori_83, Caterpie_93
- Track 3 : Mask_86
- Track 4 : Mao1_86
- Track 5 : Ranunculus_13
- Track 6 : Wilde_12, Tank_12
- Track 7 : Rizwana_11
- Track 8 : Pureglobe5_19, Popstraw_16, Odyssey395_19, BetaFish_17
- Track 9 : Hive_16, NyleyClemson_14, Forrestell_15, DogYard_17, MellowYellow_15, Beagle_18, Pointis_17, PhuzzTulsa_15, RIPWilbur_15, RazzB_14
- Track 10 : Nikan_14, Ren19_14
- Track 11 : Ollypop_16
- Track 12 : Kubulix_18
- Track 13 : BruhMoment_13
- Track 14 : AWGoat_12
- Track 15 : SilentRX_12
- Track 16 : Soos_19
- Track 17 : DonTron_20
- Track 18 : KingstonB_19
- Track 19 : Makar_22
- Track 20 : ColdSoup_22, Amo99_22, Jollymon_21
- Track 21 : Purplicious_20
- Track 22 : Clawz_22
- Track 23 : Sting_20
- Track 24 : Grumio_21
- Track 25 : Stillion_20
- Track 26 : Valary_1, Fireball_1, Sendy_1, Arri_1, Egi03_1, KimmyK_1, Shinji_1, CherryCola_1, Gezellig_1, Wizard_1, PullumCavea_1, Phlop_1
- Track 27 : Sixsevenium_1, Portcullis_1, Nubi_1, Barb_1, Bakery_1, PinkCoffee_1, Togo_1, TillyBobJoe_1, SmokingBunny_1, Evamon_1, JohnPork_1, Salvador_1, ClamChowder_1, Fugax_1, Mutzi_1, VanDeWege_1, CoveyB_1, YungMoney_1, Danyall_1
- Track 28 : Halo3_1
- Track 29 : RogerDodger_1, Twister6_1, Savbucketdawg_1, Jambalaya_1
- Track 30 : SharkTale_1
- Track 31 : Clown_1
- Track 32 : Baddon_1

- Track 33 : YorkOnyx_1, Stichling_1, Kroos_1, Derg_1, Tangerine_1, Bizzy_1, Kwobi_1, Ashertheman_1, Flatwoods_1
- Track 34 : BobBob_1, Brandonk123_1, Angelicage_1
- Track 35 : Bibwit_1, Stultus_1
- Track 36 : MoontowerMania_1
- Track 37 : Ribeye_1
- Track 38 : Affeca_1, McKinley_1, Fosterous_1, Jabberwocky_1, Love_1, Kewpiedoll_1, Geodirt_1, Charming_1, Tangent_1, ChadMasterC_1, Lennon_1, Vivi2_1, Sitar_1
- Track 39 : Brawn1_1, Fitzgerald_1, Ailee_1, Keitabear_1, Shivanishola_1, Sedona_1, Sanjuju_1
- Track 40 : StorminNorm_1, Tycho_1
- Track 41 : Thing3_1, Kamashten_1, Barsten_1, McCrothy_1, Rofo_1, Galadriel_1, Paries_1, FuegoCuervo_1
- Track 42 : JKSyngboy_1
- Track 43 : RiverRaider_1
- Track 44 : SchottB_1, Baumdotcom_1, LilHam_1, Gaea_1
- Track 45 : Saronaya_1, Gustavo_1
- Track 46 : Nordenberg_1
- Track 47 : Ali17_1, Inspectinfecti_1, MelBins_1
- Track 48 : Phauci_1, Leonard_1, Hans_1, Phinally_1
- Track 49 : Belphegor_1
- Track 50 : EMOore_1
- Track 51 : GTE6_1
- Track 52 : RoadKill_1, Chickadee_1, Kwekel_1, Twonlo_1, EdmundFerry_1, Tiamoceli_1
- Track 53 : Dextert_1
- Track 54 : APunk_1, BigHunkinEater_1
- Track 55 : Sampson_1, Natkenzie_1, Abblin_1, Scioto_1, ViaConlectus_1
- Track 56 : DoctorFroggo_1, Delrey21_1, Verity_1
- Track 57 : Zipp_1
- Track 58 : Pumpkiney_1
- Track 59 : Tardus_1
- Track 60 : Lilbeanie_1
- Track 61 : RomansRevenge_9, Boise_9
- Track 62 : Phonegingi_1
- Track 63 : Antuna_1, Carrillo_1, Blett_1
- Track 64 : Losacky_1, Violeta_1
- Track 65 : Bush_1, Winchester007_1, PhillyJawn_1, Dropshot_1, Mariel_1, CookieDog_1, Phingu_1, MenE_1, Appa_1
- Track 66 : ScoobySnack_1, Jakelyne_1, NCRodriguez_1, Warren_1, Guzman_1
- Track 67 : Pickles13_1
- Track 68 : Taptic_64, Megabear_64
- Track 69 : Argie_67, GodPhather_66, Jeon_64
- Track 70 : Cepens_64
- Track 71 : D12_63, PR_64
- Track 72 : TurkishDelight_1
- Track 73 : BigAnti_1
- Track 74 : Tonitrus_9
- Track 75 : pZL12_68c
- Track 76 : Sunfish_20
- Track 77 : Kithara_18

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

The start number called the most often in the published annotations is 29, it was called in 53 of the 177 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Affeca_1, Ailee_1, Angelicage_1, Ashertheman_1, Baddon_1, Barsten_1, Baumdotcom_1, Bibwit_1, Bizzy_1, BobBob_1, Boise_9, Brandonk123_1, Brawn1_1, ChadMasterC_1, Charming_1, Derg_1, Fitzgerald_1, Flatwoods_1, Fosterous_1, FuegoCuervo_1, Gaea_1, Galadriel_1, Geodirt_1, Gustavo_1, JKSyngboy_1, Jabberwocky_1, Kamashten_1, Keitabear_1, Kewpiedoll_1, Kroos_1, Kwobi_1, Lennon_1, LilHam_1, Love_1, McCrothy_1, McKinley_1, MoontowerMania_1, Paries_1, Ribeye_1, RiverRaider_1, Rofo_1, RomansRevenge_9, Sanjuju_1, Saronaya_1, SchottB_1, Sedona_1, Shivanishola_1, Sitar_1, Stichling_1, StorminNorm_1, Stultus_1, Tangent_1, Tangerine_1, Thing3_1, Tycho_1, Vivi2_1, YorkOnyx_1,

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

- Nordenberg_1,

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

- APunk_1, AWGoat_12, Abblin_1, Ali17_1, Amo99_22, Antuna_1, Appa_1, Argie_67, Arri_1, Bakery_1, Barb_1, Beagle_18, Belphegor_1, BetaFish_17, BigAnti_1, BigHunkinEater_1, Blett_1, BruhMoment_13, Bush_1, Carrillo_1, Caterpie_93, Cepens_64, CherryCola_1, Chickadee_1, ClamChowder_1, Clawz_22, Clown_1, ColdSoup_22, CookieDog_1, CoveyB_1, D12_63, Danyall_1, Delrey21_1, Dexdert_1, DoctorFroggo_1, DogYard_17, DonTron_20, Dori_83, Dropshot_1, EMOore_1, EdmundFerry_1, Egi03_1, Evamon_1, Fireball_1, Forrestell_15, Fugax_1, GTE6_1, Gezellig_1, GodPhather_66, Grumio_21, Guzman_1, Halo3_1, Hans_1, Hive_16, Inspectinfecti_1, Jakelyne_1, Jambalaya_1, Jeon_64, JohnPork_1, Jollymon_21, KimmyK_1, KingstonB_19, Kithara_18, Kubulix_18, Kwekel_1, Leonard_1, Lilbeanie_1, Losacky_1, Makar_22, Mao1_86, Mariel_1, Mask_86, Megabear_64, MelBins_1, MellowYellow_15, MenE_1, Mutzi_1, NCRodriguez_1, Natkenzie_1, Nikan_14, Nubi_1, NyleyClemson_14, Odyssey395_19, Ollypop_16, PR_64, Phauci_1, PhillyJawn_1, Phinally_1, Phingu_1, Phlop_1, Phonegingi_1, PhuzzTulsa_15, Pickles13_1, PinkCoffee_1, Pointis_17, Popstraw_16, Portcullis_1, PullumCavea_1, Pumpkiney_1, Pureglobe5_19, Purplicious_20, RIPWilbur_15, Ranunculus_13, RazzB_14, Ren19_14, Rizwana_11, RoadKill_1, RogerDodger_1, Salvador_1, Sampson_1, Savbucketdawg_1, Scioto_1, ScoobySnack_1, Sejanus_88, Sendy_1, SharkTale_1, Shinji_1, SilentRX_12, Sixsevenium_1, SmokingBunny_1, Soos_19, Stillion_20, Sting_20, Sunfish_20, Tank_12, Taptic_64, Tardus_1, Tiamoceli_1, TillyBobJoe_1, Togo_1, Tonitrus_9, TurkishDelight_1, Twister6_1, Twonlo_1, Valary_1, VanDeWege_1, Verity_1, ViaConlectus_1, Violeta_1, Warren_1, Wilde_12, Winchester007_1, Wizard_1, YungMoney_1, Zipp_1, pZL12_68c,

Summary by start number:

Start 9:

- Found in 1 of 204 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 177

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kithara_18 (singleton),

Start 14:

- Found in 1 of 204 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 177
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ranunculus_13 (AP),

Start 16:

- Found in 4 of 204 (2.0%) of genes in pham
- Manual Annotations of this start: 4 of 177
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BruhMoment_13 (AP3), Sunfish_20 (singleton), Tank_12 (AP1), Wilde_12 (AP1),

Start 17:

- Found in 1 of 204 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 177
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rizwana_11 (AP1),

Start 19:

- Found in 21 of 204 (10.3%) of genes in pham
- Manual Annotations of this start: 17 of 177
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antuna_1 (GA), Appa_1 (GA), Blett_1 (GA), Bush_1 (GA), Carrillo_1 (GA), CookieDog_1 (GA), Dropshot_1 (GA), Guzman_1 (GA), Jakelyne_1 (GA), Losacky_1 (GA), Mariel_1 (GA), MenE_1 (GA), NCRodriguez_1 (GA), PhillyJawn_1 (GA), Phingu_1 (GA), Phonegingi_1 (GA), Pickles13_1 (GA), ScoobySnack_1 (GA), Violeta_1 (GA), Warren_1 (GA), Winchester007_1 (GA),

Start 20:

- Found in 17 of 204 (8.3%) of genes in pham
- Manual Annotations of this start: 14 of 177
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat_12 (AP4), Beagle_18 (AP2), BetaFish_17 (AP2), DogYard_17 (AP2), Forrestell_15 (AP2), Hive_16 (AP2), Kubulix_18 (AP2), MellowYellow_15 (AP2), NyleyClemson_14 (AP2), Odyssey395_19 (AP2), PhuzzTulsa_15 (AP2), Pointis_17 (AP2), Popstraw_16 (AP2), Pureglobe5_19 (AP2), RIPWilbur_15 (AP2), RazzB_14 (AP2), SilentRX_12 (AP4),

Start 21:

- Found in 3 of 204 (1.5%) of genes in pham
- Manual Annotations of this start: 2 of 177
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nikan_14 (AP2), Ollypop_16 (AP2), Ren19_14 (AP2),

Start 22:

- Found in 10 of 204 (4.9%) of genes in pham
- Manual Annotations of this start: 9 of 177

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ali17_1 (DE2), Belphegor_1 (DE2), EMOore_1 (DE2), Hans_1 (DE2), Inspectinfecti_1 (DE2), Leonard_1 (DE2), MelBins_1 (DE2), Phauci_1 (DE2), Phinally_1 (DE2), pZL12_68c (singleton),

Start 23:

- Found in 9 of 204 (4.4%) of genes in pham
- Manual Annotations of this start: 7 of 177
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Chickadee_1 (DE3), Dexdert_1 (DE3), EdmundFerry_1 (DE3), GTE6_1 (DE3), Kwekel_1 (DE3), RoadKill_1 (DE3), Tiamoceli_1 (DE3), Twonlo_1 (DE3),

Start 25:

- Found in 12 of 204 (5.9%) of genes in pham
- Manual Annotations of this start: 7 of 177
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Amo99_22 (CP), Clawz_22 (CP), ColdSoup_22 (CP), DonTron_20 (CP), Grumio_21 (CP), Jollymon_21 (CP), KingstonB_19 (CP), Purpicious_20 (CP), Soos_19 (CP), Stillion_20 (CP), Sting_20 (CP),

Start 26:

- Found in 1 of 204 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 177
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TurkishDelight_1 (singleton),

Start 27:

- Found in 39 of 204 (19.1%) of genes in pham
- Manual Annotations of this start: 34 of 177
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arri_1 (DC1), Bakery_1 (DC1), Barb_1 (DC1), CherryCola_1 (DC1), ClamChowder_1 (DC1), Clown_1 (DC2), CoveyB_1 (DC1), Danyall_1 (DC1), Egi03_1 (DC1), Evamon_1 (DC1), Fireball_1 (DC1), Fugax_1 (DC1), Gezellig_1 (DC1), Halo3_1 (DC1), Jambalaya_1 (DC1), JohnPork_1 (DC1), KimmyK_1 (DC1), Lilbeanie_1 (DE5), Mutzi_1 (DC1), Nubi_1 (DC1), Phlop_1 (DC1), PinkCoffee_1 (DC1), Portcullis_1 (DC1), PullumCavea_1 (DC1), RogerDodger_1 (DC1), Salvador_1 (DC1), Savbucketdawg_1 (DC1), Sendy_1 (DC1), SharkTale_1 (DC1), Shinji_1 (DC1), Sixsevenium_1 (DC1), SmokingBunny_1 (DC1), TillyBobJoe_1 (DC1), Togo_1 (DC1), Twister6_1 (DC1), Valary_1 (DC1), VanDeWege_1 (DC1), Wizard_1 (DC1), YungMoney_1 (DC1),

Start 28:

- Found in 8 of 204 (3.9%) of genes in pham
- Manual Annotations of this start: 8 of 177
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Argie_67 (W), Cepens_64 (W), D12_63 (W), GodPhather_66 (W), Jeon_64 (W), Megabear_64 (W), PR_64 (W), Taptic_64 (W),

Start 29:

- Found in 58 of 204 (28.4%) of genes in pham

- Manual Annotations of this start: 53 of 177
- Called 98.3% of time when present
- Phage (with cluster) where this start called: Affeca_1 (DE1), Ailee_1 (DE1), Angelicage_1 (DE1), Ashertheman_1 (DE1), Baddon_1 (DE1), Barsten_1 (DE1), Baumdotcom_1 (DE1), Bibwit_1 (DE1), Bizzy_1 (DE1), BobBob_1 (DE1), Boise_9 (FT), Brandonk123_1 (DE1), Brawn1_1 (DE1), ChadMasterC_1 (DE1), Charming_1 (DE1), Derg_1 (DE1), Fitzgerald_1 (DE1), Flatwoods_1 (DE1), Fosterous_1 (DE1), FuegoCuervo_1 (DE1), Gaea_1 (DE1), Galadriel_1 (DE1), Geodirt_1 (DE1), Gustavo_1 (DE1), JKSyngboy_1 (DE1), Jabberwocky_1 (DE1), Kamashten_1 (DE1), Keitabear_1 (DE1), Kewpiedoll_1 (DE1), Kroos_1 (DE1), Kwobi_1 (DE1), Lennon_1 (DE1), LilHam_1 (DE1), Love_1 (DE1), McCrothy_1 (DE1), McKinley_1 (DE1), MoontowerMania_1 (DE1), Paries_1 (DE1), Ribeye_1 (DE1), RiverRaider_1 (DE1), Rofo_1 (DE1), RomansRevenge_9 (FT), Sanjuju_1 (DE1), Saronaya_1 (DE1), SchottB_1 (DE1), Sedona_1 (DE1), Shivanishola_1 (DE1), Sitar_1 (DE1), Stichling_1 (DE1), StorminNorm_1 (DE1), Stultus_1 (DE1), Tangent_1 (DE1), Tangerine_1 (DE1), Thing3_1 (DE1), Tycho_1 (DE1), Vivi2_1 (DE1), YorkOnyx_1 (DE1),

Start 32:

- Found in 20 of 204 (9.8%) of genes in pham
- Manual Annotations of this start: 16 of 177
- Called 90.0% of time when present
- Phage (with cluster) where this start called: APunk_1 (DE4), Abblin_1 (DE4), BigHunkinEater_1 (DE4), Caterpie_93 (AD), Delrey21_1 (DE4), DoctorFroggo_1 (DE4), Dori_83 (AD), Mao1_86 (AD), Natkenzie_1 (DE4), Pumpkiney_1 (DE4), Sampson_1 (DE4), Scioto_1 (DE4), Sejanus_88 (AD), Tardus_1 (DE4), Tonitrus_9 (singleton), Verity_1 (DE4), ViaConlectus_1 (DE4), Zipp_1 (DE4),

Start 33:

- Found in 2 of 204 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 177
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Mask_86 (AD),

Start 34:

- Found in 1 of 204 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigAnti_1 (singleton),

Start 43:

- Found in 65 of 204 (31.9%) of genes in pham
- Manual Annotations of this start: 1 of 177
- Called 1.5% of time when present
- Phage (with cluster) where this start called: Nordenberg_1 (DE1),

Start 45:

- Found in 68 of 204 (33.3%) of genes in pham
- No Manual Annotations of this start.
- Called 1.5% of time when present
- Phage (with cluster) where this start called: Makar_22 (CP),

Summary by clusters:

There are 18 clusters represented in this pham: singleton, AP1, FT, AD, AP2, DE1, DE2, DE3, DE4, DE5, AP4, DC2, AP, W, AP3, CP, GA, DC1,

Info for manual annotations of cluster AD:

- Start number 32 was manually annotated 3 times for cluster AD.
- Start number 33 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster AP:

- Start number 14 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 16 was manually annotated 2 times for cluster AP1.
- Start number 17 was manually annotated 1 time for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 20 was manually annotated 12 times for cluster AP2.
- Start number 21 was manually annotated 2 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 16 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 20 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster CP:

- Start number 25 was manually annotated 7 times for cluster CP.

Info for manual annotations of cluster DC1:

- Start number 27 was manually annotated 32 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 27 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:

- Start number 29 was manually annotated 52 times for cluster DE1.
- Start number 43 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 22 was manually annotated 9 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 23 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 32 was manually annotated 12 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 27 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster FT:

- Start number 29 was manually annotated 1 time for cluster FT.

Info for manual annotations of cluster GA:

- Start number 19 was manually annotated 17 times for cluster GA.

Info for manual annotations of cluster W:

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

Gene Information:

Gene: APunk_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for APunk_1:

(Start: 32 @1 has 16 MA's), (59, 139), (61, 148), (88, 241), (104, 295), (105, 298), (135, 418),

Gene: AWGoat_12 Start: 5020, Stop: 5541, Start Num: 20

Candidate Starts for AWGoat_12:

(5, 4522), (7, 4843), (8, 4909), (Start: 20 @5020 has 14 MA's), (57, 5197), (59, 5203), (61, 5212), (72, 5254), (73, 5260), (88, 5302), (91, 5314), (117, 5413),

Gene: Abblin_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for Abblin_1:

(Start: 32 @1 has 16 MA's), (59, 139), (61, 148), (88, 241), (105, 298), (135, 418),

Gene: Affeca_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Affeca_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: Ailee_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Ailee_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (62, 157), (74, 208), (88, 247), (110, 325),

Gene: Ali17_1 Start: 1, Stop: 537, Start Num: 22

Candidate Starts for Ali17_1:

(Start: 22 @1 has 9 MA's), (Start: 43 @85 has 1 MA's), (47, 100), (74, 235), (86, 268), (88, 274), (105, 331), (135, 451), (145, 487),

Gene: Amo99_22 Start: 10509, Stop: 10994, Start Num: 25

Candidate Starts for Amo99_22:

(Start: 25 @10509 has 7 MA's), (45, 10584), (49, 10599), (59, 10662), (65, 10695), (68, 10707), (79, 10737), (80, 10740), (86, 10764), (91, 10782), (97, 10803), (102, 10827), (104, 10830), (107, 10842), (113, 10866), (115, 10878), (116, 10884), (120, 10902), (126, 10932), (129, 10938),

Gene: Angelicage_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Angelicage_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (62, 157), (74, 208), (88, 247),

Gene: Antuna_1 Start: 1, Stop: 504, Start Num: 19

Candidate Starts for Antuna_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (108, 343), (112, 361),

Gene: Appa_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for Appa_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343), (112, 361),

Gene: Argie_67 Start: 49730, Stop: 50272, Start Num: 28

Candidate Starts for Argie_67:

(Start: 28 @49730 has 8 MA's), (54, 49835), (58, 49862), (59, 49865), (63, 49886), (68, 49910), (89, 49976), (91, 49994), (97, 50015), (100, 50033), (109, 50063), (115, 50087), (116, 50093), (120, 50111), (126, 50141), (137, 50177), (140, 50186),

Gene: Arri_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Arri_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Ashertheman_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Ashertheman_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247),

Gene: Baddon_1 Start: 1, Stop: 504, Start Num: 29

Candidate Starts for Baddon_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (55, 130), (74, 205), (76, 211), (88, 244),

Gene: Bakery_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Bakery_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Barb_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Barb_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Barsten_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Barsten_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (56, 133), (74, 208), (88, 247), (110, 325),

Gene: Baumdotcom_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Baumdotcom_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247), (119, 367),

Gene: Beagle_18 Start: 5586, Stop: 6104, Start Num: 20

Candidate Starts for Beagle_18:

(Start: 20 @5586 has 14 MA's), (42, 5673), (44, 5679), (52, 5724), (59, 5763), (61, 5772), (87, 5859), (88, 5862), (106, 5928), (112, 5955), (132, 6021), (148, 6084), (149, 6087),

Gene: Belphegor_1 Start: 1, Stop: 534, Start Num: 22

Candidate Starts for Belphegor_1:

(Start: 22 @1 has 9 MA's), (Start: 43 @85 has 1 MA's), (47, 100), (59, 172), (86, 268), (135, 451), (145, 487), (147, 493),

Gene: BetaFish_17 Start: 5789, Stop: 6307, Start Num: 20

Candidate Starts for BetaFish_17:

(Start: 20 @5789 has 14 MA's), (42, 5876), (44, 5882), (46, 5891), (52, 5927), (59, 5966), (87, 6062), (88, 6065), (106, 6131), (112, 6158), (132, 6224), (148, 6287), (149, 6290),

Gene: Bibwit_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Bibwit_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247),

Gene: BigAnti_1 Start: 25, Stop: 486, Start Num: 34

Candidate Starts for BigAnti_1:

(30, 1), (34, 25), (74, 187), (75, 190), (78, 196), (82, 202), (108, 289), (123, 358), (128, 379), (133, 388), (139, 415), (146, 439),

Gene: BigHunkinEater_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for BigHunkinEater_1:

(Start: 32 @1 has 16 MA's), (59, 139), (61, 148), (88, 241), (104, 295), (105, 298), (135, 418),

Gene: Bizzy_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Bizzy_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247),

Gene: Blett_1 Start: 1, Stop: 513, Start Num: 19

Candidate Starts for Blett_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (108, 343), (112, 361),

Gene: BobBob_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for BobBob_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (62, 157), (74, 208), (88, 247),

Gene: Boise_9 Start: 3610, Stop: 4101, Start Num: 29

Candidate Starts for Boise_9:

(Start: 29 @3610 has 53 MA's), (44, 3667), (52, 3712), (64, 3775), (88, 3847), (108, 3922), (132, 4009), (133, 4012), (135, 4024), (138, 4036), (144, 4057), (148, 4072),

Gene: Brandonk123_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Brandonk123_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (62, 157), (74, 208), (88, 247),

Gene: Brawn1_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Brawn1_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (62, 157), (74, 208), (88, 247), (110, 325),

Gene: BruhMoment_13 Start: 5305, Stop: 5826, Start Num: 16

Candidate Starts for BruhMoment_13:

(Start: 16 @5305 has 4 MA's), (44, 5401), (45, 5407), (57, 5479), (88, 5584), (93, 5602), (101, 5638), (106, 5650), (112, 5677), (132, 5743), (133, 5746), (137, 5767),

Gene: Bush_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for Bush_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343), (112, 361),

Gene: Carrillo_1 Start: 1, Stop: 513, Start Num: 19

Candidate Starts for Carrillo_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (108, 343), (112, 361),

Gene: Caterpie_93 Start: 58672, Stop: 59157, Start Num: 32

Candidate Starts for Caterpie_93:

(Start: 32 @58672 has 16 MA's), (68, 58855), (75, 58879), (84, 58900), (88, 58912), (115, 59014), (116, 59020), (118, 59029), (121, 59044), (126, 59056), (127, 59059), (130, 59065), (144, 59116),

Gene: Cepens_64 Start: 48136, Stop: 48678, Start Num: 28

Candidate Starts for Cepens_64:

(Start: 28 @48136 has 8 MA's), (54, 48241), (58, 48268), (59, 48271), (63, 48292), (68, 48316), (89, 48382), (91, 48400), (97, 48421), (100, 48439), (109, 48469), (115, 48493), (120, 48517), (126, 48547), (137, 48583), (140, 48592),

Gene: ChadMasterC_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for ChadMasterC_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: Charming_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Charming_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: CherryCola_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for CherryCola_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Chickadee_1 Start: 1, Stop: 561, Start Num: 23

Candidate Starts for Chickadee_1:

(Start: 23 @1 has 7 MA's), (35, 55), (51, 121), (56, 157), (88, 271), (105, 337), (120, 406), (141, 487), (147, 505),

Gene: ClamChowder_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for ClamChowder_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Clawz_22 Start: 10602, Stop: 11087, Start Num: 25

Candidate Starts for Clawz_22:

(Start: 25 @10602 has 7 MA's), (45, 10677), (49, 10692), (59, 10755), (65, 10788), (68, 10800), (71, 10809), (80, 10833), (86, 10857), (97, 10896), (101, 10917), (102, 10920), (104, 10923), (107, 10935), (113, 10959), (114, 10965), (115, 10971), (120, 10995), (126, 11025), (129, 11031),

Gene: Clown_1 Start: 1, Stop: 522, Start Num: 27

Candidate Starts for Clown_1:

(Start: 27 @1 has 34 MA's), (75, 214), (76, 217), (83, 232), (88, 250), (111, 328), (112, 334), (120, 373), (134, 424),

Gene: ColdSoup_22 Start: 10509, Stop: 10994, Start Num: 25

Candidate Starts for ColdSoup_22:

(Start: 25 @10509 has 7 MA's), (45, 10584), (49, 10599), (59, 10662), (65, 10695), (68, 10707), (79, 10737), (80, 10740), (86, 10764), (91, 10782), (97, 10803), (102, 10827), (104, 10830), (107, 10842), (113, 10866), (115, 10878), (116, 10884), (120, 10902), (126, 10932), (129, 10938),

Gene: CookieDog_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for CookieDog_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343), (112, 361),

Gene: CoveyB_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for CoveyB_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: D12_63 Start: 48684, Stop: 49226, Start Num: 28

Candidate Starts for D12_63:

(Start: 28 @48684 has 8 MA's), (54, 48789), (58, 48816), (59, 48819), (63, 48840), (68, 48864), (89, 48930), (91, 48948), (97, 48969), (99, 48981), (100, 48987), (109, 49017), (115, 49041), (116, 49047), (120, 49065), (126, 49095), (137, 49131), (140, 49140),

Gene: Danyall_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Danyall_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Delrey21_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for Delrey21_1:

(Start: 32 @1 has 16 MA's), (37, 31), (53, 103), (61, 148), (88, 241), (104, 295), (105, 298), (135, 418),

Gene: Derg_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Derg_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247),

Gene: Dextert_1 Start: 1, Stop: 561, Start Num: 23

Candidate Starts for Dextert_1:

(Start: 23 @1 has 7 MA's), (35, 55), (51, 121), (88, 271), (105, 337), (120, 406), (141, 487), (147, 505),

Gene: DoctorFroggo_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for DoctorFroggo_1:

(Start: 32 @1 has 16 MA's), (37, 31), (53, 103), (61, 148), (88, 241), (104, 295), (105, 298), (135, 418),

Gene: DogYard_17 Start: 5656, Stop: 6174, Start Num: 20

Candidate Starts for DogYard_17:

(Start: 20 @5656 has 14 MA's), (42, 5743), (44, 5749), (52, 5794), (59, 5833), (61, 5842), (87, 5929), (88, 5932), (106, 5998), (112, 6025), (132, 6091), (148, 6154), (149, 6157),

Gene: DonTron_20 Start: 10098, Stop: 10583, Start Num: 25

Candidate Starts for DonTron_20:

(Start: 25 @10098 has 7 MA's), (45, 10173), (49, 10188), (57, 10245), (59, 10251), (65, 10284), (68, 10296), (79, 10326), (80, 10329), (86, 10353), (97, 10392), (101, 10413), (102, 10416), (104, 10419),

(107, 10431), (113, 10455), (115, 10467), (116, 10473), (120, 10491), (126, 10521), (129, 10527), (131, 10530), (136, 10554),

Gene: Dori_83 Start: 58816, Stop: 59301, Start Num: 32

Candidate Starts for Dori_83:

(Start: 32 @58816 has 16 MA's), (68, 58999), (75, 59023), (84, 59044), (88, 59056), (115, 59158), (116, 59164), (118, 59173), (121, 59188), (126, 59200), (127, 59203), (130, 59209), (144, 59260),

Gene: Dropshot_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for Dropshot_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343), (112, 361),

Gene: EMoore_1 Start: 1, Stop: 537, Start Num: 22

Candidate Starts for EMoore_1:

(Start: 22 @1 has 9 MA's), (Start: 43 @85 has 1 MA's), (47, 100), (74, 235), (86, 268), (88, 274), (119, 394), (135, 451), (145, 487),

Gene: EdmundFerry_1 Start: 1, Stop: 561, Start Num: 23

Candidate Starts for EdmundFerry_1:

(Start: 23 @1 has 7 MA's), (35, 55), (51, 121), (56, 157), (88, 271), (105, 337), (120, 406), (141, 487), (147, 505),

Gene: Egi03_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Egi03_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Evamon_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Evamon_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Fireball_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Fireball_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Fitzgerald_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Fitzgerald_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (62, 157), (74, 208), (88, 247), (110, 325),

Gene: Flatwoods_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Flatwoods_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247),

Gene: Forrestell_15 Start: 5013, Stop: 5531, Start Num: 20

Candidate Starts for Forrestell_15:

(Start: 20 @5013 has 14 MA's), (42, 5100), (44, 5106), (52, 5151), (59, 5190), (61, 5199), (87, 5286), (88, 5289), (106, 5355), (112, 5382), (132, 5448), (148, 5511), (149, 5514),

Gene: Fosterous_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Fosterous_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: FuegoCuervo_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for FuegoCuervo_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (56, 133), (74, 208), (88, 247), (110, 325),

Gene: Fugax_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Fugax_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: GTE6_1 Start: 65, Stop: 625, Start Num: 23

Candidate Starts for GTE6_1:

(12, 8), (18, 32), (Start: 23 @65 has 7 MA's), (35, 119), (51, 185), (56, 221), (88, 335), (105, 401), (120, 470), (141, 551), (147, 569),

Gene: Gaea_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Gaea_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247), (119, 367),

Gene: Galadriel_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Galadriel_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (56, 133), (74, 208), (88, 247), (110, 325),

Gene: Geodirt_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Geodirt_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: Gezellig_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Gezellig_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: GodPhather_66 Start: 49458, Stop: 50000, Start Num: 28

Candidate Starts for GodPhather_66:

(Start: 28 @49458 has 8 MA's), (54, 49563), (58, 49590), (59, 49593), (63, 49614), (68, 49638), (89, 49704), (91, 49722), (97, 49743), (100, 49761), (109, 49791), (115, 49815), (116, 49821), (120, 49839), (126, 49869), (137, 49905), (140, 49914),

Gene: Grumio_21 Start: 10017, Stop: 10502, Start Num: 25

Candidate Starts for Grumio_21:

(Start: 25 @10017 has 7 MA's), (45, 10092), (49, 10107), (59, 10170), (65, 10203), (68, 10215), (79, 10245), (80, 10248), (86, 10272), (97, 10311), (101, 10332), (102, 10335), (104, 10338), (107, 10350), (113, 10374), (115, 10386), (116, 10392), (120, 10410), (129, 10446), (131, 10449), (136, 10473),

Gene: Gustavo_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Gustavo_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247), (120, 373),

Gene: Guzman_1 Start: 1, Stop: 513, Start Num: 19

Candidate Starts for Guzman_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343),

Gene: Halo3_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Halo3_1:

(Start: 27 @1 has 34 MA's), (38, 43), (47, 76), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (133, 415), (134, 424),

Gene: Hans_1 Start: 1, Stop: 537, Start Num: 22

Candidate Starts for Hans_1:

(Start: 22 @1 has 9 MA's), (Start: 43 @85 has 1 MA's), (47, 100), (74, 235), (86, 268), (88, 274), (105, 331), (135, 451), (145, 487), (147, 493),

Gene: Hive_16 Start: 5670, Stop: 6188, Start Num: 20

Candidate Starts for Hive_16:

(Start: 20 @5670 has 14 MA's), (42, 5757), (44, 5763), (52, 5808), (59, 5847), (61, 5856), (87, 5943), (88, 5946), (106, 6012), (112, 6039), (132, 6105), (148, 6168), (149, 6171),

Gene: Inspectinfecti_1 Start: 1, Stop: 537, Start Num: 22

Candidate Starts for Inspectinfecti_1:

(Start: 22 @1 has 9 MA's), (Start: 43 @85 has 1 MA's), (47, 100), (74, 235), (86, 268), (88, 274), (105, 331), (135, 451), (145, 487),

Gene: JKSyngboy_1 Start: 1, Stop: 504, Start Num: 29

Candidate Starts for JKSyngboy_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (74, 205), (76, 211), (88, 244),

Gene: Jabberwocky_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Jabberwocky_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: Jakelyne_1 Start: 1, Stop: 513, Start Num: 19

Candidate Starts for Jakelyne_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343),

Gene: Jambalaya_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Jambalaya_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (133, 415), (134, 424),

Gene: Jeon_64 Start: 49222, Stop: 49764, Start Num: 28

Candidate Starts for Jeon_64:

(Start: 28 @49222 has 8 MA's), (54, 49327), (58, 49354), (59, 49357), (63, 49378), (68, 49402), (89, 49468), (91, 49486), (97, 49507), (100, 49525), (109, 49555), (115, 49579), (116, 49585), (120, 49603), (126, 49633), (137, 49669), (140, 49678),

Gene: JohnPork_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for JohnPork_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Jollymon_21 Start: 10509, Stop: 10994, Start Num: 25

Candidate Starts for Jollymon_21:

(Start: 25 @10509 has 7 MA's), (45, 10584), (49, 10599), (59, 10662), (65, 10695), (68, 10707), (79, 10737), (80, 10740), (86, 10764), (91, 10782), (97, 10803), (102, 10827), (104, 10830), (107, 10842), (113, 10866), (115, 10878), (116, 10884), (120, 10902), (126, 10932), (129, 10938),

Gene: Kamashten_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Kamashten_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (56, 133), (74, 208), (88, 247), (110, 325),

Gene: Keitabear_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Keitabear_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (62, 157), (74, 208), (88, 247), (110, 325),

Gene: Kewpiedoll_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Kewpiedoll_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: KimmyK_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for KimmyK_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: KingstonB_19 Start: 10017, Stop: 10502, Start Num: 25

Candidate Starts for KingstonB_19:

(Start: 25 @10017 has 7 MA's), (45, 10092), (49, 10107), (59, 10170), (65, 10203), (68, 10215), (79, 10245), (80, 10248), (86, 10272), (91, 10290), (97, 10311), (101, 10332), (102, 10335), (104, 10338), (107, 10350), (113, 10374), (115, 10386), (116, 10392), (120, 10410), (126, 10440), (129, 10446),

Gene: Kithara_18 Start: 6930, Stop: 7589, Start Num: 9

Candidate Starts for Kithara_18:

(Start: 9 @6930 has 1 MA's), (13, 6954), (Start: 23 @7008 has 7 MA's), (36, 7065), (42, 7086), (61, 7185), (68, 7218), (70, 7224), (74, 7236), (87, 7269), (95, 7296), (96, 7305), (127, 7425), (140, 7467), (142, 7479), (152, 7563),

Gene: Kroos_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Kroos_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247),

Gene: Kubulix_18 Start: 5785, Stop: 6303, Start Num: 20

Candidate Starts for Kubulix_18:

(Start: 20 @5785 has 14 MA's), (42, 5872), (44, 5878), (52, 5923), (59, 5962), (87, 6058), (88, 6061), (106, 6127), (112, 6154), (132, 6220), (148, 6283), (149, 6286),

Gene: Kwekel_1 Start: 1, Stop: 561, Start Num: 23

Candidate Starts for Kwekel_1:

(Start: 23 @1 has 7 MA's), (35, 55), (51, 121), (56, 157), (88, 271), (105, 337), (120, 406), (141, 487), (147, 505),

Gene: Kwobi_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Kwobi_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247),

Gene: Lennon_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Lennon_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: Leonard_1 Start: 1, Stop: 537, Start Num: 22

Candidate Starts for Leonard_1:

(Start: 22 @1 has 9 MA's), (Start: 43 @85 has 1 MA's), (47, 100), (74, 235), (86, 268), (88, 274), (105, 331), (135, 451), (145, 487), (147, 493),

Gene: LilHam_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for LilHam_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247), (119, 367),

Gene: Lilbeanie_1 Start: 1, Stop: 591, Start Num: 27

Candidate Starts for Lilbeanie_1:

(Start: 27 @1 has 34 MA's), (38, 43), (44, 64), (60, 160), (66, 190), (94, 298), (120, 409), (143, 496), (150, 523), (151, 538),

Gene: Losacky_1 Start: 1, Stop: 513, Start Num: 19

Candidate Starts for Losacky_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (108, 343),

Gene: Love_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Love_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: Makar_22 Start: 10737, Stop: 11147, Start Num: 45

Candidate Starts for Makar_22:

(Start: 25 @10662 has 7 MA's), (45, 10737), (49, 10752), (59, 10815), (65, 10848), (68, 10860), (71, 10869), (80, 10893), (86, 10917), (97, 10956), (101, 10977), (102, 10980), (104, 10983), (107, 10995), (113, 11019), (114, 11025), (115, 11031), (120, 11055), (126, 11085), (129, 11091),

Gene: Mao1_86 Start: 57916, Stop: 58401, Start Num: 32

Candidate Starts for Mao1_86:

(10, 57814), (Start: 32 @57916 has 16 MA's), (68, 58099), (75, 58123), (84, 58144), (88, 58156), (116, 58264), (118, 58273), (121, 58288), (126, 58300), (127, 58303), (130, 58309), (144, 58360),

Gene: Mariel_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for Mariel_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343), (112, 361),

Gene: Mask_86 Start: 60554, Stop: 61024, Start Num: 33

Candidate Starts for Mask_86:

(Start: 32 @60542 has 16 MA's), (Start: 33 @60554 has 1 MA's), (67, 60719), (77, 60752), (98, 60815), (104, 60833), (115, 60881), (116, 60887), (118, 60896), (121, 60911), (126, 60923), (127, 60926), (130, 60932), (144, 60983),

Gene: McCrothy_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for McCrothy_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (56, 133), (74, 208), (88, 247), (110, 325),

Gene: McKinley_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for McKinley_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: Megabear_64 Start: 48057, Stop: 48599, Start Num: 28

Candidate Starts for Megabear_64:

(Start: 28 @48057 has 8 MA's), (54, 48162), (59, 48192), (63, 48213), (68, 48237), (89, 48303), (91, 48321), (97, 48342), (99, 48354), (100, 48360), (109, 48390), (115, 48414), (120, 48438), (126, 48468), (137, 48504), (140, 48513),

Gene: MelBins_1 Start: 1, Stop: 537, Start Num: 22

Candidate Starts for MelBins_1:

(Start: 22 @1 has 9 MA's), (Start: 43 @85 has 1 MA's), (47, 100), (74, 235), (86, 268), (88, 274), (105, 331), (135, 451), (145, 487),

Gene: MellowYellow_15 Start: 5043, Stop: 5561, Start Num: 20

Candidate Starts for MellowYellow_15:

(Start: 20 @5043 has 14 MA's), (42, 5130), (44, 5136), (52, 5181), (59, 5220), (61, 5229), (87, 5316), (88, 5319), (106, 5385), (112, 5412), (132, 5478), (148, 5541), (149, 5544),

Gene: MenE_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for MenE_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343), (112, 361),

Gene: MoontowerMania_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for MoontowerMania_1:

(Start: 29 @1 has 53 MA's), (39, 43), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (56, 133), (74, 208), (88, 247), (110, 325),

Gene: Mutzi_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Mutzi_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: NCRodriguez_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for NCRodriguez_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343),

Gene: Natkenzie_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for Natkenzie_1:

(Start: 32 @1 has 16 MA's), (59, 139), (61, 148), (88, 241), (105, 298), (135, 418),

Gene: Nikan_14 Start: 5509, Stop: 6009, Start Num: 21

Candidate Starts for Nikan_14:

(Start: 21 @5509 has 2 MA's), (31, 5539), (42, 5590), (44, 5596), (52, 5641), (59, 5680), (61, 5689), (88, 5779), (91, 5791), (106, 5845), (112, 5872), (132, 5938), (135, 5953), (140, 5971),

Gene: Nordenberg_1 Start: 58, Stop: 510, Start Num: 43

Candidate Starts for Nordenberg_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247),

Gene: Nubi_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Nubi_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: NyleyClemson_14 Start: 4985, Stop: 5503, Start Num: 20

Candidate Starts for NyleyClemson_14:

(Start: 20 @4985 has 14 MA's), (42, 5072), (44, 5078), (52, 5123), (59, 5162), (61, 5171), (87, 5258), (88, 5261), (106, 5327), (112, 5354), (132, 5420), (148, 5483), (149, 5486),

Gene: Odyssey395_19 Start: 5787, Stop: 6305, Start Num: 20

Candidate Starts for Odyssey395_19:

(Start: 20 @5787 has 14 MA's), (42, 5874), (44, 5880), (46, 5889), (52, 5925), (59, 5964), (87, 6060), (88, 6063), (106, 6129), (112, 6156), (132, 6222), (148, 6285), (149, 6288),

Gene: Ollypop_16 Start: 5474, Stop: 5974, Start Num: 21

Candidate Starts for Ollypop_16:

(15, 5441), (Start: 21 @5474 has 2 MA's), (31, 5504), (42, 5555), (44, 5561), (52, 5606), (61, 5654), (87, 5741), (88, 5744), (106, 5810), (112, 5837), (132, 5903), (138, 5930), (140, 5936),

Gene: PR_64 Start: 48661, Stop: 49203, Start Num: 28

Candidate Starts for PR_64:

(Start: 28 @48661 has 8 MA's), (54, 48766), (58, 48793), (59, 48796), (63, 48817), (68, 48841), (89, 48907), (91, 48925), (97, 48946), (99, 48958), (100, 48964), (109, 48994), (115, 49018), (116, 49024), (120, 49042), (126, 49072), (137, 49108), (140, 49117),

Gene: Paries_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Paries_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (56, 133), (74, 208), (88, 247), (110, 325),

Gene: Phauci_1 Start: 1, Stop: 537, Start Num: 22

Candidate Starts for Phauci_1:

(Start: 22 @1 has 9 MA's), (Start: 43 @85 has 1 MA's), (47, 100), (74, 235), (86, 268), (88, 274), (105, 331), (135, 451), (145, 487), (147, 493),

Gene: PhillyJawn_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for PhillyJawn_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343), (112, 361),

Gene: Phinally_1 Start: 1, Stop: 537, Start Num: 22

Candidate Starts for Phinally_1:

(Start: 22 @1 has 9 MA's), (Start: 43 @85 has 1 MA's), (47, 100), (74, 235), (86, 268), (88, 274), (105, 331), (135, 451), (145, 487), (147, 493),

Gene: Phingu_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for Phingu_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343), (112, 361),

Gene: Phlop_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Phlop_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Phonegingi_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for Phonegingi_1:

(Start: 19 @1 has 17 MA's), (48, 130), (59, 199), (83, 274), (90, 292), (99, 325), (107, 343), (108, 346), (116, 385),

Gene: PhuzzTulsa_15 Start: 5574, Stop: 6092, Start Num: 20

Candidate Starts for PhuzzTulsa_15:

(Start: 20 @5574 has 14 MA's), (42, 5661), (44, 5667), (52, 5712), (59, 5751), (61, 5760), (87, 5847), (88, 5850), (106, 5916), (112, 5943), (132, 6009), (148, 6072), (149, 6075),

Gene: Pickles13_1 Start: 1, Stop: 513, Start Num: 19

Candidate Starts for Pickles13_1:

(Start: 19 @1 has 17 MA's), (45, 118), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343), (112, 361),

Gene: PinkCoffee_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for PinkCoffee_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Pointis_17 Start: 5785, Stop: 6303, Start Num: 20

Candidate Starts for Pointis_17:

(Start: 20 @5785 has 14 MA's), (42, 5872), (44, 5878), (52, 5923), (59, 5962), (61, 5971), (87, 6058), (88, 6061), (106, 6127), (112, 6154), (132, 6220), (148, 6283), (149, 6286),

Gene: Popstraw_16 Start: 5574, Stop: 6092, Start Num: 20

Candidate Starts for Popstraw_16:

(Start: 20 @5574 has 14 MA's), (42, 5661), (44, 5667), (46, 5676), (52, 5712), (59, 5751), (87, 5847), (88, 5850), (106, 5916), (112, 5943), (132, 6009), (148, 6072), (149, 6075),

Gene: Portcullis_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Portcullis_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: PullumCavea_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for PullumCavea_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Pumpkiney_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for Pumpkiney_1:

(Start: 32 @1 has 16 MA's), (61, 148), (88, 241), (104, 295), (105, 298), (121, 373), (135, 418),

Gene: Pureglobe5_19 Start: 5801, Stop: 6319, Start Num: 20

Candidate Starts for Pureglobe5_19:

(Start: 20 @5801 has 14 MA's), (42, 5888), (44, 5894), (46, 5903), (52, 5939), (59, 5978), (87, 6074), (88, 6077), (106, 6143), (112, 6170), (132, 6236), (148, 6299), (149, 6302),

Gene: Purplicious_20 Start: 10018, Stop: 10503, Start Num: 25

Candidate Starts for Purplicious_20:

(Start: 25 @10018 has 7 MA's), (45, 10093), (49, 10108), (53, 10135), (59, 10171), (65, 10204), (68, 10216), (79, 10246), (80, 10249), (86, 10273), (97, 10312), (101, 10333), (102, 10336), (104, 10339), (107, 10351), (113, 10375), (115, 10387), (116, 10393), (120, 10411), (126, 10441), (129, 10447), (131, 10450), (136, 10474),

Gene: RIPWilbur_15 Start: 5438, Stop: 5956, Start Num: 20

Candidate Starts for RIPWilbur_15:

(Start: 20 @5438 has 14 MA's), (42, 5525), (44, 5531), (52, 5576), (59, 5615), (61, 5624), (87, 5711), (88, 5714), (106, 5780), (112, 5807), (132, 5873), (148, 5936), (149, 5939),

Gene: Ranunculus_13 Start: 5362, Stop: 5913, Start Num: 14

Candidate Starts for Ranunculus_13:

(Start: 14 @5362 has 1 MA's), (31, 5431), (42, 5479), (44, 5485), (52, 5530), (59, 5569), (88, 5668), (91, 5680), (106, 5734), (112, 5761), (133, 5830),

Gene: RazzB_14 Start: 4813, Stop: 5331, Start Num: 20

Candidate Starts for RazzB_14:

(Start: 20 @4813 has 14 MA's), (42, 4900), (44, 4906), (52, 4951), (59, 4990), (61, 4999), (87, 5086), (88, 5089), (106, 5155), (112, 5182), (132, 5248), (148, 5311), (149, 5314),

Gene: Ren19_14 Start: 5509, Stop: 6009, Start Num: 21

Candidate Starts for Ren19_14:

(Start: 21 @5509 has 2 MA's), (31, 5539), (42, 5590), (44, 5596), (52, 5641), (59, 5680), (61, 5689), (88, 5779), (91, 5791), (106, 5845), (112, 5872), (132, 5938), (135, 5953), (140, 5971),

Gene: Ribeye_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Ribeye_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247), (89, 250), (119, 367),

Gene: RiverRaider_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for RiverRaider_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (59, 145), (74, 208), (88, 247), (112, 334), (148, 475),

Gene: Rizwana_11 Start: 5074, Stop: 5604, Start Num: 17

Candidate Starts for Rizwana_11:

(Start: 17 @5074 has 1 MA's), (31, 5128), (88, 5368), (102, 5425), (124, 5509), (126, 5518), (130, 5524), (148, 5590),

Gene: RoadKill_1 Start: 1, Stop: 561, Start Num: 23

Candidate Starts for RoadKill_1:

(Start: 23 @1 has 7 MA's), (35, 55), (51, 121), (56, 157), (88, 271), (105, 337), (120, 406), (141, 487), (147, 505),

Gene: Rofo_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Rofo_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (56, 133), (74, 208), (88, 247), (110, 325),

Gene: RogerDodger_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for RogerDodger_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (133, 415), (134, 424),

Gene: RomansRevenge_9 Start: 3610, Stop: 4101, Start Num: 29

Candidate Starts for RomansRevenge_9:

(Start: 29 @3610 has 53 MA's), (44, 3667), (52, 3712), (64, 3775), (88, 3847), (108, 3922), (132, 4009), (133, 4012), (135, 4024), (138, 4036), (144, 4057), (148, 4072),

Gene: Salvador_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Salvador_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Sampson_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for Sampson_1:

(Start: 32 @1 has 16 MA's), (59, 139), (61, 148), (88, 241), (105, 298), (135, 418),

Gene: Sanjuju_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Sanjuju_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (62, 157), (74, 208), (88, 247), (110, 325),

Gene: Saronaya_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Saronaya_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247), (120, 373),

Gene: Savbucketdawg_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Savbucketdawg_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (133, 415), (134, 424),

Gene: SchottB_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for SchottB_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247), (119, 367),

Gene: Scioto_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for Scioto_1:

(Start: 32 @1 has 16 MA's), (59, 139), (61, 148), (88, 241), (105, 298), (135, 418),

Gene: ScoobySnack_1 Start: 1, Stop: 510, Start Num: 19

Candidate Starts for ScoobySnack_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343),

Gene: Sedona_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Sedona_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (62, 157), (74, 208), (88, 247), (110, 325),

Gene: Sejanus_88 Start: 59562, Stop: 60044, Start Num: 32

Candidate Starts for Sejanus_88:

(6, 59292), (Start: 32 @59562 has 16 MA's), (Start: 33 @59574 has 1 MA's), (67, 59739), (77, 59772), (98, 59835), (104, 59853), (115, 59901), (116, 59907), (118, 59916), (121, 59931), (126, 59943), (127, 59946), (130, 59952), (144, 60003),

Gene: Sendy_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Sendy_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: SharkTale_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for SharkTale_1:

(Start: 27 @1 has 34 MA's), (41, 55), (42, 58), (75, 214), (83, 232), (88, 250), (105, 304), (114, 343), (117, 361), (120, 373), (121, 379), (134, 424), (147, 466), (148, 469),

Gene: Shinji_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Shinji_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Shivanishola_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Shivanishola_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (62, 157), (74, 208), (88, 247), (110, 325),

Gene: SilentRX_12 Start: 4625, Stop: 5146, Start Num: 20

Candidate Starts for SilentRX_12:

(5, 4127), (7, 4448), (8, 4514), (Start: 20 @4625 has 14 MA's), (57, 4802), (59, 4808), (72, 4859), (73, 4865), (87, 4904), (88, 4907), (117, 5018), (133, 5069),

Gene: Sitar_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Sitar_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: Sixsevenium_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Sixsevenium_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: SmokingBunny_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for SmokingBunny_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Soos_19 Start: 9851, Stop: 10336, Start Num: 25

Candidate Starts for Soos_19:

(Start: 25 @9851 has 7 MA's), (45, 9926), (49, 9941), (57, 9998), (59, 10004), (65, 10037), (68, 10049), (79, 10079), (80, 10082), (86, 10106), (97, 10145), (101, 10166), (102, 10169), (104, 10172), (107,

10184), (113, 10208), (115, 10220), (116, 10226), (120, 10244), (126, 10274), (129, 10280), (131, 10283), (136, 10307),

Gene: Stichling_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Stichling_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247),

Gene: Stillion_20 Start: 10331, Stop: 10816, Start Num: 25

Candidate Starts for Stillion_20:

(Start: 25 @10331 has 7 MA's), (45, 10406), (49, 10421), (59, 10484), (65, 10517), (68, 10529), (79, 10559), (80, 10562), (86, 10586), (97, 10625), (101, 10646), (102, 10649), (104, 10652), (107, 10664), (113, 10688), (115, 10700), (116, 10706), (120, 10724), (129, 10760), (131, 10763), (136, 10787),

Gene: Sting_20 Start: 10263, Stop: 10748, Start Num: 25

Candidate Starts for Sting_20:

(Start: 25 @10263 has 7 MA's), (45, 10338), (49, 10353), (59, 10416), (65, 10449), (68, 10461), (79, 10491), (80, 10494), (86, 10518), (97, 10557), (101, 10578), (102, 10581), (104, 10584), (107, 10596), (113, 10620), (115, 10632), (116, 10638), (120, 10656), (126, 10686), (129, 10692), (131, 10695), (136, 10719),

Gene: StorminNorm_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for StorminNorm_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247), (112, 334),

Gene: Stultus_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Stultus_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247),

Gene: Sunfish_20 Start: 6499, Stop: 7113, Start Num: 16

Candidate Starts for Sunfish_20:

(11, 6475), (Start: 16 @6499 has 4 MA's), (Start: 32 @6562 has 16 MA's), (45, 6619), (81, 6772), (108, 6871), (110, 6880), (114, 6898), (133, 6973), (134, 6982), (142, 7015), (145, 7024),

Gene: Tangent_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Tangent_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: Tangerine_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Tangerine_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247),

Gene: Tank_12 Start: 5089, Stop: 5619, Start Num: 16

Candidate Starts for Tank_12:

(Start: 16 @5089 has 4 MA's), (24, 5125), (59, 5290), (88, 5389), (102, 5446), (105, 5452), (124, 5530), (125, 5536), (126, 5539), (130, 5545),

Gene: Taptic_64 Start: 48057, Stop: 48599, Start Num: 28

Candidate Starts for Taptic_64:

(Start: 28 @48057 has 8 MA's), (54, 48162), (59, 48192), (63, 48213), (68, 48237), (89, 48303), (91, 48321), (97, 48342), (99, 48354), (100, 48360), (109, 48390), (115, 48414), (120, 48438), (126, 48468), (137, 48504), (140, 48513),

Gene: Tardus_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for Tardus_1:

(Start: 32 @1 has 16 MA's), (61, 148), (88, 241), (104, 295), (105, 298), (120, 367), (121, 373), (135, 418),

Gene: Thing3_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Thing3_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (56, 133), (74, 208), (88, 247), (110, 325),

Gene: Tiamoceli_1 Start: 1, Stop: 561, Start Num: 23

Candidate Starts for Tiamoceli_1:

(Start: 23 @1 has 7 MA's), (35, 55), (51, 121), (56, 157), (88, 271), (105, 337), (120, 406), (141, 487), (147, 505),

Gene: TillyBobJoe_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for TillyBobJoe_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Togo_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Togo_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Tonitrus_9 Start: 4643, Stop: 5092, Start Num: 32

Candidate Starts for Tonitrus_9:

(Start: 32 @4643 has 16 MA's), (40, 4679), (85, 4868), (89, 4880), (91, 4889), (94, 4895), (106, 4928), (115, 4970), (120, 4994), (122, 5003), (130, 5030), (132, 5033),

Gene: TurkishDelight_1 Start: 1, Stop: 426, Start Num: 26

Candidate Starts for TurkishDelight_1:

(Start: 26 @1 has 1 MA's), (59, 139), (62, 151), (69, 184), (77, 208), (92, 253),

Gene: Twister6_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Twister6_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (133, 415), (134, 424),

Gene: Twonlo_1 Start: 1, Stop: 561, Start Num: 23

Candidate Starts for Twonlo_1:

(Start: 23 @1 has 7 MA's), (35, 55), (51, 121), (56, 157), (88, 271), (105, 337), (120, 406), (141, 487), (147, 505),

Gene: Tycho_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for Tycho_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247), (112, 334),

Gene: Valary_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Valary_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: VanDeWege_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for VanDeWege_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Verity_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for Verity_1:

(Start: 32 @1 has 16 MA's), (37, 31), (53, 103), (61, 148), (88, 241), (104, 295), (105, 298), (135, 418),

Gene: ViaConlectus_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for ViaConlectus_1:

(Start: 32 @1 has 16 MA's), (59, 139), (61, 148), (88, 241), (105, 298), (135, 418),

Gene: Violeta_1 Start: 1, Stop: 513, Start Num: 19

Candidate Starts for Violeta_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (108, 343),

Gene: Vivi2_1 Start: 1, Stop: 510, Start Num: 29

Candidate Starts for Vivi2_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (53, 109), (74, 208), (88, 247), (110, 325),

Gene: Warren_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for Warren_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343),

Gene: Wilde_12 Start: 5017, Stop: 5547, Start Num: 16

Candidate Starts for Wilde_12:

(Start: 16 @5017 has 4 MA's), (24, 5053), (59, 5218), (88, 5317), (102, 5374), (105, 5380), (124, 5458), (125, 5464), (126, 5467), (130, 5473),

Gene: Winchester007_1 Start: 1, Stop: 522, Start Num: 19

Candidate Starts for Winchester007_1:

(Start: 19 @1 has 17 MA's), (48, 127), (63, 217), (83, 271), (90, 289), (103, 334), (108, 343), (112, 361),

Gene: Wizard_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for Wizard_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: YorkOnyx_1 Start: 1, Stop: 507, Start Num: 29

Candidate Starts for YorkOnyx_1:

(Start: 29 @1 has 53 MA's), (Start: 43 @58 has 1 MA's), (45, 67), (54, 115), (88, 247),

Gene: YungMoney_1 Start: 1, Stop: 531, Start Num: 27

Candidate Starts for YungMoney_1:

(Start: 27 @1 has 34 MA's), (38, 43), (50, 94), (75, 214), (83, 232), (105, 304), (107, 313), (117, 361), (120, 373), (121, 379), (134, 424),

Gene: Zipp_1 Start: 1, Stop: 498, Start Num: 32

Candidate Starts for Zipp_1:

(Start: 32 @1 has 16 MA's), (37, 31), (53, 103), (61, 148), (88, 241), (135, 418),

Gene: pZL12_68c Start: 56713, Stop: 56180, Start Num: 22

Candidate Starts for pZL12_68c:

(1, 57679), (2, 57661), (3, 57658), (4, 57571), (Start: 22 @56713 has 9 MA's), (48, 56614), (108, 56371), (115, 56338),