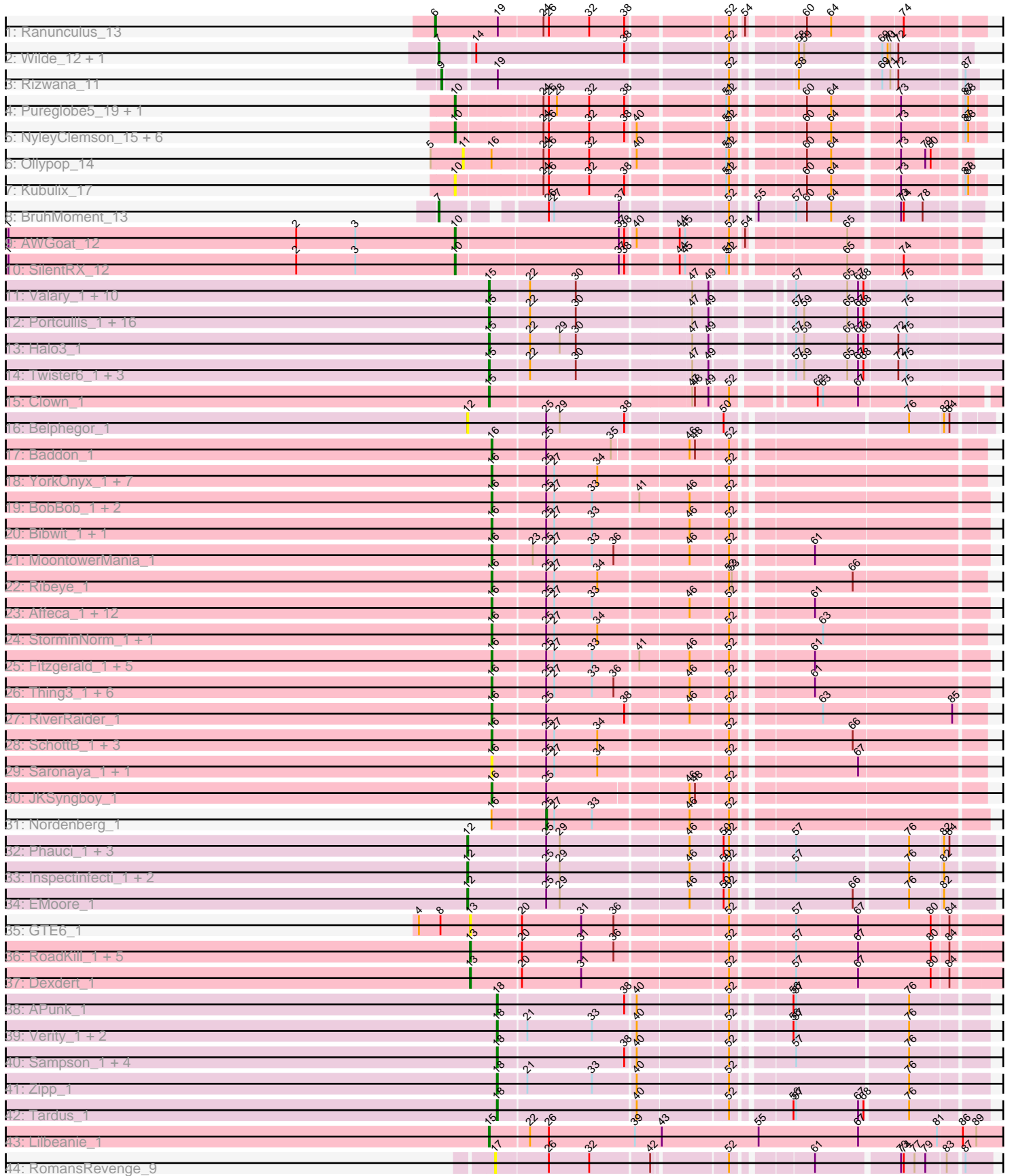


Pham 212403



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 212403 Report

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

Pham number 212403 has 135 members, 25 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus_13
- Track 2 : Wilde_12, Tank_12
- Track 3 : Rizwana_11
- Track 4 : Pureglobe5_19, Odyssey395_19
- Track 5 : NyleyClemson_15, Forrestell_14, DogYard_16, MellowYellow_15, Beagle_18, Pointis_17, RazzB_13
- Track 6 : Ollypop_14
- Track 7 : Kubulix_17
- Track 8 : BruhMoment_13
- Track 9 : AWGoat_12
- Track 10 : SilentRX_12
- Track 11 : Valary_1, Egi03_1, Fireball_1, Arri_1, Shinji_1, KimmyK_1, Gezellig_1, CherryCola_1, Wizard_1, PullumCavea_1, Phlop_1
- Track 12 : Portcullis_1, Nubi_1, Bakery_1, Evamon_1, Togo_1, SmokingBunny_1, PinkCoffee_1, Salvador_1, VanDeWege_1, ClamChowder_1, Fugax_1, CoveyB_1, Mutzi_1, TillyBobJoe_1, YungMoney_1, Barb_1, Danyall_1
- Track 13 : Halo3_1
- Track 14 : Twister6_1, Savbucketdawg_1, RogerDodger_1, Jambalaya_1
- Track 15 : Clown_1
- Track 16 : Belphegor_1
- Track 17 : Baddon_1
- Track 18 : YorkOnyx_1, Kroos_1, Derg_1, Bizzy_1, Kwobi_1, Ashertheman_1, Tangerine_1, Flatwoods_1
- Track 19 : BobBob_1, Brandonk123_1, Angelicage_1
- Track 20 : Bibwit_1, Stultus_1
- Track 21 : MoontowerMania_1
- Track 22 : Ribeye_1
- Track 23 : Affeca_1, McKinley_1, Jabberwocky_1, Kewpiedoll_1, Geodirt_1, Charming_1, Love_1, Tangent_1, Fosterous_1, ChadMasterC_1, Lennon_1, Vivi2_1, Sitar_1
- Track 24 : StorminNorm_1, Tycho_1
- Track 25 : Fitzgerald_1, Ailee_1, Keitabear_1, Shivanishola_1, Sedona_1, Sanjuju_1
- Track 26 : Thing3_1, Kamashten_1, Barsten_1, FuegoCuervo_1, Rofo_1, Galadriel_1, Paries_1
- Track 27 : RiverRaider_1
- Track 28 : SchottB_1, Baumdotcom_1, LilHam_1, Gaea_1

- Track 29 : Saronaya_1, Gustavo_1
- Track 30 : JKSyngboy_1
- Track 31 : Nordenberg_1
- Track 32 : Phauci_1, Leonard_1, Hans_1, Phinally_1
- Track 33 : Inspectinfecti_1, Ali17_1, MelBins_1
- Track 34 : EMOore_1
- Track 35 : GTE6_1
- Track 36 : RoadKill_1, Twonlo_1, Chickadee_1, Kwekel_1, EdmundFerry_1, Tiamoceli_1
- Track 37 : Dxdert_1
- Track 38 : APunk_1
- Track 39 : Verity_1, DoctorFroggo_1, Delrey21_1
- Track 40 : Sampson_1, Natkenzie_1, Abblin_1, Scioto_1, ViaConlectus_1
- Track 41 : Zipp_1
- Track 42 : Tardus_1
- Track 43 : Lilbeanie_1
- Track 44 : RomansRevenge_9

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

The start number called the most often in the published annotations is 16, it was called in 44 of the 110 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, Brandonk123_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, McKinley_1, MoontowerMania_1, Paries_1, Ribeye_1, RiverRaider_1, Rofo_1, Sanjuju_1, Saronaya_1, SchottB_1, Sedona_1, Shivanishola_1, Sitar_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, Ollypop_14,

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

- APunk_1, AWGoat_12, Abblin_1, Ali17_1, Arri_1, Bakery_1, Barb_1, Beagle_18, Belphegor_1, BruhMoment_13, CherryCola_1, Chickadee_1, ClamChowder_1, Clown_1, CoveyB_1, Danyall_1, Delrey21_1, Dxdert_1, DoctorFroggo_1, DogYard_16, EMOore_1, EdmundFerry_1, Egi03_1, Evamon_1, Fireball_1, Forrestell_14, Fugax_1, GTE6_1, Gezellig_1, Halo3_1, Hans_1, Inspectinfecti_1, Jambalaya_1, KimmyK_1, Kubulix_17, Kwekel_1, Leonard_1, Lilbeanie_1, MelBins_1, MellowYellow_15, Mutzi_1, Natkenzie_1, Nubi_1, NyleyClemson_15, Odyssey395_19, Phauci_1, Phinally_1, Phlop_1, PinkCoffee_1, Pointis_17, Portcullis_1, PullumCavea_1, Pureglobe5_19, Ranunculus_13, RazzB_13, Rizwana_11, RoadKill_1, RogerDodger_1, RomansRevenge_9, Salvador_1, Sampson_1, Savbucketdawg_1, Scioto_1, Shinji_1, SilentRX_12, SmokingBunny_1, Tank_12, Tardus_1, Tiamoceli_1, TillyBobJoe_1, Togo_1, Twister6_1, Twonlo_1,

Valary_1, VanDeWege_1, Verity_1, ViaConlectus_1, Wilde_12, Wizard_1, YungMoney_1, Zipp_1,

Summary by start number:

Start 6:

- Found in 1 of 135 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 110
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ranunculus_13 (AP),

Start 7:

- Found in 3 of 135 (2.2%) of genes in pham
- Manual Annotations of this start: 3 of 110
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BruhMoment_13 (AP3), Tank_12 (AP1), Wilde_12 (AP1),

Start 9:

- Found in 1 of 135 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 110
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rizwana_11 (AP1),

Start 10:

- Found in 12 of 135 (8.9%) of genes in pham
- Manual Annotations of this start: 7 of 110
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat_12 (AP4), Beagle_18 (AP2), DogYard_16 (AP2), Forrestell_14 (AP2), Kubulix_17 (AP2), MellowYellow_15 (AP2), NyleyClemson_15 (AP2), Odyssey395_19 (AP2), Pointis_17 (AP2), Pureglobe5_19 (AP2), RazzB_13 (AP2), SilentRX_12 (AP4),

Start 11:

- Found in 1 of 135 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ollypop_14 (AP2),

Start 12:

- Found in 9 of 135 (6.7%) of genes in pham
- Manual Annotations of this start: 8 of 110
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ali17_1 (DE2), Belphegor_1 (DE), EMoore_1 (DE2), Hans_1 (DE2), Inspectinfecti_1 (DE2), Leonard_1 (DE2), MeiBins_1 (DE2), Phauci_1 (DE2), Phinally_1 (DE2),

Start 13:

- Found in 8 of 135 (5.9%) of genes in pham
- Manual Annotations of this start: 7 of 110
- Called 100.0% 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 15:

- Found in 35 of 135 (25.9%) of genes in pham
- Manual Annotations of this start: 30 of 110
- 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), 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), Shinji_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 16:

- Found in 54 of 135 (40.0%) of genes in pham
- Manual Annotations of this start: 44 of 110
- Called 96.3% 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), Brandonk123_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), McKinley_1 (DE1), MoontowerMania_1 (DE1), Paries_1 (DE1), Ribeye_1 (DE1), RiverRaider_1 (DE1), Rofo_1 (DE1), Sanjuju_1 (DE1), Saronaya_1 (DE1), SchottB_1 (DE1), Sedona_1 (DE1), Shivanishola_1 (DE1), Sitar_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 17:

- Found in 1 of 135 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RomansRevenge_9 (singleton),

Start 18:

- Found in 11 of 135 (8.1%) of genes in pham
- Manual Annotations of this start: 8 of 110
- Called 100.0% of time when present
- Phage (with cluster) where this start called: APunk_1 (DE4), Abblin_1 (DE4), Delrey21_1 (DE4), DoctorFroggo_1 (DE4), Natkenzie_1 (DE4), Sampson_1 (DE4), Scioto_1 (DE4), Tardus_1 (DE4), Verity_1 (DE4), ViaConlectus_1 (DE4), Zipp_1 (DE4),

Start 25:

- Found in 62 of 135 (45.9%) of genes in pham
- Manual Annotations of this start: 1 of 110
- Called 1.6% of time when present

- Phage (with cluster) where this start called: Nordenberg_1 (DE1),

Summary by clusters:

There are 14 clusters represented in this pham: singleton, AP1, AP2, DE1, DE2, DE3, DE4, DE5, AP4, DE, AP, AP3, DC2, DC1,

Info for manual annotations of cluster AP:

- Start number 6 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 7 was manually annotated 2 times for cluster AP1.
- Start number 9 was manually annotated 1 time for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 10 was manually annotated 5 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 7 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 10 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster DC1:

- Start number 15 was manually annotated 28 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 15 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DE1:

- Start number 16 was manually annotated 44 times for cluster DE1.
- Start number 25 was manually annotated 1 time for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 12 was manually annotated 8 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 13 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 18 was manually annotated 8 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 15 was manually annotated 1 time for cluster DE5.

Gene Information:

Gene: APunk_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for APunk_1:

(Start: 18 @1 has 8 MA's), (38, 139), (40, 148), (52, 241), (56, 295), (57, 298), (76, 418),

Gene: AWGoat_12 Start: 5020, Stop: 5541, Start Num: 10

Candidate Starts for AWGoat_12:

(1, 4522), (2, 4843), (3, 4909), (Start: 10 @5020 has 7 MA's), (37, 5197), (38, 5203), (40, 5212), (44, 5254), (45, 5260), (52, 5302), (54, 5314), (65, 5413),

Gene: Abblin_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for Abblin_1:

(Start: 18 @1 has 8 MA's), (38, 139), (40, 148), (52, 241), (57, 298), (76, 418),

Gene: Affeca_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Affeca_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: Ailee_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Ailee_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (41, 157), (46, 208), (52, 247), (61, 325),

Gene: Ali17_1 Start: 1, Stop: 537, Start Num: 12

Candidate Starts for Ali17_1:

(Start: 12 @1 has 8 MA's), (Start: 25 @85 has 1 MA's), (29, 100), (46, 235), (50, 268), (52, 274), (57, 331), (76, 451), (82, 487),

Gene: Angelicage_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Angelicage_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (41, 157), (46, 208), (52, 247),

Gene: Arri_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Arri_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Ashertheman_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Ashertheman_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247),

Gene: Baddon_1 Start: 1, Stop: 504, Start Num: 16

Candidate Starts for Baddon_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (35, 130), (46, 205), (48, 211), (52, 244),

Gene: Bakery_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Bakery_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Barb_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Barb_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Barsten_1 Start: 1, Stop: 510, Start Num: 16
Candidate Starts for Barsten_1:
(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (36, 133), (46, 208), (52, 247), (61, 325),

Gene: Baumdotcom_1 Start: 1, Stop: 507, Start Num: 16
Candidate Starts for Baumdotcom_1:
(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247), (66, 367),

Gene: Beagle_18 Start: 5586, Stop: 6104, Start Num: 10
Candidate Starts for Beagle_18:
(Start: 10 @5586 has 7 MA's), (24, 5673), (26, 5679), (32, 5724), (38, 5763), (40, 5772), (51, 5859), (52, 5862), (60, 5928), (64, 5955), (73, 6021), (87, 6084), (88, 6087),

Gene: Belphegor_1 Start: 1, Stop: 534, Start Num: 12
Candidate Starts for Belphegor_1:
(Start: 12 @1 has 8 MA's), (Start: 25 @85 has 1 MA's), (29, 100), (38, 172), (50, 268), (76, 451), (82, 487), (84, 493),

Gene: Bibwit_1 Start: 1, Stop: 510, Start Num: 16
Candidate Starts for Bibwit_1:
(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247),

Gene: Bizzy_1 Start: 1, Stop: 507, Start Num: 16
Candidate Starts for Bizzy_1:
(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247),

Gene: BobBob_1 Start: 1, Stop: 510, Start Num: 16
Candidate Starts for BobBob_1:
(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (41, 157), (46, 208), (52, 247),

Gene: Brandonk123_1 Start: 1, Stop: 510, Start Num: 16
Candidate Starts for Brandonk123_1:
(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (41, 157), (46, 208), (52, 247),

Gene: BruhMoment_13 Start: 5305, Stop: 5826, Start Num: 7
Candidate Starts for BruhMoment_13:
(Start: 7 @5305 has 3 MA's), (26, 5401), (27, 5407), (37, 5479), (52, 5584), (55, 5602), (57, 5638), (60, 5650), (64, 5677), (73, 5743), (74, 5746), (78, 5767),

Gene: ChadMasterC_1 Start: 1, Stop: 510, Start Num: 16
Candidate Starts for ChadMasterC_1:
(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: Charming_1 Start: 1, Stop: 510, Start Num: 16
Candidate Starts for Charming_1:
(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: CherryCola_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for CherryCola_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Chickadee_1 Start: 1, Stop: 561, Start Num: 13

Candidate Starts for Chickadee_1:

(Start: 13 @1 has 7 MA's), (20, 55), (31, 121), (36, 157), (52, 271), (57, 337), (67, 406), (80, 487), (84, 505),

Gene: ClamChowder_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for ClamChowder_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Clown_1 Start: 1, Stop: 522, Start Num: 15

Candidate Starts for Clown_1:

(Start: 15 @1 has 30 MA's), (47, 214), (48, 217), (49, 232), (52, 250), (62, 328), (63, 334), (67, 373), (75, 424),

Gene: CoveyB_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for CoveyB_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Danyall_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Danyall_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Delrey21_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for Delrey21_1:

(Start: 18 @1 has 8 MA's), (21, 31), (33, 103), (40, 148), (52, 241), (56, 295), (57, 298), (76, 418),

Gene: Derg_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Derg_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247),

Gene: Dxdert_1 Start: 1, Stop: 561, Start Num: 13

Candidate Starts for Dxdert_1:

(Start: 13 @1 has 7 MA's), (20, 55), (31, 121), (52, 271), (57, 337), (67, 406), (80, 487), (84, 505),

Gene: DoctorFroggo_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for DoctorFroggo_1:

(Start: 18 @1 has 8 MA's), (21, 31), (33, 103), (40, 148), (52, 241), (56, 295), (57, 298), (76, 418),

Gene: DogYard_16 Start: 5656, Stop: 6174, Start Num: 10

Candidate Starts for DogYard_16:

(Start: 10 @5656 has 7 MA's), (24, 5743), (26, 5749), (32, 5794), (38, 5833), (40, 5842), (51, 5929), (52, 5932), (60, 5998), (64, 6025), (73, 6091), (87, 6154), (88, 6157),

Gene: EMoore_1 Start: 1, Stop: 537, Start Num: 12

Candidate Starts for EMoore_1:

(Start: 12 @1 has 8 MA's), (Start: 25 @85 has 1 MA's), (29, 100), (46, 235), (50, 268), (52, 274), (66, 394), (76, 451), (82, 487),

Gene: EdmundFerry_1 Start: 1, Stop: 561, Start Num: 13

Candidate Starts for EdmundFerry_1:

(Start: 13 @1 has 7 MA's), (20, 55), (31, 121), (36, 157), (52, 271), (57, 337), (67, 406), (80, 487), (84, 505),

Gene: Egi03_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Egi03_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Evamon_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Evamon_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Fireball_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Fireball_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Fitzgerald_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Fitzgerald_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (41, 157), (46, 208), (52, 247), (61, 325),

Gene: Flatwoods_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Flatwoods_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247),

Gene: Forrestell_14 Start: 5013, Stop: 5531, Start Num: 10

Candidate Starts for Forrestell_14:

(Start: 10 @5013 has 7 MA's), (24, 5100), (26, 5106), (32, 5151), (38, 5190), (40, 5199), (51, 5286), (52, 5289), (60, 5355), (64, 5382), (73, 5448), (87, 5511), (88, 5514),

Gene: Fosterous_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Fosterous_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: FuegoCuervo_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for FuegoCuervo_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (36, 133), (46, 208), (52, 247), (61, 325),

Gene: Fugax_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Fugax_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: GTE6_1 Start: 65, Stop: 625, Start Num: 13

Candidate Starts for GTE6_1:

(4, 8), (8, 32), (Start: 13 @65 has 7 MA's), (20, 119), (31, 185), (36, 221), (52, 335), (57, 401), (67, 470), (80, 551), (84, 569),

Gene: Gaea_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Gaea_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247), (66, 367),

Gene: Galadriel_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Galadriel_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (36, 133), (46, 208), (52, 247), (61, 325),

Gene: Geodirt_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Geodirt_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: Gezellig_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Gezellig_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Gustavo_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Gustavo_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247), (67, 373),

Gene: Halo3_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Halo3_1:

(Start: 15 @1 has 30 MA's), (22, 43), (29, 76), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (72, 415), (75, 424),

Gene: Hans_1 Start: 1, Stop: 537, Start Num: 12

Candidate Starts for Hans_1:

(Start: 12 @1 has 8 MA's), (Start: 25 @85 has 1 MA's), (29, 100), (46, 235), (50, 268), (52, 274), (57, 331), (76, 451), (82, 487), (84, 493),

Gene: Inspectinfecti_1 Start: 1, Stop: 537, Start Num: 12

Candidate Starts for Inspectinfecti_1:

(Start: 12 @1 has 8 MA's), (Start: 25 @85 has 1 MA's), (29, 100), (46, 235), (50, 268), (52, 274), (57, 331), (76, 451), (82, 487),

Gene: JKSyngboy_1 Start: 1, Stop: 504, Start Num: 16

Candidate Starts for JKSyngboy_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (46, 205), (48, 211), (52, 244),

Gene: Jabberwocky_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Jabberwocky_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: Jambalaya_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Jambalaya_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (72, 415), (75, 424),

Gene: Kamashten_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Kamashten_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (36, 133), (46, 208), (52, 247), (61, 325),

Gene: Keitabear_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Keitabear_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (41, 157), (46, 208), (52, 247), (61, 325),

Gene: Kewpiedoll_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Kewpiedoll_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: KimmyK_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for KimmyK_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Kroos_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Kroos_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247),

Gene: Kubulix_17 Start: 5785, Stop: 6303, Start Num: 10

Candidate Starts for Kubulix_17:

(Start: 10 @5785 has 7 MA's), (24, 5872), (26, 5878), (32, 5923), (38, 5962), (51, 6058), (52, 6061), (60, 6127), (64, 6154), (73, 6220), (87, 6283), (88, 6286),

Gene: Kwekel_1 Start: 1, Stop: 561, Start Num: 13

Candidate Starts for Kwekel_1:

(Start: 13 @1 has 7 MA's), (20, 55), (31, 121), (36, 157), (52, 271), (57, 337), (67, 406), (80, 487), (84, 505),

Gene: Kwobi_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Kwobi_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247),

Gene: Lennon_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Lennon_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: Leonard_1 Start: 1, Stop: 537, Start Num: 12

Candidate Starts for Leonard_1:

(Start: 12 @1 has 8 MA's), (Start: 25 @85 has 1 MA's), (29, 100), (46, 235), (50, 268), (52, 274), (57, 331), (76, 451), (82, 487), (84, 493),

Gene: LilHam_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for LilHam_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247), (66, 367),

Gene: Lilbeanie_1 Start: 1, Stop: 591, Start Num: 15

Candidate Starts for Lilbeanie_1:

(Start: 15 @1 has 30 MA's), (22, 43), (26, 64), (39, 160), (43, 190), (55, 298), (67, 409), (81, 496), (86, 523), (89, 538),

Gene: Love_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Love_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: McKinley_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for McKinley_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: MelBins_1 Start: 1, Stop: 537, Start Num: 12

Candidate Starts for MelBins_1:

(Start: 12 @1 has 8 MA's), (Start: 25 @85 has 1 MA's), (29, 100), (46, 235), (50, 268), (52, 274), (57, 331), (76, 451), (82, 487),

Gene: MellowYellow_15 Start: 5043, Stop: 5561, Start Num: 10

Candidate Starts for MellowYellow_15:

(Start: 10 @5043 has 7 MA's), (24, 5130), (26, 5136), (32, 5181), (38, 5220), (40, 5229), (51, 5316), (52, 5319), (60, 5385), (64, 5412), (73, 5478), (87, 5541), (88, 5544),

Gene: MoontowerMania_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for MoontowerMania_1:

(Start: 16 @1 has 44 MA's), (23, 43), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (36, 133), (46, 208), (52, 247), (61, 325),

Gene: Mutzi_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Mutzi_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Natkenzie_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for Natkenzie_1:

(Start: 18 @1 has 8 MA's), (38, 139), (40, 148), (52, 241), (57, 298), (76, 418),

Gene: Nordenberg_1 Start: 58, Stop: 510, Start Num: 25

Candidate Starts for Nordenberg_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247),

Gene: Nubi_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Nubi_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: NyleyClemson_15 Start: 4985, Stop: 5503, Start Num: 10

Candidate Starts for NyleyClemson_15:

(Start: 10 @4985 has 7 MA's), (24, 5072), (26, 5078), (32, 5123), (38, 5162), (40, 5171), (51, 5258), (52, 5261), (60, 5327), (64, 5354), (73, 5420), (87, 5483), (88, 5486),

Gene: Odyssey395_19 Start: 5787, Stop: 6305, Start Num: 10

Candidate Starts for Odyssey395_19:

(Start: 10 @5787 has 7 MA's), (24, 5874), (26, 5880), (28, 5889), (32, 5925), (38, 5964), (51, 6060), (52, 6063), (60, 6129), (64, 6156), (73, 6222), (87, 6285), (88, 6288),

Gene: Ollypop_14 Start: 5474, Stop: 5974, Start Num: 11

Candidate Starts for Ollypop_14:

(5, 5441), (11, 5474), (Start: 16 @5504 has 44 MA's), (24, 5555), (26, 5561), (32, 5606), (40, 5654), (51, 5741), (52, 5744), (60, 5810), (64, 5837), (73, 5903), (79, 5930), (80, 5936),

Gene: Paries_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Paries_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (36, 133), (46, 208), (52, 247), (61, 325),

Gene: Phauci_1 Start: 1, Stop: 537, Start Num: 12

Candidate Starts for Phauci_1:

(Start: 12 @1 has 8 MA's), (Start: 25 @85 has 1 MA's), (29, 100), (46, 235), (50, 268), (52, 274), (57, 331), (76, 451), (82, 487), (84, 493),

Gene: Phinally_1 Start: 1, Stop: 537, Start Num: 12

Candidate Starts for Phinally_1:

(Start: 12 @1 has 8 MA's), (Start: 25 @85 has 1 MA's), (29, 100), (46, 235), (50, 268), (52, 274), (57, 331), (76, 451), (82, 487), (84, 493),

Gene: Phlop_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Phlop_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: PinkCoffee_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for PinkCoffee_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Pointis_17 Start: 5785, Stop: 6303, Start Num: 10

Candidate Starts for Pointis_17:

(Start: 10 @5785 has 7 MA's), (24, 5872), (26, 5878), (32, 5923), (38, 5962), (40, 5971), (51, 6058), (52, 6061), (60, 6127), (64, 6154), (73, 6220), (87, 6283), (88, 6286),

Gene: Portcullis_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Portcullis_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: PullumCavea_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for PullumCavea_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Pureglobe5_19 Start: 5801, Stop: 6319, Start Num: 10

Candidate Starts for Pureglobe5_19:

(Start: 10 @5801 has 7 MA's), (24, 5888), (26, 5894), (28, 5903), (32, 5939), (38, 5978), (51, 6074), (52, 6077), (60, 6143), (64, 6170), (73, 6236), (87, 6299), (88, 6302),

Gene: Ranunculus_13 Start: 5362, Stop: 5913, Start Num: 6

Candidate Starts for Ranunculus_13:

(Start: 6 @5362 has 1 MA's), (19, 5431), (24, 5479), (26, 5485), (32, 5530), (38, 5569), (52, 5668), (54, 5680), (60, 5734), (64, 5761), (74, 5830),

Gene: RazzB_13 Start: 4813, Stop: 5331, Start Num: 10

Candidate Starts for RazzB_13:

(Start: 10 @4813 has 7 MA's), (24, 4900), (26, 4906), (32, 4951), (38, 4990), (40, 4999), (51, 5086), (52, 5089), (60, 5155), (64, 5182), (73, 5248), (87, 5311), (88, 5314),

Gene: Ribeye_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Ribeye_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247), (53, 250), (66, 367),

Gene: RiverRaider_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for RiverRaider_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (38, 145), (46, 208), (52, 247), (63, 334), (85, 475),

Gene: Rizwana_11 Start: 5074, Stop: 5604, Start Num: 9

Candidate Starts for Rizwana_11:

(Start: 9 @5074 has 1 MA's), (19, 5128), (52, 5368), (58, 5425), (69, 5509), (71, 5518), (72, 5524), (87, 5590),

Gene: RoadKill_1 Start: 1, Stop: 561, Start Num: 13

Candidate Starts for RoadKill_1:

(Start: 13 @1 has 7 MA's), (20, 55), (31, 121), (36, 157), (52, 271), (57, 337), (67, 406), (80, 487), (84, 505),

Gene: Rofo_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Rofo_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (36, 133), (46, 208), (52, 247), (61, 325),

Gene: RogerDodger_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for RogerDodger_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (72, 415), (75, 424),

Gene: RomansRevenge_9 Start: 3610, Stop: 4101, Start Num: 17

Candidate Starts for RomansRevenge_9:

(17, 3610), (26, 3667), (32, 3712), (42, 3775), (52, 3847), (61, 3922), (73, 4009), (74, 4012), (77, 4024), (79, 4036), (83, 4057), (87, 4072),

Gene: Salvador_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Salvador_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Sampson_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for Sampson_1:

(Start: 18 @1 has 8 MA's), (38, 139), (40, 148), (52, 241), (57, 298), (76, 418),

Gene: Sanjuju_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Sanjuju_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (41, 157), (46, 208), (52, 247), (61, 325),

Gene: Saronaya_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Saronaya_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247), (67, 373),

Gene: Savbucketdawg_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Savbucketdawg_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (72, 415), (75, 424),

Gene: SchottB_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for SchottB_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247), (66, 367),

Gene: Scioto_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for Scioto_1:

(Start: 18 @1 has 8 MA's), (38, 139), (40, 148), (52, 241), (57, 298), (76, 418),

Gene: Sedona_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Sedona_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (41, 157), (46, 208), (52, 247), (61, 325),

Gene: Shinji_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Shinji_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Shivanishola_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Shivanishola_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (41, 157), (46, 208), (52, 247), (61, 325),

Gene: SilentRX_12 Start: 4625, Stop: 5146, Start Num: 10

Candidate Starts for SilentRX_12:

(1, 4127), (2, 4448), (3, 4514), (Start: 10 @4625 has 7 MA's), (37, 4802), (38, 4808), (44, 4859), (45, 4865), (51, 4904), (52, 4907), (65, 5018), (74, 5069),

Gene: Sitar_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Sitar_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: SmokingBunny_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for SmokingBunny_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: StorminNorm_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for StorminNorm_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247), (63, 334),

Gene: Stultus_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Stultus_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247),

Gene: Tangent_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Tangent_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: Tangerine_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Tangerine_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247),

Gene: Tank_12 Start: 5089, Stop: 5619, Start Num: 7

Candidate Starts for Tank_12:

(Start: 7 @5089 has 3 MA's), (14, 5125), (38, 5290), (52, 5389), (58, 5446), (59, 5452), (69, 5530), (70, 5536), (71, 5539), (72, 5545),

Gene: Tardus_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for Tardus_1:

(Start: 18 @1 has 8 MA's), (40, 148), (52, 241), (56, 295), (57, 298), (67, 367), (68, 373), (76, 418),

Gene: Thing3_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Thing3_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (36, 133), (46, 208), (52, 247), (61, 325),

Gene: Tiamoceli_1 Start: 1, Stop: 561, Start Num: 13

Candidate Starts for Tiamoceli_1:

(Start: 13 @1 has 7 MA's), (20, 55), (31, 121), (36, 157), (52, 271), (57, 337), (67, 406), (80, 487), (84, 505),

Gene: TillyBobJoe_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for TillyBobJoe_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Togo_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Togo_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Twister6_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Twister6_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (72, 415), (75, 424),

Gene: Twonlo_1 Start: 1, Stop: 561, Start Num: 13

Candidate Starts for Twonlo_1:

(Start: 13 @1 has 7 MA's), (20, 55), (31, 121), (36, 157), (52, 271), (57, 337), (67, 406), (80, 487), (84, 505),

Gene: Tycho_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for Tycho_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247), (63, 334),

Gene: Valary_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Valary_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: VanDeWege_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for VanDeWege_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Verity_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for Verity_1:

(Start: 18 @1 has 8 MA's), (21, 31), (33, 103), (40, 148), (52, 241), (56, 295), (57, 298), (76, 418),

Gene: ViaConlectus_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for ViaConlectus_1:

(Start: 18 @1 has 8 MA's), (38, 139), (40, 148), (52, 241), (57, 298), (76, 418),

Gene: Vivi2_1 Start: 1, Stop: 510, Start Num: 16

Candidate Starts for Vivi2_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (33, 109), (46, 208), (52, 247), (61, 325),

Gene: Wilde_12 Start: 5017, Stop: 5547, Start Num: 7

Candidate Starts for Wilde_12:

(Start: 7 @5017 has 3 MA's), (14, 5053), (38, 5218), (52, 5317), (58, 5374), (59, 5380), (69, 5458), (70, 5464), (71, 5467), (72, 5473),

Gene: Wizard_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for Wizard_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: YorkOnyx_1 Start: 1, Stop: 507, Start Num: 16

Candidate Starts for YorkOnyx_1:

(Start: 16 @1 has 44 MA's), (Start: 25 @58 has 1 MA's), (27, 67), (34, 115), (52, 247),

Gene: YungMoney_1 Start: 1, Stop: 531, Start Num: 15

Candidate Starts for YungMoney_1:

(Start: 15 @1 has 30 MA's), (22, 43), (30, 94), (47, 214), (49, 232), (57, 304), (59, 313), (65, 361), (67, 373), (68, 379), (75, 424),

Gene: Zipp_1 Start: 1, Stop: 498, Start Num: 18

Candidate Starts for Zipp_1:

(Start: 18 @1 has 8 MA's), (21, 31), (33, 103), (40, 148), (52, 241), (76, 418),