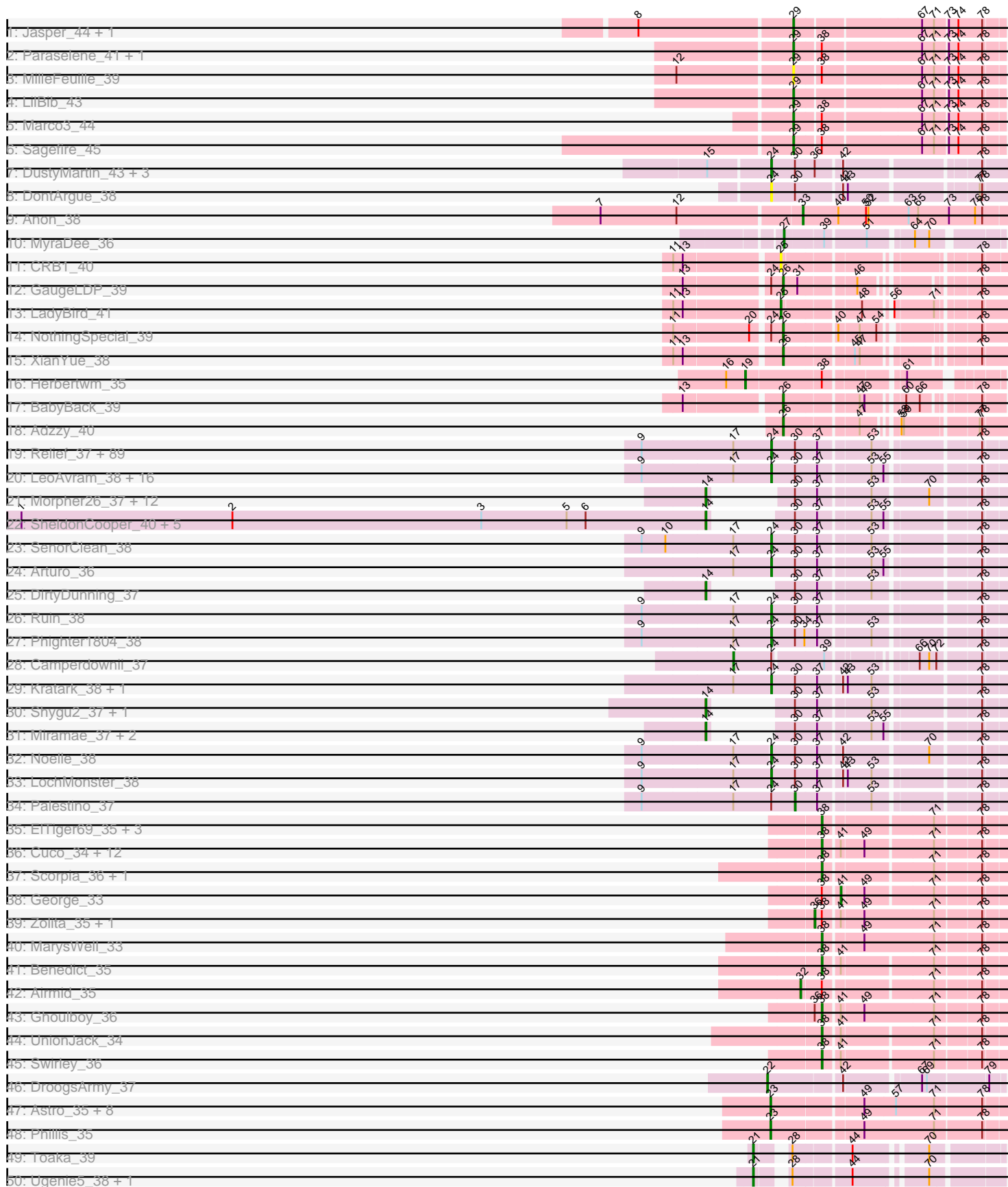
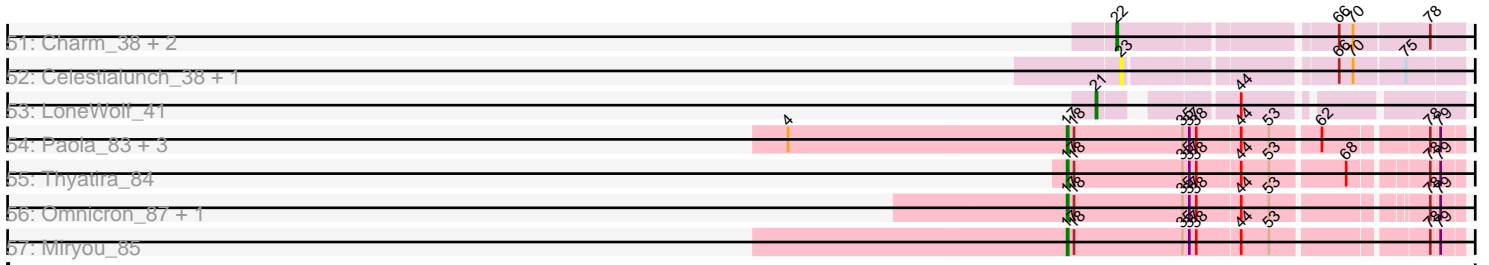


Pham 292515



Pham 292515



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 292515 Report

This analysis was run 04/18/26 on database version 643.

Pham number 292515 has 221 members, 17 are drafts.

Phages represented in each track:

- Track 1 : Jasper_44, Dreamboat_44
- Track 2 : Paraselene_41, Rutherford_45
- Track 3 : MilleFeuille_39
- Track 4 : LilBib_43
- Track 5 : Marco3_44
- Track 6 : Sagefire_45
- Track 7 : DustyMartin_43, Shapes_43, RhynO_40, Rowdy_43
- Track 8 : DontArgue_38
- Track 9 : Anon_38
- Track 10 : MyraDee_36
- Track 11 : CRB1_40
- Track 12 : GaugeLDP_39
- Track 13 : LadyBird_41
- Track 14 : NothingSpecial_39
- Track 15 : XianYue_38
- Track 16 : Herbertwm_35
- Track 17 : BabyBack_39
- Track 18 : Adzzy_40
- Track 19 : Relief_37, HamSlice_37, Iceman_39, Florean_38, Cocoaberry_38, Lorenzo_38, Clarenza_38, Pumbaa_38, KFPoly_38, Avle17_38, Melvin_40, Taquarus_38, Alberto7_39, Tinybot_37, Wilbur_38, Dhanush_38, Gadost_38, Kyee_38, Bruiser_37, TinaFeyge_39, CentreCat_38, Holli_37, Deano_38, Bartimeaus_38, Funston_38, Thanksgivukkah_38, Koreni_37, Albee_38, Baby16_38, TygerBlood_38, SteMason_38, RockieBear_38, Nemo27_38, Commander_38, LittleGuy_38, Lemur_38, Eris_37, LittleB_38, Lunsford_39, NotAPhaseMom_38, Caelakin_38, JoongJeon_38, Ulysses_37, Burger_36, Sultana_38, Chaph_38, Wander_38, Phontbonne_38, TiroTheta9_38, Sparxx_39, TroyPia_39, Sabertooth_38, MeeZee_38, Mayonnaise_38, KekoraPapaka_39, Skipitt_37, ICleared_38, Blackmoor_38, Houdini22_38, Kingmustik0402_38, Phacado_38, Druantia_38, Happiness_37, Flux_38, Koan_37, Peaches_38, Eros_38, Mazhar510_38, Maverick_38, Romney_38, Millski_37, Scamp_38, PeterPeter_38, OKaNui_39, Jaykayelowell_37, BubbleTrouble_38, Huxley_39, Bombshell_38, Eapen_38, Shaka_38, Spino_38, Wizard007_38, YoSam321_38, Roosevelt_37, LappelDuVide_38, Broseidon_38, JetBlade_38, Connomayer_38, Nyxis_38, Phelipe_39
- Track 20 : LeoAvram_38, Morrow_39, Citius_38, Mundrea_36, Rosa24_38, BellusTerra_39, Nebs_39, Eurydice_39, Medusa_38, Polymorphads_39,

NorthStar_37, Kampy_38, Eagle_38, Iracema64_39, Abdiel_38, Maxo_39, Ohfah_39
 • Track 21 : Morpher26_37, Datway_37, PetiteSangsue_37, Katalie136_37, Badger_36, Wile_37, Bumblebee11_36, Perplexer_37, Backyardigan_36, Xena_36, AbbysRanger_37, Cici_37, Achebe_36
 • Track 22 : SheldonCooper_40, Cerulean_39, LHTSCC_40, Obama12_39, BangNhom_39, ChampagnePapi_40
 • Track 23 : SenorClean_38
 • Track 24 : Arturo_36
 • Track 25 : DirtyDunning_37
 • Track 26 : Ruin_38
 • Track 27 : Phighter1804_38
 • Track 28 : Camperdownii_37
 • Track 29 : Kratak_38, Kremtemulon_38
 • Track 30 : Shygu2_37, Cintron_38
 • Track 31 : Miramae_37, AvatarAhPeg_37, Stink_38
 • Track 32 : Noelle_38
 • Track 33 : LochMonster_38
 • Track 34 : Palestino_37
 • Track 35 : EITiger69_35, Jabiru_35, PetterN_36, Naca_35
 • Track 36 : Cuco_34, HuhtaEnerson15_34, Milcery_34, Micasa_36, LittleCherry_34, Prinash11_35, Twigg_34, Tarynearal_33, Midas2_34, Coog_34, Bonamassa_34, Theia_32, Archetta_34
 • Track 37 : Scorpia_36, Chadwick_36
 • Track 38 : George_33
 • Track 39 : Zolita_35, SydNat_36
 • Track 40 : MarysWell_33
 • Track 41 : Benedict_35
 • Track 42 : Airmid_35
 • Track 43 : Ghouboy_36
 • Track 44 : UnionJack_34
 • Track 45 : Swirley_36
 • Track 46 : DroogsArmy_37
 • Track 47 : Astro_35, Groundhog_34, Dixon_35, Smeadley_35, NearlyHeadless_35, Caitlin_34, Roary_35, Danforth_34, Expelliarmus_34
 • Track 48 : Phillis_35
 • Track 49 : Toaka_39
 • Track 50 : Ugenie5_38, Scherzo_41
 • Track 51 : Charm_38, DreamTeam1_38, Klodlith_39
 • Track 52 : Celestialunch_38, MegTheThird_38
 • Track 53 : LoneWolf_41
 • Track 54 : Paola_83, Leston_83, Guillsminger_84, Waterfoul_83
 • Track 55 : Thyatira_84
 • Track 56 : Omnicron_87, Rando14_84
 • Track 57 : Miryou_85

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

The start number called the most often in the published annotations is 24, it was called in 111 of the 204 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abdiel_38, Albee_38, Alberto7_39, Arturo_36, Avle17_38, Baby16_38, Bartimeaus_38, BellusTerra_39, Blackmoor_38, Bombshell_38, Broseidon_38, Bruiser_37, BubbleTrouble_38, Burger_36, Caelakin_38, CentreCat_38, Chaph_38, Citius_38, Clarenza_38, Cocoaberry_38, Commander_38, Connomayer_38, Deano_38, Dhanush_38, DontArgue_38, Druantia_38, DustyMartin_43, Eagle_38, Eapen_38, Eris_37, Eros_38, Eurydice_39, Florean_38, Flux_38, Funston_38, Gadost_38, HamSlice_37, Happiness_37, Holli_37, Houdini22_38, Huxley_39, ICleared_38, Iceman_39, Iracema64_39, Jaykayelowell_37, JetBlade_38, JoongJeon_38, KFPoly_38, Kampy_38, KekoraPapaka_39, Kingmustik0402_38, Koan_37, Koreni_37, Kratark_38, Kremtemulon_38, Kyee_38, LappelDuVide_38, Lemur_38, LeoAvram_38, LittleB_38, LittleGuy_38, LochMonster_38, Lorenzo_38, Lunsford_39, Maverick_38, Maxo_39, Mayonnaise_38, Mazhar510_38, Medusa_38, MeeZee_38, Melvin_40, Millski_37, Morrow_39, Mundrea_36, Nebs_39, Nemo27_38, Noelle_38, NorthStar_37, NotAPhaseMom_38, Nyxis_38, OKaNui_39, Ohfah_39, Peaches_38, PeterPeter_38, Phacado_38, Phelipe_39, Phighter1804_38, Phontbonne_38, Polymorphads_39, Pumbaa_38, Relief_37, RhynO_40, RockieBear_38, Romney_38, Roosevelt_37, Rosa24_38, Rowdy_43, Ruin_38, Sabertooth_38, Scamp_38, SeniorClean_38, Shaka_38, Shapes_43, Skipitt_37, Sparxx_39, Spino_38, SteMason_38, Sultana_38, Taquarus_38, Thanksgivukkah_38, TinaFeyge_39, Tinybot_37, TiroTheta9_38, TroyPia_39, TygerBlood_38, Ulysses_37, Wander_38, Wilbur_38, Wizard007_38, YoSam321_38,

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

- Camperdownii_37, GaugeLDP_39, NothingSpecial_39, Palestino_37,

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

- AbbysRanger_37, Achebe_36, Adzzy_40, Airmid_35, Anon_38, Archetta_34, Astro_35, AvatarAhPeg_37, BabyBack_39, Backyardigan_36, Badger_36, BangNhom_39, Benedict_35, Bonamassa_34, Bumblebee11_36, CRB1_40, Caitlin_34, Celestiallunch_38, Cerulean_39, Chadwick_36, ChampagnePapi_40, Charm_38, Cici_37, Cintron_38, Coog_34, Cuco_34, Danforth_34, Datway_37, DirtyDunning_37, Dixon_35, DreamTeam1_38, Dreamboat_44, DroogsArmy_37, EITiger69_35, Expelliarmus_34, George_33, Ghoulyboy_36, Groundhog_34, Guillsminger_84, Herbertwm_35, HuhtaEnerson15_34, Jabiru_35, Jasper_44, Katalie136_37, Klodlith_39, LHTSCC_40, LadyBird_41, Leston_83, LilBib_43, LittleCherry_34, LoneWolf_41, Marco3_44, MarysWell_33, MegTheThird_38, Micasa_36, Midas2_34, Milcery_34, MilleFeuille_39, Miramae_37, Miryou_85, Morpher26_37, MyraDee_36, Naca_35, NearlyHeadless_35, Obama12_39, Omnicon_87, Paola_83, Paraselene_41, Perplexer_37, PetiteSangsue_37, PetterN_36, Phillis_35, Prinash11_35, Rando14_84, Roary_35, Rutherferd_45, Sagefire_45, Scherzo_41, Scorpia_36, SheldonCooper_40, Shygu2_37, Smeadley_35, Stink_38, Swirley_36, SydNat_36, Tarynearal_33, Theia_32, Thyatira_84, Toaka_39, Twigg_34, Ugenie5_38, UnionJack_34, Waterfoul_83, Wile_37, Xena_36, XianYue_38, Zolita_35,

Summary by start number:

Start 14:

- Found in 25 of 221 (11.3%) of genes in pham
- Manual Annotations of this start: 25 of 204
- Called 100.0% of time when present

- Phage (with cluster) where this start called: AbbysRanger_37 (A4), Achebe_36 (A4), AvatarAhPeg_37 (A4), Backyardigan_36 (A4), Badger_36 (A4), BangNhom_39 (A4), Bumblebee11_36 (A4), Cerulean_39 (A4), ChampagnePapi_40 (A4), Cici_37 (A4), Cintron_38 (A4), Datway_37 (A4), DirtyDunning_37 (A4), Katalie136_37 (A4), LHTSCC_40 (A4), Miramae_37 (A4), Morpher26_37 (A4), Obama12_39 (A4), Perplexer_37 (A4), PetiteSangsue_37 (A4), SheldonCooper_40 (A4), Shygu2_37 (A4), Stink_38 (A4), Wile_37 (A4), Xena_36 (A4),

Start 17:

- Found in 125 of 221 (56.6%) of genes in pham
- Manual Annotations of this start: 9 of 204
- Called 7.2% of time when present
- Phage (with cluster) where this start called: Camperdownii_37 (A4), Guillsminger_84 (K5), Leston_83 (K5), Miryou_85 (K5), Omnicron_87 (K5), Paola_83 (K5), Rando14_84 (K5), Thyatira_84 (K5), Waterfoul_83 (K5),

Start 19:

- Found in 1 of 221 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Herbertwm_35 (A2),

Start 21:

- Found in 4 of 221 (1.8%) of genes in pham
- Manual Annotations of this start: 4 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LoneWolf_41 (A9), Scherzo_41 (A9), Toaka_39 (A9), Ugenie5_38 (A9),

Start 22:

- Found in 4 of 221 (1.8%) of genes in pham
- Manual Annotations of this start: 3 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Charm_38 (A9), DreamTeam1_38 (A9), DroogsArmy_37 (A7), Klodlith_39 (A9),

Start 23:

- Found in 12 of 221 (5.4%) of genes in pham
- Manual Annotations of this start: 9 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Astro_35 (A8), Caitlin_34 (A8), Celestiallunch_38 (A9), Danforth_34 (A8), Dixon_35 (A8), Expelliarmus_34 (A8), Groundhog_34 (A8), MegTheThird_38 (A9), NearlyHeadless_35 (A8), Phillis_35 (A8), Roary_35 (A8), Smeadley_35 (A8),

Start 24:

- Found in 124 of 221 (56.1%) of genes in pham
- Manual Annotations of this start: 111 of 204
- Called 96.8% of time when present
- Phage (with cluster) where this start called: Abdiel_38 (A4), Albee_38 (A4), Alberto7_39 (A4), Arturo_36 (A4), Avle17_38 (A4), Baby16_38 (A4), Bartimeaus_38 (A4), BellusTerra_39 (A4), Blackmoor_38 (A4), Bombshell_38 (A4), Broseidon_38 (A4), Bruiser_37 (A4), BubbleTrouble_38 (A4), Burger_36 (A4), Caelakin_38 (A4),

CentreCat_38 (A4), Chaph_38 (A4), Citius_38 (A4), Clarenza_38 (A4),
Cocoaberry_38 (A4), Commander_38 (A4), Connomayer_38 (A4), Deano_38 (A4),
Dhanush_38 (A4), DontArgue_38 (A10), Druantia_38 (A4), DustyMartin_43 (A10),
Eagle_38 (A4), Eapen_38 (A4), Eris_37 (A4), Eros_38 (A4), Eurydice_39 (A4),
Florean_38 (A4), Flux_38 (A4), Funston_38 (A4), Gadost_38 (A4), HamSlice_37 (A4),
Happiness_37 (A4), Holli_37 (A4), Houdini22_38 (A4), Huxley_39 (A4), ICleared_38
(A4), IceMan_39 (A4), Iracema64_39 (A4), Jaykayelowell_37 (A4), JetBlade_38 (A4),
JoongJeon_38 (A4), KFPoly_38 (A4), Kampy_38 (A4), KekoraPapaka_39 (A4),
Kingmustik0402_38 (A4), Koan_37 (A4), Koreni_37 (A4), Kratark_38 (A4),
Kremtemulon_38 (A4), Kyee_38 (A4), LappelDuVide_38 (A4), Lemur_38 (A4),
LeoAvram_38 (A4), LittleB_38 (A4), LittleGuy_38 (A4), LochMonster_38 (A4),
Lorenzo_38 (A4), Lunsford_39 (A4), Maverick_38 (A4), Maxo_39 (A4),
Mayonnaise_38 (A4), Mazhar510_38 (A4), Medusa_38 (A4), MeeZee_38 (A4),
Melvin_40 (A4), Millski_37 (A4), Morrow_39 (A4), Mundrea_36 (A4), Nebs_39 (A4),
Nemo27_38 (A4), Noelle_38 (A4), NorthStar_37 (A4), NotAPhaseMom_38 (A4),
Nyxis_38 (A4), OKaNui_39 (A4), Ohfah_39 (A4), Peaches_38 (A4), PeterPeter_38
(A4), Phacado_38 (A4), Phelipe_39 (A4), Phighter1804_38 (A4), Phontbonne_38
(A4), Polymorphads_39 (A4), Pumbaa_38 (A4), Relief_37 (A4), RhynO_40 (A10),
RockieBear_38 (A4), Romney_38 (A4), Roosevelt_37 (A4), Rosa24_38 (A4),
Rowdy_43 (A10), Ruin_38 (A4), Sabertooth_38 (A4), Scamp_38 (A4),
SenorClean_38 (A4), Shaka_38 (A4), Shapes_43 (A10), Skipitt_37 (A4), Sparxx_39
(A4), Spino_38 (A4), SteMason_38 (A4), Sultana_38 (A4), Taquarus_38 (A4),
Thanksgivukkah_38 (A4), TinaFeyge_39 (A4), Tinybot_37 (A4), TiroTheta9_38 (A4),
TroyPia_39 (A4), TygerBlood_38 (A4), Ulysses_37 (A4), Wander_38 (A4), Wilbur_38
(A4), Wizard007_38 (A4), YoSam321_38 (A4),

Start 25:

- Found in 2 of 221 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CRB1_40 (A2), LadyBird_41 (A2),

Start 26:

- Found in 5 of 221 (2.3%) of genes in pham
- Manual Annotations of this start: 5 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adzzy_40 (A2), BabyBack_39 (A2),
GaugeLDP_39 (A2), NothingSpecial_39 (A2), XianYue_38 (A2),

Start 27:

- Found in 1 of 221 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MyraDee_36 (A18),

Start 29:

- Found in 8 of 221 (3.6%) of genes in pham
- Manual Annotations of this start: 7 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dreamboat_44 (A1), Jasper_44 (A1),
LilBib_43 (A1), Marco3_44 (A1), MilleFeuille_39 (A1), Paraselene_41 (A1),
Rutherford_45 (A1), Sagefire_45 (A1),

Start 30:

- Found in 146 of 221 (66.1%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 0.7% of time when present
- Phage (with cluster) where this start called: Palestino_37 (A4),

Start 32:

- Found in 1 of 221 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Airmid_35 (A5),

Start 33:

- Found in 1 of 221 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anon_38 (A15),

Start 36:

- Found in 7 of 221 (3.2%) of genes in pham
- Manual Annotations of this start: 2 of 204
- Called 28.6% of time when present
- Phage (with cluster) where this start called: SydNat_36 (A5), Zolita_35 (A5),

Start 38:

- Found in 42 of 221 (19.0%) of genes in pham
- Manual Annotations of this start: 22 of 204
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Archetta_34 (A5), Benedict_35 (A5), Bonamassa_34 (A5), Chadwick_36 (A5), Coog_34 (A5), Cuco_34 (A5), EITiger69_35 (A5), Ghoulboy_36 (A5), HuhtaEnerson15_34 (A5), Jabiru_35 (A5), LittleCherry_34 (A5), MarysWell_33 (A5), Micasa_36 (A5), Midas2_34 (A5), Milcery_34 (A5), Naca_35 (A5), PetterN_36 (A5), Prinashe11_35 (A5), Scorpia_36 (A5), Swirley_36 (A5), Tarynearal_33 (A5), Theia_32 (A5), Twigg_34 (A5), UnionJack_34 (A5),

Start 41:

- Found in 20 of 221 (9.0%) of genes in pham
- Manual Annotations of this start: 1 of 204
- Called 5.0% of time when present
- Phage (with cluster) where this start called: George_33 (A5),

Summary by clusters:

There are 11 clusters represented in this pham: A15, A10, A18, A1, A2, A5, A4, K5, A7, A9, A8,

Info for manual annotations of cluster A1:

- Start number 29 was manually annotated 7 times for cluster A1.

Info for manual annotations of cluster A10:

- Start number 24 was manually annotated 1 time for cluster A10.

Info for manual annotations of cluster A15:

- Start number 33 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A18:

- Start number 27 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:

- Start number 19 was manually annotated 1 time for cluster A2.
- Start number 25 was manually annotated 1 time for cluster A2.
- Start number 26 was manually annotated 5 times for cluster A2.

Info for manual annotations of cluster A4:

- Start number 14 was manually annotated 25 times for cluster A4.
- Start number 17 was manually annotated 1 time for cluster A4.
- Start number 24 was manually annotated 110 times for cluster A4.
- Start number 30 was manually annotated 1 time for cluster A4.

Info for manual annotations of cluster A5:

- Start number 32 was manually annotated 1 time for cluster A5.
- Start number 36 was manually annotated 2 times for cluster A5.
- Start number 38 was manually annotated 22 times for cluster A5.
- Start number 41 was manually annotated 1 time for cluster A5.

Info for manual annotations of cluster A7:

- Start number 22 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A8:

- Start number 23 was manually annotated 9 times for cluster A8.

Info for manual annotations of cluster A9:

- Start number 21 was manually annotated 4 times for cluster A9.
- Start number 22 was manually annotated 2 times for cluster A9.

Info for manual annotations of cluster K5:

- Start number 17 was manually annotated 8 times for cluster K5.

Gene Information:

Gene: AbbysRanger_37 Start: 28220, Stop: 27960, Start Num: 14

Candidate Starts for AbbysRanger_37:

(Start: 14 @28220 has 25 MA's), (Start: 30 @28193 has 1 MA's), (37, 28166), (53, 28106), (70, 28043), (78, 27986),

Gene: Abdiel_38 Start: 28375, Stop: 28109, Start Num: 24

Candidate Starts for Abdiel_38:

(9, 28537), (Start: 17 @28423 has 9 MA's), (Start: 24 @28375 has 111 MA's), (Start: 30 @28345 has 1 MA's), (37, 28318), (53, 28258), (55, 28243), (78, 28141),

Gene: Achebe_36 Start: 28203, Stop: 27943, Start Num: 14

Candidate Starts for Achebe_36:

(Start: 14 @28203 has 25 MA's), (Start: 30 @28176 has 1 MA's), (37, 28149), (53, 28089), (70, 28026), (78, 27969),

Gene: Adzzy_40 Start: 26940, Stop: 26704, Start Num: 26
Candidate Starts for Adzzy_40:
(Start: 26 @26940 has 5 MA's), (47, 26856), (58, 26826), (59, 26823), (77, 26742), (78, 26739),

Gene: Airmid_35 Start: 27047, Stop: 26814, Start Num: 32
Candidate Starts for Airmid_35:
(Start: 32 @27047 has 1 MA's), (Start: 38 @27023 has 22 MA's), (71, 26897), (78, 26843),

Gene: Albee_38 Start: 28374, Stop: 28108, Start Num: 24
Candidate Starts for Albee_38:
(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Alberto7_39 Start: 28714, Stop: 28448, Start Num: 24
Candidate Starts for Alberto7_39:
(9, 28876), (Start: 17 @28762 has 9 MA's), (Start: 24 @28714 has 111 MA's), (Start: 30 @28684 has 1 MA's), (37, 28657), (53, 28597), (78, 28480),

Gene: Anon_38 Start: 26419, Stop: 26123, Start Num: 33
Candidate Starts for Anon_38:
(7, 26665), (12, 26569), (Start: 33 @26419 has 1 MA's), (40, 26374), (50, 26341), (52, 26338), (63, 26287), (65, 26275), (73, 26236), (76, 26203), (78, 26194),

Gene: Archetta_34 Start: 27563, Stop: 27351, Start Num: 38
Candidate Starts for Archetta_34:
(Start: 38 @27563 has 22 MA's), (Start: 41 @27545 has 1 MA's), (49, 27518), (71, 27437), (78, 27383),

Gene: Arturo_36 Start: 28433, Stop: 28167, Start Num: 24
Candidate Starts for Arturo_36:
(Start: 17 @28481 has 9 MA's), (Start: 24 @28433 has 111 MA's), (Start: 30 @28403 has 1 MA's), (37, 28376), (53, 28316), (55, 28301), (78, 28199),

Gene: Astro_35 Start: 26960, Stop: 26682, Start Num: 23
Candidate Starts for Astro_35:
(Start: 23 @26960 has 9 MA's), (49, 26855), (57, 26816), (71, 26768), (78, 26714),

Gene: AvatarAhPeg_37 Start: 28735, Stop: 28475, Start Num: 14
Candidate Starts for AvatarAhPeg_37:
(Start: 14 @28735 has 25 MA's), (Start: 30 @28705 has 1 MA's), (37, 28678), (53, 28618), (55, 28603), (78, 28501),

Gene: Avle17_38 Start: 28374, Stop: 28108, Start Num: 24
Candidate Starts for Avle17_38:
(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Baby16_38 Start: 28385, Stop: 28119, Start Num: 24
Candidate Starts for Baby16_38:
(9, 28547), (Start: 17 @28433 has 9 MA's), (Start: 24 @28385 has 111 MA's), (Start: 30 @28355 has 1 MA's), (37, 28328), (53, 28268), (78, 28151),

Gene: BabyBack_39 Start: 29153, Stop: 28929, Start Num: 26

Candidate Starts for BabyBack_39:

(13, 29267), (Start: 26 @29153 has 5 MA's), (47, 29069), (49, 29063), (60, 29027), (66, 29012), (78, 28955),

Gene: Backyardigan_36 Start: 28236, Stop: 27976, Start Num: 14

Candidate Starts for Backyardigan_36:

(Start: 14 @28236 has 25 MA's), (Start: 30 @28209 has 1 MA's), (37, 28182), (53, 28122), (70, 28059), (78, 28002),

Gene: Badger_36 Start: 28204, Stop: 27944, Start Num: 14

Candidate Starts for Badger_36:

(Start: 14 @28204 has 25 MA's), (Start: 30 @28177 has 1 MA's), (37, 28150), (53, 28090), (70, 28027), (78, 27970),

Gene: BangNhom_39 Start: 28676, Stop: 28410, Start Num: 14

Candidate Starts for BangNhom_39:

(1, 29540), (2, 29273), (3, 28958), (5, 28850), (6, 28826), (Start: 14 @28676 has 25 MA's), (Start: 30 @28646 has 1 MA's), (37, 28619), (53, 28559), (55, 28544), (78, 28442),

Gene: Bartimeaus_38 Start: 28376, Stop: 28110, Start Num: 24

Candidate Starts for Bartimeaus_38:

(9, 28538), (Start: 17 @28424 has 9 MA's), (Start: 24 @28376 has 111 MA's), (Start: 30 @28346 has 1 MA's), (37, 28319), (53, 28259), (78, 28142),

Gene: BellusTerra_39 Start: 28375, Stop: 28109, Start Num: 24

Candidate Starts for BellusTerra_39:

(9, 28537), (Start: 17 @28423 has 9 MA's), (Start: 24 @28375 has 111 MA's), (Start: 30 @28345 has 1 MA's), (37, 28318), (53, 28258), (55, 28243), (78, 28141),

Gene: Benedict_35 Start: 27023, Stop: 26814, Start Num: 38

Candidate Starts for Benedict_35:

(Start: 38 @27023 has 22 MA's), (Start: 41 @27005 has 1 MA's), (71, 26897), (78, 26843),

Gene: Blackmoor_38 Start: 28376, Stop: 28110, Start Num: 24

Candidate Starts for Blackmoor_38:

(9, 28538), (Start: 17 @28424 has 9 MA's), (Start: 24 @28376 has 111 MA's), (Start: 30 @28346 has 1 MA's), (37, 28319), (53, 28259), (78, 28142),

Gene: Bombshell_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Bombshell_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Bonamassa_34 Start: 27357, Stop: 27145, Start Num: 38

Candidate Starts for Bonamassa_34:

(Start: 38 @27357 has 22 MA's), (Start: 41 @27339 has 1 MA's), (49, 27312), (71, 27231), (78, 27177),

Gene: Broseidon_38 Start: 28376, Stop: 28110, Start Num: 24

Candidate Starts for Broseidon_38:

(9, 28538), (Start: 17 @28424 has 9 MA's), (Start: 24 @28376 has 111 MA's), (Start: 30 @28346 has 1 MA's), (37, 28319), (53, 28259), (78, 28142),

Gene: Bruiser_37 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Bruiser_37:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: BubbleTrouble_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for BubbleTrouble_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Bumblebee11_36 Start: 28206, Stop: 27946, Start Num: 14

Candidate Starts for Bumblebee11_36:

(Start: 14 @28206 has 25 MA's), (Start: 30 @28179 has 1 MA's), (37, 28152), (53, 28092), (70, 28029), (78, 27972),

Gene: Burger_36 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Burger_36:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: CRB1_40 Start: 28593, Stop: 28357, Start Num: 25

Candidate Starts for CRB1_40:

(11, 28716), (13, 28704), (Start: 25 @28593 has 1 MA's), (78, 28389),

Gene: Caelakin_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Caelakin_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Caitlin_34 Start: 26953, Stop: 26675, Start Num: 23

Candidate Starts for Caitlin_34:

(Start: 23 @26953 has 9 MA's), (49, 26848), (57, 26809), (71, 26761), (78, 26707),

Gene: Camperdownii_37 Start: 28095, Stop: 27802, Start Num: 17

Candidate Starts for Camperdownii_37:

(Start: 17 @28095 has 9 MA's), (Start: 24 @28047 has 111 MA's), (39, 27987), (66, 27903), (70, 27891), (72, 27882), (78, 27834),

Gene: Celestiallunch_38 Start: 28004, Stop: 27747, Start Num: 23

Candidate Starts for Celestiallunch_38:

(Start: 23 @28004 has 9 MA's), (66, 27848), (70, 27836), (75, 27794),

Gene: CentreCat_38 Start: 28377, Stop: 28111, Start Num: 24

Candidate Starts for CentreCat_38:

(9, 28539), (Start: 17 @28425 has 9 MA's), (Start: 24 @28377 has 111 MA's), (Start: 30 @28347 has 1 MA's), (37, 28320), (53, 28260), (78, 28143),

Gene: Cerulean_39 Start: 28677, Stop: 28411, Start Num: 14

Candidate Starts for Cerulean_39:

(1, 29541), (2, 29274), (3, 28959), (5, 28851), (6, 28827), (Start: 14 @28677 has 25 MA's), (Start: 30 @28647 has 1 MA's), (37, 28620), (53, 28560), (55, 28545), (78, 28443),

Gene: Chadwick_36 Start: 26926, Stop: 26717, Start Num: 38

Candidate Starts for Chadwick_36:

(Start: 38 @26926 has 22 MA's), (71, 26800), (78, 26746),

Gene: ChampagnePapi_40 Start: 28676, Stop: 28410, Start Num: 14

Candidate Starts for ChampagnePapi_40:

(1, 29540), (2, 29273), (3, 28958), (5, 28850), (6, 28826), (Start: 14 @28676 has 25 MA's), (Start: 30 @28646 has 1 MA's), (37, 28619), (53, 28559), (55, 28544), (78, 28442),

Gene: Chaph_38 Start: 28385, Stop: 28119, Start Num: 24

Candidate Starts for Chaph_38:

(9, 28547), (Start: 17 @28433 has 9 MA's), (Start: 24 @28385 has 111 MA's), (Start: 30 @28355 has 1 MA's), (37, 28328), (53, 28268), (78, 28151),

Gene: Charm_38 Start: 28141, Stop: 27875, Start Num: 22

Candidate Starts for Charm_38:

(Start: 22 @28141 has 3 MA's), (66, 27976), (70, 27964), (78, 27901),

Gene: Cici_37 Start: 28221, Stop: 27961, Start Num: 14

Candidate Starts for Cici_37:

(Start: 14 @28221 has 25 MA's), (Start: 30 @28194 has 1 MA's), (37, 28167), (53, 28107), (70, 28044), (78, 27987),

Gene: Cintron_38 Start: 28440, Stop: 28174, Start Num: 14

Candidate Starts for Cintron_38:

(Start: 14 @28440 has 25 MA's), (Start: 30 @28410 has 1 MA's), (37, 28383), (53, 28323), (78, 28206),

Gene: Citius_38 Start: 28395, Stop: 28129, Start Num: 24

Candidate Starts for Citius_38:

(9, 28557), (Start: 17 @28443 has 9 MA's), (Start: 24 @28395 has 111 MA's), (Start: 30 @28365 has 1 MA's), (37, 28338), (53, 28278), (55, 28263), (78, 28161),

Gene: Clarenza_38 Start: 28371, Stop: 28105, Start Num: 24

Candidate Starts for Clarenza_38:

(9, 28533), (Start: 17 @28419 has 9 MA's), (Start: 24 @28371 has 111 MA's), (Start: 30 @28341 has 1 MA's), (37, 28314), (53, 28254), (78, 28137),

Gene: Cocoaberry_38 Start: 28378, Stop: 28112, Start Num: 24

Candidate Starts for Cocoaberry_38:

(9, 28540), (Start: 17 @28426 has 9 MA's), (Start: 24 @28378 has 111 MA's), (Start: 30 @28348 has 1 MA's), (37, 28321), (53, 28261), (78, 28144),

Gene: Commander_38 Start: 28373, Stop: 28107, Start Num: 24

Candidate Starts for Commander_38:

(9, 28535), (Start: 17 @28421 has 9 MA's), (Start: 24 @28373 has 111 MA's), (Start: 30 @28343 has 1 MA's), (37, 28316), (53, 28256), (78, 28139),

Gene: Connomayer_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Connomayer_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Coog_34 Start: 27403, Stop: 27185, Start Num: 38

Candidate Starts for Coog_34:

(Start: 38 @27403 has 22 MA's), (Start: 41 @27385 has 1 MA's), (49, 27358), (71, 27271), (78, 27217),

Gene: Cuco_34 Start: 27356, Stop: 27144, Start Num: 38

Candidate Starts for Cuco_34:

(Start: 38 @27356 has 22 MA's), (Start: 41 @27338 has 1 MA's), (49, 27311), (71, 27230), (78, 27176),

Gene: Danforth_34 Start: 26845, Stop: 26567, Start Num: 23

Candidate Starts for Danforth_34:

(Start: 23 @26845 has 9 MA's), (49, 26740), (57, 26701), (71, 26653), (78, 26599),

Gene: Datway_37 Start: 28192, Stop: 27932, Start Num: 14

Candidate Starts for Datway_37:

(Start: 14 @28192 has 25 MA's), (Start: 30 @28165 has 1 MA's), (37, 28138), (53, 28078), (70, 28015), (78, 27958),

Gene: Deano_38 Start: 28382, Stop: 28116, Start Num: 24

Candidate Starts for Deano_38:

(9, 28544), (Start: 17 @28430 has 9 MA's), (Start: 24 @28382 has 111 MA's), (Start: 30 @28352 has 1 MA's), (37, 28325), (53, 28265), (78, 28148),

Gene: Dhanush_38 Start: 28377, Stop: 28111, Start Num: 24

Candidate Starts for Dhanush_38:

(9, 28539), (Start: 17 @28425 has 9 MA's), (Start: 24 @28377 has 111 MA's), (Start: 30 @28347 has 1 MA's), (37, 28320), (53, 28260), (78, 28143),

Gene: DirtyDunning_37 Start: 28251, Stop: 27991, Start Num: 14

Candidate Starts for DirtyDunning_37:

(Start: 14 @28251 has 25 MA's), (Start: 30 @28221 has 1 MA's), (37, 28194), (53, 28134), (78, 28017),

Gene: Dixon_35 Start: 26954, Stop: 26676, Start Num: 23

Candidate Starts for Dixon_35:

(Start: 23 @26954 has 9 MA's), (49, 26849), (57, 26810), (71, 26762), (78, 26708),

Gene: DontArgue_38 Start: 27488, Stop: 27219, Start Num: 24

Candidate Starts for DontArgue_38:

(Start: 24 @27488 has 111 MA's), (Start: 30 @27458 has 1 MA's), (42, 27404), (43, 27401), (77, 27257), (78, 27254),

Gene: DreamTeam1_38 Start: 28024, Stop: 27758, Start Num: 22

Candidate Starts for DreamTeam1_38:

(Start: 22 @28024 has 3 MA's), (66, 27859), (70, 27847), (78, 27784),

Gene: Dreamboat_44 Start: 32205, Stop: 31960, Start Num: 29

Candidate Starts for Dreamboat_44:

(8, 32394), (Start: 29 @32205 has 7 MA's), (67, 32055), (71, 32040), (73, 32025), (74, 32013), (78, 31983),

Gene: DroogsArmy_37 Start: 30255, Stop: 29989, Start Num: 22

Candidate Starts for DroogsArmy_37:

(Start: 22 @30255 has 3 MA's), (42, 30168), (67, 30084), (69, 30078), (79, 30006),

Gene: Druantia_38 Start: 28377, Stop: 28111, Start Num: 24

Candidate Starts for Druantia_38:

(9, 28539), (Start: 17 @28425 has 9 MA's), (Start: 24 @28377 has 111 MA's), (Start: 30 @28347 has 1 MA's), (37, 28320), (53, 28260), (78, 28143),

Gene: DustyMartin_43 Start: 28322, Stop: 28053, Start Num: 24

Candidate Starts for DustyMartin_43:

(15, 28382), (Start: 24 @28322 has 111 MA's), (Start: 30 @28292 has 1 MA's), (Start: 36 @28268 has 2 MA's), (42, 28238), (78, 28088),

Gene: Eagle_38 Start: 28399, Stop: 28133, Start Num: 24

Candidate Starts for Eagle_38:

(9, 28561), (Start: 17 @28447 has 9 MA's), (Start: 24 @28399 has 111 MA's), (Start: 30 @28369 has 1 MA's), (37, 28342), (53, 28282), (55, 28267), (78, 28165),

Gene: Eapen_38 Start: 28372, Stop: 28106, Start Num: 24

Candidate Starts for Eapen_38:

(9, 28534), (Start: 17 @28420 has 9 MA's), (Start: 24 @28372 has 111 MA's), (Start: 30 @28342 has 1 MA's), (37, 28315), (53, 28255), (78, 28138),

Gene: EITiger69_35 Start: 27021, Stop: 26812, Start Num: 38

Candidate Starts for EITiger69_35:

(Start: 38 @27021 has 22 MA's), (71, 26895), (78, 26841),

Gene: Eris_37 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Eris_37:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Eros_38 Start: 28376, Stop: 28110, Start Num: 24

Candidate Starts for Eros_38:

(9, 28538), (Start: 17 @28424 has 9 MA's), (Start: 24 @28376 has 111 MA's), (Start: 30 @28346 has 1 MA's), (37, 28319), (53, 28259), (78, 28142),

Gene: Eurydice_39 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Eurydice_39:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (55, 28242), (78, 28140),

Gene: Expelliarmus_34 Start: 26831, Stop: 26553, Start Num: 23

Candidate Starts for Expelliarmus_34:

(Start: 23 @26831 has 9 MA's), (49, 26726), (57, 26687), (71, 26639), (78, 26585),

Gene: Florean_38 Start: 28373, Stop: 28107, Start Num: 24

Candidate Starts for Florean_38:

(9, 28535), (Start: 17 @28421 has 9 MA's), (Start: 24 @28373 has 111 MA's), (Start: 30 @28343 has 1 MA's), (37, 28316), (53, 28256), (78, 28139),

Gene: Flux_38 Start: 28376, Stop: 28110, Start Num: 24

Candidate Starts for Flux_38:

(9, 28538), (Start: 17 @28424 has 9 MA's), (Start: 24 @28376 has 111 MA's), (Start: 30 @28346 has 1 MA's), (37, 28319), (53, 28259), (78, 28142),

Gene: Funston_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Funston_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Gadost_38 Start: 28378, Stop: 28112, Start Num: 24

Candidate Starts for Gadost_38:

(9, 28540), (Start: 17 @28426 has 9 MA's), (Start: 24 @28378 has 111 MA's), (Start: 30 @28348 has 1 MA's), (37, 28321), (53, 28261), (78, 28144),

Gene: GaugeLDP_39 Start: 29059, Stop: 28823, Start Num: 26

Candidate Starts for GaugeLDP_39:

(13, 29173), (Start: 24 @29074 has 111 MA's), (Start: 26 @29059 has 5 MA's), (31, 29041), (46, 28978), (78, 28867),

Gene: George_33 Start: 27339, Stop: 27145, Start Num: 41

Candidate Starts for George_33:

(Start: 38 @27357 has 22 MA's), (Start: 41 @27339 has 1 MA's), (49, 27312), (71, 27231), (78, 27177),

Gene: Ghouboy_36 Start: 27962, Stop: 27744, Start Num: 38

Candidate Starts for Ghouboy_36:

(Start: 36 @27971 has 2 MA's), (Start: 38 @27962 has 22 MA's), (Start: 41 @27944 has 1 MA's), (49, 27917), (71, 27830), (78, 27776),

Gene: Groundhog_34 Start: 26925, Stop: 26647, Start Num: 23

Candidate Starts for Groundhog_34:

(Start: 23 @26925 has 9 MA's), (49, 26820), (57, 26781), (71, 26733), (78, 26679),

Gene: Guillsminger_84 Start: 55380, Stop: 55694, Start Num: 17

Candidate Starts for Guillsminger_84:

(4, 55140), (Start: 17 @55380 has 9 MA's), (18, 55386), (35, 55479), (37, 55485), (Start: 38 @55491 has 22 MA's), (44, 55527), (53, 55551), (62, 55590), (78, 55671), (79, 55677),

Gene: HamSlice_37 Start: 28372, Stop: 28106, Start Num: 24

Candidate Starts for HamSlice_37:

(9, 28534), (Start: 17 @28420 has 9 MA's), (Start: 24 @28372 has 111 MA's), (Start: 30 @28342 has 1 MA's), (37, 28315), (53, 28255), (78, 28138),

Gene: Happiness_37 Start: 28379, Stop: 28113, Start Num: 24

Candidate Starts for Happiness_37:

(9, 28541), (Start: 17 @28427 has 9 MA's), (Start: 24 @28379 has 111 MA's), (Start: 30 @28349 has 1 MA's), (37, 28322), (53, 28262), (78, 28145),

Gene: Herbertwm_35 Start: 26820, Stop: 26551, Start Num: 19

Candidate Starts for Herbertwm_35:

(16, 26844), (Start: 19 @26820 has 1 MA's), (Start: 38 @26730 has 22 MA's), (61, 26646),

Gene: Holli_37 Start: 28164, Stop: 27898, Start Num: 24

Candidate Starts for Holli_37:

(9, 28326), (Start: 17 @28212 has 9 MA's), (Start: 24 @28164 has 111 MA's), (Start: 30 @28134 has 1 MA's), (37, 28107), (53, 28047), (78, 27930),

Gene: Houdini22_38 Start: 28378, Stop: 28112, Start Num: 24

Candidate Starts for Houdini22_38:

(9, 28540), (Start: 17 @28426 has 9 MA's), (Start: 24 @28378 has 111 MA's), (Start: 30 @28348 has 1 MA's), (37, 28321), (53, 28261), (78, 28144),

Gene: HuhtaEnerson15_34 Start: 27348, Stop: 27136, Start Num: 38

Candidate Starts for HuhtaEnerson15_34:

(Start: 38 @27348 has 22 MA's), (Start: 41 @27330 has 1 MA's), (49, 27303), (71, 27222), (78, 27168),

Gene: Huxley_39 Start: 28435, Stop: 28169, Start Num: 24

Candidate Starts for Huxley_39:

(9, 28597), (Start: 17 @28483 has 9 MA's), (Start: 24 @28435 has 111 MA's), (Start: 30 @28405 has 1 MA's), (37, 28378), (53, 28318), (78, 28201),

Gene: ICleared_38 Start: 28406, Stop: 28140, Start Num: 24

Candidate Starts for ICleared_38:

(9, 28568), (Start: 17 @28454 has 9 MA's), (Start: 24 @28406 has 111 MA's), (Start: 30 @28376 has 1 MA's), (37, 28349), (53, 28289), (78, 28172),

Gene: Iceman_39 Start: 28663, Stop: 28397, Start Num: 24

Candidate Starts for Iceman_39:

(9, 28825), (Start: 17 @28711 has 9 MA's), (Start: 24 @28663 has 111 MA's), (Start: 30 @28633 has 1 MA's), (37, 28606), (53, 28546), (78, 28429),

Gene: Iracema64_39 Start: 28638, Stop: 28372, Start Num: 24

Candidate Starts for Iracema64_39:

(9, 28800), (Start: 17 @28686 has 9 MA's), (Start: 24 @28638 has 111 MA's), (Start: 30 @28608 has 1 MA's), (37, 28581), (53, 28521), (55, 28506), (78, 28404),

Gene: Jabiru_35 Start: 27070, Stop: 26861, Start Num: 38

Candidate Starts for Jabiru_35:

(Start: 38 @27070 has 22 MA's), (71, 26944), (78, 26890),

Gene: Jasper_44 Start: 32091, Stop: 31846, Start Num: 29

Candidate Starts for Jasper_44:

(8, 32280), (Start: 29 @32091 has 7 MA's), (67, 31941), (71, 31926), (73, 31911), (74, 31899), (78, 31869),

Gene: Jaykayelowell_37 Start: 28370, Stop: 28104, Start Num: 24

Candidate Starts for Jaykayelowell_37:

(9, 28532), (Start: 17 @28418 has 9 MA's), (Start: 24 @28370 has 111 MA's), (Start: 30 @28340 has 1 MA's), (37, 28313), (53, 28253), (78, 28136),

Gene: JetBlade_38 Start: 28371, Stop: 28105, Start Num: 24

Candidate Starts for JetBlade_38:

(9, 28533), (Start: 17 @28419 has 9 MA's), (Start: 24 @28371 has 111 MA's), (Start: 30 @28341 has 1 MA's), (37, 28314), (53, 28254), (78, 28137),

Gene: JoongJeon_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for JoongJeon_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: KFPoly_38 Start: 28371, Stop: 28105, Start Num: 24

Candidate Starts for KFPoly_38:

(9, 28533), (Start: 17 @28419 has 9 MA's), (Start: 24 @28371 has 111 MA's), (Start: 30 @28341 has 1 MA's), (37, 28314), (53, 28254), (78, 28137),

Gene: Kamy_38 Start: 28376, Stop: 28110, Start Num: 24

Candidate Starts for Kamy_38:

(9, 28538), (Start: 17 @28424 has 9 MA's), (Start: 24 @28376 has 111 MA's), (Start: 30 @28346 has 1 MA's), (37, 28319), (53, 28259), (55, 28244), (78, 28142),

Gene: Katalie136_37 Start: 28206, Stop: 27946, Start Num: 14

Candidate Starts for Katalie136_37:

(Start: 14 @28206 has 25 MA's), (Start: 30 @28179 has 1 MA's), (37, 28152), (53, 28092), (70, 28029), (78, 27972),

Gene: KekoraPapaka_39 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for KekoraPapaka_39:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Kingmustik0402_38 Start: 28366, Stop: 28100, Start Num: 24

Candidate Starts for Kingmustik0402_38:

(9, 28528), (Start: 17 @28414 has 9 MA's), (Start: 24 @28366 has 111 MA's), (Start: 30 @28336 has 1 MA's), (37, 28309), (53, 28249), (78, 28132),

Gene: Klodlith_39 Start: 28041, Stop: 27775, Start Num: 22

Candidate Starts for Klodlith_39:

(Start: 22 @28041 has 3 MA's), (66, 27876), (70, 27864), (78, 27801),

Gene: Koan_37 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Koan_37:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Koreni_37 Start: 28055, Stop: 27789, Start Num: 24

Candidate Starts for Koreni_37:

(9, 28217), (Start: 17 @28103 has 9 MA's), (Start: 24 @28055 has 111 MA's), (Start: 30 @28025 has 1 MA's), (37, 27998), (53, 27938), (78, 27821),

Gene: Kratak_38 Start: 28316, Stop: 28050, Start Num: 24

Candidate Starts for Kratak_38:

(Start: 17 @28364 has 9 MA's), (Start: 24 @28316 has 111 MA's), (Start: 30 @28286 has 1 MA's), (37, 28259), (42, 28232), (43, 28229), (53, 28199), (78, 28082),

Gene: Kremtemulon_38 Start: 28328, Stop: 28062, Start Num: 24

Candidate Starts for Kremtemulon_38:

(Start: 17 @28376 has 9 MA's), (Start: 24 @28328 has 111 MA's), (Start: 30 @28298 has 1 MA's), (37, 28271), (42, 28244), (43, 28241), (53, 28211), (78, 28094),

Gene: Kyee_38 Start: 28372, Stop: 28106, Start Num: 24

Candidate Starts for Kyee_38:

(9, 28534), (Start: 17 @28420 has 9 MA's), (Start: 24 @28372 has 111 MA's), (Start: 30 @28342 has 1 MA's), (37, 28315), (53, 28255), (78, 28138),

Gene: LHTSCC_40 Start: 28676, Stop: 28410, Start Num: 14

Candidate Starts for LHTSCC_40:

(1, 29540), (2, 29273), (3, 28958), (5, 28850), (6, 28826), (Start: 14 @28676 has 25 MA's), (Start: 30 @28646 has 1 MA's), (37, 28619), (53, 28559), (55, 28544), (78, 28442),

Gene: LadyBird_41 Start: 28555, Stop: 28316, Start Num: 25

Candidate Starts for LadyBird_41:

(11, 28678), (13, 28666), (Start: 25 @28555 has 1 MA's), (48, 28468), (56, 28441), (71, 28396), (78, 28351),

Gene: LappelDuVide_38 Start: 28373, Stop: 28107, Start Num: 24

Candidate Starts for LappelDuVide_38:

(9, 28535), (Start: 17 @28421 has 9 MA's), (Start: 24 @28373 has 111 MA's), (Start: 30 @28343 has 1 MA's), (37, 28316), (53, 28256), (78, 28139),

Gene: Lemur_38 Start: 28371, Stop: 28105, Start Num: 24

Candidate Starts for Lemur_38:

(9, 28533), (Start: 17 @28419 has 9 MA's), (Start: 24 @28371 has 111 MA's), (Start: 30 @28341 has 1 MA's), (37, 28314), (53, 28254), (78, 28137),

Gene: LeoAvram_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for LeoAvram_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (55, 28242), (78, 28140),

Gene: Leston_83 Start: 55497, Stop: 55811, Start Num: 17

Candidate Starts for Leston_83:

(4, 55257), (Start: 17 @55497 has 9 MA's), (18, 55503), (35, 55596), (37, 55602), (Start: 38 @55608 has 22 MA's), (44, 55644), (53, 55668), (62, 55707), (78, 55788), (79, 55794),

Gene: LilBib_43 Start: 33080, Stop: 32835, Start Num: 29

Candidate Starts for LilBib_43:

(Start: 29 @33080 has 7 MA's), (67, 32930), (71, 32915), (73, 32900), (74, 32888), (78, 32858),

Gene: LittleB_38 Start: 28375, Stop: 28109, Start Num: 24

Candidate Starts for LittleB_38:

(9, 28537), (Start: 17 @28423 has 9 MA's), (Start: 24 @28375 has 111 MA's), (Start: 30 @28345 has 1 MA's), (37, 28318), (53, 28258), (78, 28141),

Gene: LittleCherry_34 Start: 27358, Stop: 27146, Start Num: 38

Candidate Starts for LittleCherry_34:

(Start: 38 @27358 has 22 MA's), (Start: 41 @27340 has 1 MA's), (49, 27313), (71, 27232), (78, 27178),

Gene: LittleGuy_38 Start: 28273, Stop: 28007, Start Num: 24

Candidate Starts for LittleGuy_38:

(9, 28435), (Start: 17 @28321 has 9 MA's), (Start: 24 @28273 has 111 MA's), (Start: 30 @28243 has 1 MA's), (37, 28216), (53, 28156), (78, 28039),

Gene: LochMonster_38 Start: 28413, Stop: 28147, Start Num: 24

Candidate Starts for LochMonster_38:

(9, 28575), (Start: 17 @28461 has 9 MA's), (Start: 24 @28413 has 111 MA's), (Start: 30 @28383 has 1 MA's), (37, 28356), (42, 28329), (43, 28326), (53, 28296), (78, 28179),

Gene: LoneWolf_41 Start: 28735, Stop: 28481, Start Num: 21

Candidate Starts for LoneWolf_41:
(Start: 21 @28735 has 4 MA's), (44, 28642),

Gene: Lorenzo_38 Start: 28374, Stop: 28108, Start Num: 24
Candidate Starts for Lorenzo_38:
(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Lunsford_39 Start: 28371, Stop: 28105, Start Num: 24
Candidate Starts for Lunsford_39:
(9, 28533), (Start: 17 @28419 has 9 MA's), (Start: 24 @28371 has 111 MA's), (Start: 30 @28341 has 1 MA's), (37, 28314), (53, 28254), (78, 28137),

Gene: Marco3_44 Start: 32839, Stop: 32594, Start Num: 29
Candidate Starts for Marco3_44:
(Start: 29 @32839 has 7 MA's), (Start: 38 @32809 has 22 MA's), (67, 32689), (71, 32674), (73, 32659), (74, 32647), (78, 32617),

Gene: MarysWell_33 Start: 27412, Stop: 27194, Start Num: 38
Candidate Starts for MarysWell_33:
(Start: 38 @27412 has 22 MA's), (49, 27367), (71, 27280), (78, 27226),

Gene: Maverick_38 Start: 28374, Stop: 28108, Start Num: 24
Candidate Starts for Maverick_38:
(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Maxo_39 Start: 28376, Stop: 28110, Start Num: 24
Candidate Starts for Maxo_39:
(9, 28538), (Start: 17 @28424 has 9 MA's), (Start: 24 @28376 has 111 MA's), (Start: 30 @28346 has 1 MA's), (37, 28319), (53, 28259), (55, 28244), (78, 28142),

Gene: Mayonnaise_38 Start: 28374, Stop: 28108, Start Num: 24
Candidate Starts for Mayonnaise_38:
(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Mazhar510_38 Start: 28375, Stop: 28109, Start Num: 24
Candidate Starts for Mazhar510_38:
(9, 28537), (Start: 17 @28423 has 9 MA's), (Start: 24 @28375 has 111 MA's), (Start: 30 @28345 has 1 MA's), (37, 28318), (53, 28258), (78, 28141),

Gene: Medusa_38 Start: 28373, Stop: 28107, Start Num: 24
Candidate Starts for Medusa_38:
(9, 28535), (Start: 17 @28421 has 9 MA's), (Start: 24 @28373 has 111 MA's), (Start: 30 @28343 has 1 MA's), (37, 28316), (53, 28256), (55, 28241), (78, 28139),

Gene: MeeZee_38 Start: 28374, Stop: 28108, Start Num: 24
Candidate Starts for MeeZee_38:
(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: MegTheThird_38 Start: 28003, Stop: 27746, Start Num: 23

Candidate Starts for MegTheThird_38:

(Start: 23 @28003 has 9 MA's), (66, 27847), (70, 27835), (75, 27793),

Gene: Melvin_40 Start: 28372, Stop: 28106, Start Num: 24

Candidate Starts for Melvin_40:

(9, 28534), (Start: 17 @28420 has 9 MA's), (Start: 24 @28372 has 111 MA's), (Start: 30 @28342 has 1 MA's), (37, 28315), (53, 28255), (78, 28138),

Gene: Micasa_36 Start: 27685, Stop: 27467, Start Num: 38

Candidate Starts for Micasa_36:

(Start: 38 @27685 has 22 MA's), (Start: 41 @27667 has 1 MA's), (49, 27640), (71, 27553), (78, 27499),

Gene: Midas2_34 Start: 27403, Stop: 27185, Start Num: 38

Candidate Starts for Midas2_34:

(Start: 38 @27403 has 22 MA's), (Start: 41 @27385 has 1 MA's), (49, 27358), (71, 27271), (78, 27217),

Gene: Milcery_34 Start: 27362, Stop: 27150, Start Num: 38

Candidate Starts for Milcery_34:

(Start: 38 @27362 has 22 MA's), (Start: 41 @27344 has 1 MA's), (49, 27317), (71, 27236), (78, 27182),

Gene: MilleFeuille_39 Start: 32461, Stop: 32216, Start Num: 29

Candidate Starts for MilleFeuille_39:

(12, 32602), (Start: 29 @32461 has 7 MA's), (Start: 38 @32431 has 22 MA's), (67, 32311), (71, 32296), (73, 32281), (74, 32269), (78, 32239),

Gene: Millski_37 Start: 28378, Stop: 28112, Start Num: 24

Candidate Starts for Millski_37:

(9, 28540), (Start: 17 @28426 has 9 MA's), (Start: 24 @28378 has 111 MA's), (Start: 30 @28348 has 1 MA's), (37, 28321), (53, 28261), (78, 28144),

Gene: Miramae_37 Start: 28397, Stop: 28137, Start Num: 14

Candidate Starts for Miramae_37:

(Start: 14 @28397 has 25 MA's), (Start: 30 @28367 has 1 MA's), (37, 28340), (53, 28280), (55, 28265), (78, 28163),

Gene: Miryou_85 Start: 57355, Stop: 57669, Start Num: 17

Candidate Starts for Miryou_85:

(Start: 17 @57355 has 9 MA's), (18, 57361), (35, 57454), (37, 57460), (Start: 38 @57466 has 22 MA's), (44, 57502), (53, 57526), (78, 57646), (79, 57652),

Gene: Morpher26_37 Start: 28227, Stop: 27967, Start Num: 14

Candidate Starts for Morpher26_37:

(Start: 14 @28227 has 25 MA's), (Start: 30 @28200 has 1 MA's), (37, 28173), (53, 28113), (70, 28050), (78, 27993),

Gene: Morrow_39 Start: 28380, Stop: 28114, Start Num: 24

Candidate Starts for Morrow_39:

(9, 28542), (Start: 17 @28428 has 9 MA's), (Start: 24 @28380 has 111 MA's), (Start: 30 @28350 has 1 MA's), (37, 28323), (53, 28263), (55, 28248), (78, 28146),

Gene: Mundrea_36 Start: 28134, Stop: 27874, Start Num: 24

Candidate Starts for Mundrea_36:

(9, 28296), (Start: 17 @28182 has 9 MA's), (Start: 24 @28134 has 111 MA's), (Start: 30 @28104 has 1 MA's), (37, 28077), (53, 28017), (55, 28002), (78, 27900),

Gene: MyraDee_36 Start: 26293, Stop: 26057, Start Num: 27

Candidate Starts for MyraDee_36:

(Start: 27 @26293 has 1 MA's), (39, 26248), (51, 26200), (64, 26152), (70, 26134),

Gene: Naca_35 Start: 27563, Stop: 27354, Start Num: 38

Candidate Starts for Naca_35:

(Start: 38 @27563 has 22 MA's), (71, 27437), (78, 27383),

Gene: NearlyHeadless_35 Start: 26884, Stop: 26606, Start Num: 23

Candidate Starts for NearlyHeadless_35:

(Start: 23 @26884 has 9 MA's), (49, 26779), (57, 26740), (71, 26692), (78, 26638),

Gene: Nebs_39 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Nebs_39:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (55, 28242), (78, 28140),

Gene: Nemo27_38 Start: 28373, Stop: 28107, Start Num: 24

Candidate Starts for Nemo27_38:

(9, 28535), (Start: 17 @28421 has 9 MA's), (Start: 24 @28373 has 111 MA's), (Start: 30 @28343 has 1 MA's), (37, 28316), (53, 28256), (78, 28139),

Gene: Noelle_38 Start: 28436, Stop: 28167, Start Num: 24

Candidate Starts for Noelle_38:

(9, 28595), (Start: 17 @28481 has 9 MA's), (Start: 24 @28436 has 111 MA's), (Start: 30 @28406 has 1 MA's), (37, 28379), (42, 28352), (70, 28256), (78, 28199),

Gene: NorthStar_37 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for NorthStar_37:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (55, 28242), (78, 28140),

Gene: NotAPhaseMom_38 Start: 28378, Stop: 28112, Start Num: 24

Candidate Starts for NotAPhaseMom_38:

(9, 28540), (Start: 17 @28426 has 9 MA's), (Start: 24 @28378 has 111 MA's), (Start: 30 @28348 has 1 MA's), (37, 28321), (53, 28261), (78, 28144),

Gene: NothingSpecial_39 Start: 29386, Stop: 29153, Start Num: 26

Candidate Starts for NothingSpecial_39:

(11, 29512), (20, 29419), (Start: 24 @29401 has 111 MA's), (Start: 26 @29386 has 5 MA's), (40, 29326), (47, 29302), (54, 29281), (78, 29188),

Gene: Nyxis_38 Start: 28267, Stop: 28001, Start Num: 24

Candidate Starts for Nyxis_38:

(9, 28429), (Start: 17 @28315 has 9 MA's), (Start: 24 @28267 has 111 MA's), (Start: 30 @28237 has 1 MA's), (37, 28210), (53, 28150), (78, 28033),

Gene: OKaNui_39 Start: 28427, Stop: 28161, Start Num: 24

Candidate Starts for OKaNui_39:

(9, 28589), (Start: 17 @28475 has 9 MA's), (Start: 24 @28427 has 111 MA's), (Start: 30 @28397 has 1 MA's), (37, 28370), (53, 28310), (78, 28193),

Gene: Obama12_39 Start: 28678, Stop: 28412, Start Num: 14

Candidate Starts for Obama12_39:

(1, 29542), (2, 29275), (3, 28960), (5, 28852), (6, 28828), (Start: 14 @28678 has 25 MA's), (Start: 30 @28648 has 1 MA's), (37, 28621), (53, 28561), (55, 28546), (78, 28444),

Gene: Ohfah_39 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Ohfah_39:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (55, 28242), (78, 28140),

Gene: Omnicron_87 Start: 57578, Stop: 57886, Start Num: 17

Candidate Starts for Omnicron_87:

(Start: 17 @57578 has 9 MA's), (18, 57584), (35, 57677), (37, 57683), (Start: 38 @57689 has 22 MA's), (44, 57725), (53, 57749), (78, 57863), (79, 57869),

Gene: Palestino_37 Start: 28344, Stop: 28108, Start Num: 30

Candidate Starts for Palestino_37:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Paola_83 Start: 55380, Stop: 55694, Start Num: 17

Candidate Starts for Paola_83:

(4, 55140), (Start: 17 @55380 has 9 MA's), (18, 55386), (35, 55479), (37, 55485), (Start: 38 @55491 has 22 MA's), (44, 55527), (53, 55551), (62, 55590), (78, 55671), (79, 55677),

Gene: Paraselene_41 Start: 32492, Stop: 32247, Start Num: 29

Candidate Starts for Paraselene_41:

(Start: 29 @32492 has 7 MA's), (Start: 38 @32462 has 22 MA's), (67, 32342), (71, 32327), (73, 32312), (74, 32300), (78, 32270),

Gene: Peaches_38 Start: 28373, Stop: 28107, Start Num: 24

Candidate Starts for Peaches_38:

(9, 28535), (Start: 17 @28421 has 9 MA's), (Start: 24 @28373 has 111 MA's), (Start: 30 @28343 has 1 MA's), (37, 28316), (53, 28256), (78, 28139),

Gene: Perplexer_37 Start: 28203, Stop: 27943, Start Num: 14

Candidate Starts for Perplexer_37:

(Start: 14 @28203 has 25 MA's), (Start: 30 @28176 has 1 MA's), (37, 28149), (53, 28089), (70, 28026), (78, 27969),

Gene: PeterPeter_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for PeterPeter_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: PetiteSangsue_37 Start: 28206, Stop: 27946, Start Num: 14

Candidate Starts for PetiteSangsue_37:

(Start: 14 @28206 has 25 MA's), (Start: 30 @28179 has 1 MA's), (37, 28152), (53, 28092), (70, 28029), (78, 27972),

Gene: PetterN_36 Start: 26926, Stop: 26717, Start Num: 38

Candidate Starts for PetterN_36:

(Start: 38 @26926 has 22 MA's), (71, 26800), (78, 26746),

Gene: Phacado_38 Start: 28373, Stop: 28107, Start Num: 24

Candidate Starts for Phacado_38:

(9, 28535), (Start: 17 @28421 has 9 MA's), (Start: 24 @28373 has 111 MA's), (Start: 30 @28343 has 1 MA's), (37, 28316), (53, 28256), (78, 28139),

Gene: Phelipe_39 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Phelipe_39:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Phighter1804_38 Start: 28416, Stop: 28150, Start Num: 24

Candidate Starts for Phighter1804_38:

(9, 28578), (Start: 17 @28464 has 9 MA's), (Start: 24 @28416 has 111 MA's), (Start: 30 @28386 has 1 MA's), (34, 28374), (37, 28359), (53, 28299), (78, 28182),

Gene: Phillis_35 Start: 26910, Stop: 26632, Start Num: 23

Candidate Starts for Phillis_35:

(Start: 23 @26910 has 9 MA's), (49, 26805), (71, 26718), (78, 26664),

Gene: Phontbonne_38 Start: 28268, Stop: 28002, Start Num: 24

Candidate Starts for Phontbonne_38:

(9, 28430), (Start: 17 @28316 has 9 MA's), (Start: 24 @28268 has 111 MA's), (Start: 30 @28238 has 1 MA's), (37, 28211), (53, 28151), (78, 28034),

Gene: Polymorphads_39 Start: 28367, Stop: 28101, Start Num: 24

Candidate Starts for Polymorphads_39:

(9, 28529), (Start: 17 @28415 has 9 MA's), (Start: 24 @28367 has 111 MA's), (Start: 30 @28337 has 1 MA's), (37, 28310), (53, 28250), (55, 28235), (78, 28133),

Gene: Prin Ashe11_35 Start: 27325, Stop: 27113, Start Num: 38

Candidate Starts for Prin Ashe11_35:

(Start: 38 @27325 has 22 MA's), (Start: 41 @27307 has 1 MA's), (49, 27280), (71, 27199), (78, 27145),

Gene: Pumbaa_38 Start: 28319, Stop: 28053, Start Num: 24

Candidate Starts for Pumbaa_38:

(9, 28481), (Start: 17 @28367 has 9 MA's), (Start: 24 @28319 has 111 MA's), (Start: 30 @28289 has 1 MA's), (37, 28262), (53, 28202), (78, 28085),

Gene: Rando14_84 Start: 55989, Stop: 56297, Start Num: 17

Candidate Starts for Rando14_84:

(Start: 17 @55989 has 9 MA's), (18, 55995), (35, 56088), (37, 56094), (Start: 38 @56100 has 22 MA's), (44, 56136), (53, 56160), (78, 56274), (79, 56280),

Gene: Relief_37 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Relief_37:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: RhynO_40 Start: 28414, Stop: 28145, Start Num: 24

Candidate Starts for RhynO_40:

(15, 28474), (Start: 24 @28414 has 111 MA's), (Start: 30 @28384 has 1 MA's), (Start: 36 @28360 has 2 MA's), (42, 28330), (78, 28180),

Gene: Roary_35 Start: 26830, Stop: 26552, Start Num: 23

Candidate Starts for Roary_35:

(Start: 23 @26830 has 9 MA's), (49, 26725), (57, 26686), (71, 26638), (78, 26584),

Gene: RockieBear_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for RockieBear_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Romney_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Romney_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Roosevelt_37 Start: 28376, Stop: 28110, Start Num: 24

Candidate Starts for Roosevelt_37:

(9, 28538), (Start: 17 @28424 has 9 MA's), (Start: 24 @28376 has 111 MA's), (Start: 30 @28346 has 1 MA's), (37, 28319), (53, 28259), (78, 28142),

Gene: Rosa24_38 Start: 28408, Stop: 28142, Start Num: 24

Candidate Starts for Rosa24_38:

(9, 28570), (Start: 17 @28456 has 9 MA's), (Start: 24 @28408 has 111 MA's), (Start: 30 @28378 has 1 MA's), (37, 28351), (53, 28291), (55, 28276), (78, 28174),

Gene: Rowdy_43 Start: 28322, Stop: 28053, Start Num: 24

Candidate Starts for Rowdy_43:

(15, 28382), (Start: 24 @28322 has 111 MA's), (Start: 30 @28292 has 1 MA's), (Start: 36 @28268 has 2 MA's), (42, 28238), (78, 28088),

Gene: Ruin_38 Start: 28370, Stop: 28104, Start Num: 24

Candidate Starts for Ruin_38:

(9, 28532), (Start: 17 @28418 has 9 MA's), (Start: 24 @28370 has 111 MA's), (Start: 30 @28340 has 1 MA's), (37, 28313), (78, 28136),

Gene: Rutherferd_45 Start: 33535, Stop: 33290, Start Num: 29

Candidate Starts for Rutherferd_45:

(Start: 29 @33535 has 7 MA's), (Start: 38 @33505 has 22 MA's), (67, 33385), (71, 33370), (73, 33355), (74, 33343), (78, 33313),

Gene: Sabertooth_38 Start: 28373, Stop: 28107, Start Num: 24

Candidate Starts for Sabertooth_38:

(9, 28535), (Start: 17 @28421 has 9 MA's), (Start: 24 @28373 has 111 MA's), (Start: 30 @28343 has 1 MA's), (37, 28316), (53, 28256), (78, 28139),

Gene: Sagefire_45 Start: 33468, Stop: 33223, Start Num: 29

Candidate Starts for Sagefire_45:

(Start: 29 @33468 has 7 MA's), (Start: 38 @33438 has 22 MA's), (67, 33318), (71, 33303), (73, 33288), (74, 33276), (78, 33246),

Gene: Scamp_38 Start: 28376, Stop: 28110, Start Num: 24

Candidate Starts for Scamp_38:

(9, 28538), (Start: 17 @28424 has 9 MA's), (Start: 24 @28376 has 111 MA's), (Start: 30 @28346 has 1 MA's), (37, 28319), (53, 28259), (78, 28142),

Gene: Scherzo_41 Start: 29158, Stop: 28904, Start Num: 21

Candidate Starts for Scherzo_41:

(Start: 21 @29158 has 4 MA's), (28, 29131), (44, 29065), (70, 28987),

Gene: Scorpia_36 Start: 27003, Stop: 26794, Start Num: 38

Candidate Starts for Scorpia_36:

(Start: 38 @27003 has 22 MA's), (71, 26877), (78, 26823),

Gene: SenorClean_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for SenorClean_38:

(9, 28536), (10, 28506), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Shaka_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Shaka_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Shapes_43 Start: 28322, Stop: 28053, Start Num: 24

Candidate Starts for Shapes_43:

(15, 28382), (Start: 24 @28322 has 111 MA's), (Start: 30 @28292 has 1 MA's), (Start: 36 @28268 has 2 MA's), (42, 28238), (78, 28088),

Gene: SheldonCooper_40 Start: 28677, Stop: 28411, Start Num: 14

Candidate Starts for SheldonCooper_40:

(1, 29541), (2, 29274), (3, 28959), (5, 28851), (6, 28827), (Start: 14 @28677 has 25 MA's), (Start: 30 @28647 has 1 MA's), (37, 28620), (53, 28560), (55, 28545), (78, 28443),

Gene: Shygu2_37 Start: 28206, Stop: 27946, Start Num: 14

Candidate Starts for Shygu2_37:

(Start: 14 @28206 has 25 MA's), (Start: 30 @28176 has 1 MA's), (37, 28149), (53, 28089), (78, 27972),

Gene: Skipitt_37 Start: 28371, Stop: 28105, Start Num: 24

Candidate Starts for Skipitt_37:

(9, 28533), (Start: 17 @28419 has 9 MA's), (Start: 24 @28371 has 111 MA's), (Start: 30 @28341 has 1 MA's), (37, 28314), (53, 28254), (78, 28137),

Gene: Smeadley_35 Start: 26953, Stop: 26675, Start Num: 23

Candidate Starts for Smeadley_35:

(Start: 23 @26953 has 9 MA's), (49, 26848), (57, 26809), (71, 26761), (78, 26707),

Gene: Sparxx_39 Start: 28369, Stop: 28103, Start Num: 24

Candidate Starts for Sparxx_39:

(9, 28531), (Start: 17 @28417 has 9 MA's), (Start: 24 @28369 has 111 MA's), (Start: 30 @28339 has 1 MA's), (37, 28312), (53, 28252), (78, 28135),

Gene: Spino_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Spino_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: SteMason_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for SteMason_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Stink_38 Start: 28677, Stop: 28417, Start Num: 14

Candidate Starts for Stink_38:

(Start: 14 @28677 has 25 MA's), (Start: 30 @28647 has 1 MA's), (37, 28620), (53, 28560), (55, 28545), (78, 28443),

Gene: Sultana_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Sultana_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Swirley_36 Start: 27689, Stop: 27477, Start Num: 38

Candidate Starts for Swirley_36:

(Start: 38 @27689 has 22 MA's), (Start: 41 @27671 has 1 MA's), (71, 27563), (78, 27509),

Gene: SydNat_36 Start: 27980, Stop: 27753, Start Num: 36

Candidate Starts for SydNat_36:

(Start: 36 @27980 has 2 MA's), (Start: 38 @27971 has 22 MA's), (Start: 41 @27953 has 1 MA's), (49, 27926), (71, 27839), (78, 27785),

Gene: Taquarus_38 Start: 28377, Stop: 28111, Start Num: 24

Candidate Starts for Taquarus_38:

(9, 28539), (Start: 17 @28425 has 9 MA's), (Start: 24 @28377 has 111 MA's), (Start: 30 @28347 has 1 MA's), (37, 28320), (53, 28260), (78, 28143),

Gene: Tarynearal_33 Start: 27355, Stop: 27143, Start Num: 38

Candidate Starts for Tarynearal_33:

(Start: 38 @27355 has 22 MA's), (Start: 41 @27337 has 1 MA's), (49, 27310), (71, 27229), (78, 27175),

Gene: Thanksgivukkah_38 Start: 28375, Stop: 28109, Start Num: 24

Candidate Starts for Thanksgivukkah_38:

(9, 28537), (Start: 17 @28423 has 9 MA's), (Start: 24 @28375 has 111 MA's), (Start: 30 @28345 has 1 MA's), (37, 28318), (53, 28258), (78, 28141),

Gene: Theia_32 Start: 27379, Stop: 27167, Start Num: 38

Candidate Starts for Theia_32:

(Start: 38 @27379 has 22 MA's), (Start: 41 @27361 has 1 MA's), (49, 27334), (71, 27253), (78, 27199),

Gene: Thyatira_84 Start: 57092, Stop: 57403, Start Num: 17

Candidate Starts for Thyatira_84:

(Start: 17 @57092 has 9 MA's), (18, 57098), (35, 57191), (37, 57197), (Start: 38 @57203 has 22 MA's), (44, 57239), (53, 57263), (68, 57323), (78, 57380), (79, 57386),

Gene: TinaFeyge_39 Start: 28369, Stop: 28103, Start Num: 24

Candidate Starts for TinaFeyge_39:

(9, 28531), (Start: 17 @28417 has 9 MA's), (Start: 24 @28369 has 111 MA's), (Start: 30 @28339 has 1 MA's), (37, 28312), (53, 28252), (78, 28135),

Gene: Tinybot_37 Start: 28404, Stop: 28138, Start Num: 24

Candidate Starts for Tinybot_37:

(9, 28566), (Start: 17 @28452 has 9 MA's), (Start: 24 @28404 has 111 MA's), (Start: 30 @28374 has 1 MA's), (37, 28347), (53, 28287), (78, 28170),

Gene: TiroTheta9_38 Start: 28371, Stop: 28105, Start Num: 24

Candidate Starts for TiroTheta9_38:

(9, 28533), (Start: 17 @28419 has 9 MA's), (Start: 24 @28371 has 111 MA's), (Start: 30 @28341 has 1 MA's), (37, 28314), (53, 28254), (78, 28137),

Gene: Toaka_39 Start: 28247, Stop: 27996, Start Num: 21

Candidate Starts for Toaka_39:

(Start: 21 @28247 has 4 MA's), (28, 28220), (44, 28154), (70, 28076),

Gene: TroyPia_39 Start: 28372, Stop: 28106, Start Num: 24

Candidate Starts for TroyPia_39:

(9, 28534), (Start: 17 @28420 has 9 MA's), (Start: 24 @28372 has 111 MA's), (Start: 30 @28342 has 1 MA's), (37, 28315), (53, 28255), (78, 28138),

Gene: Twigg_34 Start: 27328, Stop: 27116, Start Num: 38

Candidate Starts for Twigg_34:

(Start: 38 @27328 has 22 MA's), (Start: 41 @27310 has 1 MA's), (49, 27283), (71, 27202), (78, 27148),

Gene: TygerBlood_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for TygerBlood_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Ugenie5_38 Start: 29157, Stop: 28903, Start Num: 21

Candidate Starts for Ugenie5_38:

(Start: 21 @29157 has 4 MA's), (28, 29130), (44, 29064), (70, 28986),

Gene: Ulysses_37 Start: 28054, Stop: 27788, Start Num: 24

Candidate Starts for Ulysses_37:

(9, 28216), (Start: 17 @28102 has 9 MA's), (Start: 24 @28054 has 111 MA's), (Start: 30 @28024 has 1 MA's), (37, 27997), (53, 27937), (78, 27820),

Gene: UnionJack_34 Start: 26537, Stop: 26325, Start Num: 38

Candidate Starts for UnionJack_34:

(Start: 38 @26537 has 22 MA's), (Start: 41 @26519 has 1 MA's), (71, 26411), (78, 26357),

Gene: Wander_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Wander_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Waterfoul_83 Start: 55162, Stop: 55473, Start Num: 17

Candidate Starts for Waterfoul_83:

(4, 54922), (Start: 17 @55162 has 9 MA's), (18, 55168), (35, 55261), (37, 55267), (Start: 38 @55273 has 22 MA's), (44, 55309), (53, 55333), (62, 55372), (78, 55450), (79, 55456),

Gene: Wilbur_38 Start: 28374, Stop: 28108, Start Num: 24

Candidate Starts for Wilbur_38:

(9, 28536), (Start: 17 @28422 has 9 MA's), (Start: 24 @28374 has 111 MA's), (Start: 30 @28344 has 1 MA's), (37, 28317), (53, 28257), (78, 28140),

Gene: Wile_37 Start: 28237, Stop: 27977, Start Num: 14

Candidate Starts for Wile_37:

(Start: 14 @28237 has 25 MA's), (Start: 30 @28210 has 1 MA's), (37, 28183), (53, 28123), (70, 28060), (78, 28003),

Gene: Wizard007_38 Start: 28379, Stop: 28113, Start Num: 24

Candidate Starts for Wizard007_38:

(9, 28541), (Start: 17 @28427 has 9 MA's), (Start: 24 @28379 has 111 MA's), (Start: 30 @28349 has 1 MA's), (37, 28322), (53, 28262), (78, 28145),

Gene: Xena_36 Start: 28203, Stop: 27943, Start Num: 14

Candidate Starts for Xena_36:

(Start: 14 @28203 has 25 MA's), (Start: 30 @28176 has 1 MA's), (37, 28149), (53, 28089), (70, 28026), (78, 27969),

Gene: XianYue_38 Start: 28104, Stop: 27877, Start Num: 26

Candidate Starts for XianYue_38:

(11, 28230), (13, 28218), (Start: 26 @28104 has 5 MA's), (45, 28026), (47, 28020), (78, 27906),

Gene: YoSam321_38 Start: 28371, Stop: 28105, Start Num: 24

Candidate Starts for YoSam321_38:

(9, 28533), (Start: 17 @28419 has 9 MA's), (Start: 24 @28371 has 111 MA's), (Start: 30 @28341 has 1 MA's), (37, 28314), (53, 28254), (78, 28137),

Gene: Zolita_35 Start: 27984, Stop: 27757, Start Num: 36

Candidate Starts for Zolita_35:

(Start: 36 @27984 has 2 MA's), (Start: 38 @27975 has 22 MA's), (Start: 41 @27957 has 1 MA's), (49, 27930), (71, 27843), (78, 27789),