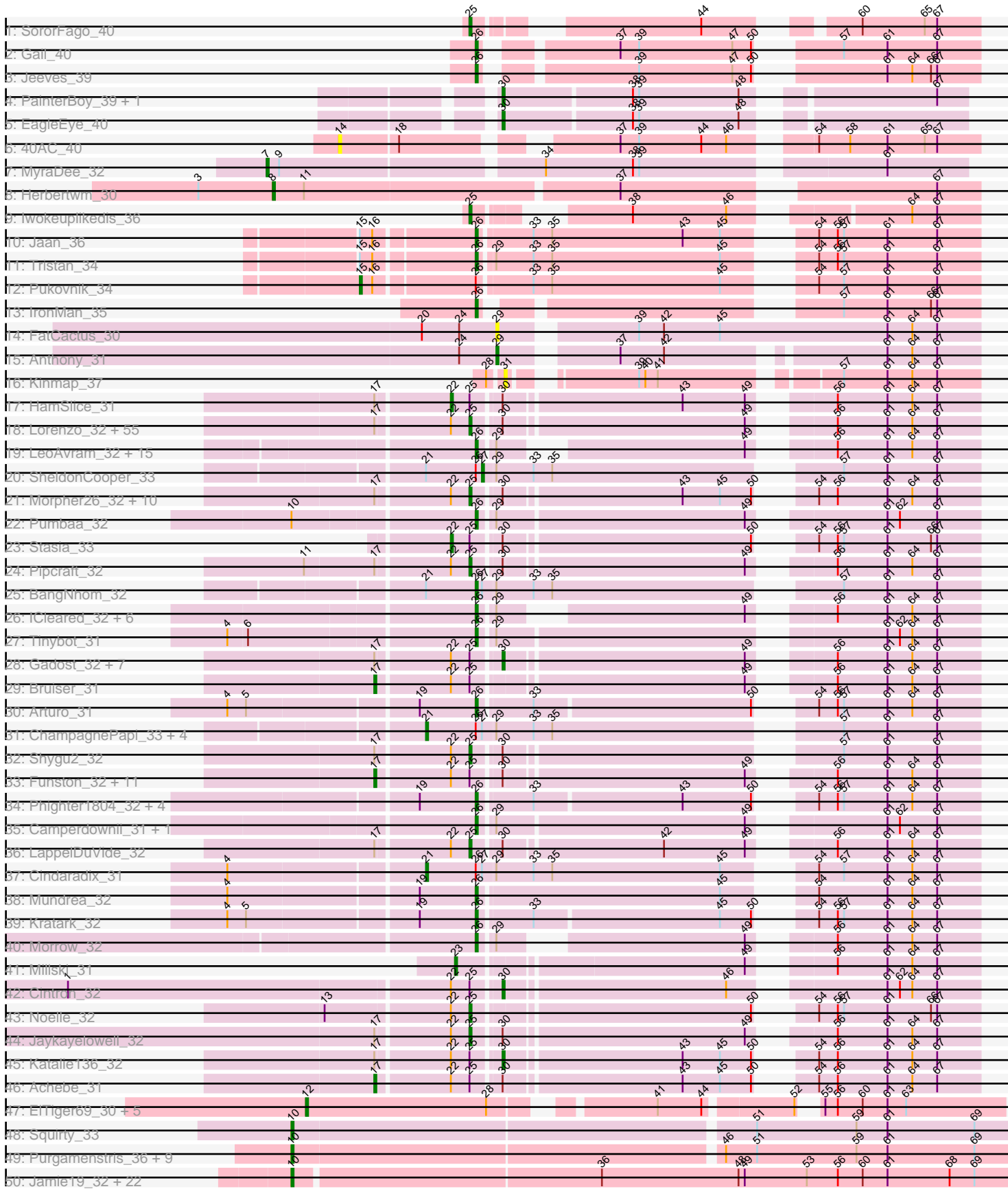


Pham 308085



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 308085 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308085 has 213 members, 7 are drafts.

Phages represented in each track:

- Track 1 : SororFago_40
- Track 2 : Gail_40
- Track 3 : Jeeves_39
- Track 4 : PainterBoy_39, Lucyedi_39
- Track 5 : EagleEye_40
- Track 6 : 40AC_40
- Track 7 : MyraDee_32
- Track 8 : Herbertwm_30
- Track 9 : Iwokeuplikedis_36
- Track 10 : Jaan_36
- Track 11 : Tristan_34
- Track 12 : Pukovnik_34
- Track 13 : IronMan_35
- Track 14 : FatCactus_30
- Track 15 : Anthony_31
- Track 16 : Kinmap_37
- Track 17 : HamSlice_31
- Track 18 : Lorenzo_32, Florean_32, Cocoaberry_32, Bartimeaus_32, Avle17_32, Dhanush_32, Wilbur_32, Wizard007_32, Taquarus_32, Relief_32, Kyee_32, CentreCat_32, Phacado_32, NorthStar_32, Ruin_32, Sabertooth_32, SteMason_32, TygerBlood_32, Albee_32, Baby16_32, Citius_32, Flux_32, NotAPhaseMom_32, Caelakin_32, LittleB_32, Mayonnaise_32, Sultana_32, Chaph_32, SeniorClean_32, Burger_31, Druantia_32, Deano_32, TiroTheta9_32, Holli_32, Blackmoor_32, Houdini22_32, Happiness_32, Mazhar510_32, Scamp_32, OKaNui_33, Eros_32, Romney_32, Connomayer_32, PeterPeter_32, MeeZee_32, Shaka_32, Eapen_32, Huxley_32, RockieBear_31, YoSam321_32, Spino_32, Roosevelt_32, Broseidon_32, Iceman_33, JetBlade_32, Peaches_32
- Track 19 : LeoAvram_32, TroyPia_32, TinaFeyge_32, Maxo_32, Commander_32, BellusTerra_32, Eurydice_32, Nebs_32, Medusa_32, Melvin_32, Sparxx_32, Kamy_32, Polymorphads_32, Abdiel_31, Ohfah_32, Phelipe_32
- Track 20 : SheldonCooper_33
- Track 21 : Morpher26_32, Perplexer_32, Datway_32, PetiteSangsue_32, Wile_32, Backyardigan_32, Xena_32, Bumblebee11_32, AbbysRanger_32, Badger_32, Cici_32
- Track 22 : Pumbaa_32
- Track 23 : Stasia_33
- Track 24 : Pipcraft_32

- Track 25 : BangNhom_32
- Track 26 : ICleared_32, Alberto7_33, LittleGuy_32, Kremtemulon_32, Koreni_31, Phontbonne_32, Nyxis_32
- Track 27 : Tinybot_31
- Track 28 : Gadost_32, Thanksgivukkah_32, Annyong_32, Wander_32, KekoraPapaka_31, Skipitt_32, Kingmustik0402_32, Koan_32
- Track 29 : Bruiser_31
- Track 30 : Arturo_31
- Track 31 : ChampagnePapi_33, Cerulean_33, Obama12_33, Eagle_31, LHTSCC_33
- Track 32 : Shygu2_32
- Track 33 : Funston_32, Nemo27_32, JoongJeon_32, Lemur_32, Eris_31, Lunsford_33, KFPoly_32, Maverick_32, Clarenza_32, BubbleTrouble_32, Palestino_31, Bombshell_32
- Track 34 : Phighter1804_32, Ulysses_31, DirtyDunning_32, Iracema64_33, LochMonster_32
- Track 35 : Camperdownii_31, Rosa24_31
- Track 36 : LappelDuVide_32
- Track 37 : Cinderadix_31
- Track 38 : Mundrea_32
- Track 39 : Kratak_32
- Track 40 : Morrow_32
- Track 41 : Millski_31
- Track 42 : Cintron_32
- Track 43 : Noelle_32
- Track 44 : Jaykayelowell_32
- Track 45 : Katalie136_32
- Track 46 : Achebe_31
- Track 47 : EITiger69_30, Benedict_30, Jabiru_30, Scorpia_31, Airmid_30, Naca_30
- Track 48 : Squirty_33
- Track 49 : Purgamenstris_36, Phrann_36, PhancyPhin_36, Hanako_36, Impisi_38, BabeRuth_37, ShrimpFriedEgg_36, Redi_36, Spinach_36, Nенаe_36
- Track 50 : Jamie19_32, Duplicity_35, Silvafighter_36, ParmesanJohn_35, Phloss_33, Melville_37, Andies_32, Smurph_35, Gex_35, Panchino_31, Shweta_32, MichelleMyBell_33, SpongeBob_32, Chewbacca_36, Schnauzer_35, Pipsqueaks_35, Carcharodon_35, Fulbright_34, Xerxes_35, Magsby_35, Xeno_32, Tapioca_36, Snekmaggedon_32
- Track 51 : Kevin1_34, Butters_36, Rubeelu_36
- Track 52 : Silvy_33, Charlie_33, Philonius_33, Aggie_33, Journey_33, Tortoise12_33, Bosection6_33, EGUunicorn_33, SkinnyPete_30
- Track 53 : Raymond7_30

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

The start number called the most often in the published annotations is 25, it was called in 73 of the 206 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbysRanger_32, Albee_32, Avle17_32, Baby16_32, Backyardigan_32, Badger_32, Bartimeaus_32, Blackmoor_32, Broseidon_32, Bumblebee11_32, Burger_31,

Caelakin_32, CentreCat_32, Chaph_32, Cici_32, Citius_32, Cocoaberry_32, Connomayer_32, Datway_32, Deano_32, Dhanush_32, Druantia_32, Eapen_32, Eros_32, Florean_32, Flux_32, Happiness_32, Holli_32, Houdini22_32, Huxley_32, Iceman_33, Iwokeuplikedis_36, Jaykayelowell_32, JetBlade_32, Kyee_32, LappelDuVide_32, LittleB_32, Lorenzo_32, Mayonnaise_32, Mazhar510_32, MeeZee_32, Morpher26_32, Noelle_32, NorthStar_32, NotAPhaseMom_32, OKaNui_33, Peaches_32, Perplexer_32, PeterPeter_32, PetiteSangsue_32, Phacado_32, Pipcraft_32, Relief_32, RockieBear_31, Romney_32, Roosevelt_32, Ruin_32, Sabertooth_32, Scamp_32, SenorClean_32, Shaka_32, Shygu2_32, SororFago_40, Spino_32, SteMason_32, Sultana_32, Taquarus_32, TiroTheta9_32, TygerBlood_32, Wilbur_32, Wile_32, Wizard007_32, Xena_32, YoSam321_32,

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

- Achebe_31, Annyong_32, Bombshell_32, Bruiser_31, BubbleTrouble_32, Cintron_32, Clarenza_32, Eris_31, Funston_32, Gadost_32, HamSlice_31, JoongJeon_32, KFPoly_32, Katalie136_32, KekoraPapaka_31, Kingmustik0402_32, Koan_32, Lemur_32, Lunsford_33, Maverick_32, Nemo27_32, Palestino_31, Skipitt_32, Stasia_33, Thanksgivukkah_32, Wander_32,

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

- 40AC_40, Abdiel_31, Aggie_33, Airmid_30, Alberto7_33, Andies_32, Anthony_31, Arturo_31, BabeRuth_37, BangNhom_32, BellusTerra_32, Benedict_30, Bosection6_33, Butters_36, Camperdownii_31, Carcharodon_35, Cerulean_33, ChampagnePapi_33, Charlie_33, Chewbacca_36, Cindaradix_31, Commander_32, DirtyDunning_32, Duplicity_35, EGUnicorn_33, EagleEye_40, Eagle_31, EITiger69_30, Eurydice_32, FatCactus_30, Fulbright_34, Gail_40, Gex_35, Hanako_36, Herbertwm_30, ICleared_32, Impisi_38, Iracema64_33, IronMan_35, Jaan_36, Jabiru_30, Jamie19_32, Jeeves_39, Journey_33, Kampy_32, Kevin1_34, Kinmap_37, Koreni_31, Kratark_32, Kremtemulon_32, LHTSCC_33, LeoAvram_32, LittleGuy_32, LochMonster_32, Lucyedi_39, Magsby_35, Maxo_32, Medusa_32, Melville_37, Melvin_32, MichelleMyBell_33, Millski_31, Morrow_32, Mundrea_32, MyraDee_32, Naca_30, Nebs_32, Nenae_36, Nyxis_32, Obama12_33, Ohfah_32, PainterBoy_39, Panchino_31, Parmesanjohn_35, PhancyPhin_36, Phelipe_32, Phighter1804_32, Philonius_33, Phloss_33, Phontbonne_32, Phrann_36, Pipsqueaks_35, Polymorphads_32, Pukovnik_34, Pumbaa_32, Purgamenstris_36, Raymond7_30, Redi_36, Rosa24_31, Rubeelu_36, Schnauzer_35, Scorpia_31, SheldonCooper_33, ShrimpFriedEgg_36, Shweta_32, Silvafighter_36, Silvy_33, SkinnyPete_30, Smurph_35, Snekmaggedon_32, Sparxx_32, Spinach_36, SpongeBob_32, Squirty_33, Tapioca_36, TinaFeyge_32, Tinybot_31, Tortoise12_33, Tristan_34, TroyPia_32, Ulysses_31, Xeno_32, Xerxes_35,

Summary by start number:

Start 7:

- Found in 1 of 213 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 206
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MyraDee_32 (A18),

Start 8:

- Found in 1 of 213 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 206
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Herbertwm_30 (A2),

Start 10:

- Found in 48 of 213 (22.5%) of genes in pham
- Manual Annotations of this start: 46 of 206
- Called 97.9% of time when present
- Phage (with cluster) where this start called: Aggie_33 (N), Andies_32 (N), BabeRuth_37 (N), Bosection6_33 (N), Butters_36 (N), Carcharodon_35 (N), Charlie_33 (N), Chewbacca_36 (N), Duplicity_35 (N), EGUnicorn_33 (N), Fulbright_34 (N), Gex_35 (N), Hanako_36 (N), Impisi_38 (N), Jamie19_32 (N), Journey_33 (N), Kevin1_34 (N), Magsby_35 (N), Melville_37 (N), MichelleMyBell_33 (N), Nенаe_36 (N), Panchino_31 (N), Parmesanjohn_35 (N), PhancyPhin_36 (N), Philonius_33 (N), Phloss_33 (N), Phrann_36 (N), Pipsqueaks_35 (N), Purgamenstris_36 (N), Raymond7_30 (N), Redi_36 (N), Rubeelu_36 (N), Schnauzer_35 (N), ShrimpFriedEgg_36 (N), Shweta_32 (N), Silvafighter_36 (N), Silvy_33 (N), SkinnyPete_30 (N), Smurph_35 (N), Snekmaggedon_32 (N), Spinach_36 (N), SpongeBob_32 (N), Squirty_33 (F3), Tapioca_36 (N), Tortoise12_33 (N), Xeno_32 (N), Xerxes_35 (N),

Start 12:

- Found in 6 of 213 (2.8%) of genes in pham
- Manual Annotations of this start: 6 of 206
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Airmid_30 (A5), Benedict_30 (A5), EITiger69_30 (A5), Jabiru_30 (A5), Naca_30 (A5), Scorpia_31 (A5),

Start 14:

- Found in 1 of 213 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 40AC_40 (A17),

Start 15:

- Found in 3 of 213 (1.4%) of genes in pham
- Manual Annotations of this start: 1 of 206
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Pukovnik_34 (A2),

Start 17:

- Found in 95 of 213 (44.6%) of genes in pham
- Manual Annotations of this start: 14 of 206
- Called 14.7% of time when present
- Phage (with cluster) where this start called: Achebe_31 (A4), Bombshell_32 (A4), Bruiser_31 (A4), BubbleTrouble_32 (A4), Clarenza_32 (A4), Eris_31 (A4), Funston_32 (A4), JoongJeon_32 (A4), KFPoly_32 (A4), Lemur_32 (A4), Lunsford_33 (A4), Maverick_32 (A4), Nemo27_32 (A4), Palestino_31 (A4),

Start 21:

- Found in 8 of 213 (3.8%) of genes in pham
- Manual Annotations of this start: 6 of 206
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Cerulean_33 (A4), ChampagnePapi_33 (A4), Cindaradix_31 (A4), Eagle_31 (A4), LHTSCC_33 (A4), Obama12_33 (A4),

Start 22:

- Found in 98 of 213 (46.0%) of genes in pham
- Manual Annotations of this start: 2 of 206
- Called 2.0% of time when present
- Phage (with cluster) where this start called: HamSlice_31 (A4), Stasia_33 (A4),

Start 23:

- Found in 1 of 213 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 206
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Millski_31 (A4),

Start 25:

- Found in 100 of 213 (46.9%) of genes in pham
- Manual Annotations of this start: 73 of 206
- Called 74.0% of time when present
- Phage (with cluster) where this start called: AbbysRanger_32 (A4), Albee_32 (A4), Avle17_32 (A4), Baby16_32 (A4), Backyardigan_32 (A4), Badger_32 (A4), Bartimeaus_32 (A4), Blackmoor_32 (A4), Broseidon_32 (A4), Bumblebee11_32 (A4), Burger_31 (A4), Caelakin_32 (A4), CentreCat_32 (A4), Chaph_32 (A4), Cici_32 (A4), Citius_32 (A4), Cocoaberry_32 (A4), Connomayer_32 (A4), Datway_32 (A4), Deano_32 (A4), Dhanush_32 (A4), Druantia_32 (A4), Eapen_32 (A4), Eros_32 (A4), Florean_32 (A4), Flux_32 (A4), Happiness_32 (A4), Holli_32 (A4), Houdini22_32 (A4), Huxley_32 (A4), Iceman_33 (A4), Iwokeuplikedis_36 (A2), Jaykayelowell_32 (A4), JetBlade_32 (A4), Kyee_32 (A4), LappelDuVide_32 (A4), LittleB_32 (A4), Lorenzo_32 (A4), Mayonnaise_32 (A4), Mazhar510_32 (A4), MeeZee_32 (A4), Morpher26_32 (A4), Noelle_32 (A4), NorthStar_32 (A4), NotAPhaseMom_32 (A4), OKaNui_33 (A4), Peaches_32 (A4), Perplexer_32 (A4), PeterPeter_32 (A4), PetiteSangsue_32 (A4), Phacado_32 (A4), Pipcraft_32 (A4), Relief_32 (A4), RockieBear_31 (A4), Romney_32 (A4), Roosevelt_32 (A4), Ruin_32 (A4), Sabertooth_32 (A4), Scamp_32 (A4), SenorClean_32 (A4), Shaka_32 (A4), Shygu2_32 (A4), SororFago_40 (A14), Spino_32 (A4), SteMason_32 (A4), Sultana_32 (A4), Taquarus_32 (A4), TiroTheta9_32 (A4), TygerBlood_32 (A4), Wilbur_32 (A4), Wile_32 (A4), Wizard007_32 (A4), Xena_32 (A4), YoSam321_32 (A4),

Start 26:

- Found in 50 of 213 (23.5%) of genes in pham
- Manual Annotations of this start: 41 of 206
- Called 84.0% of time when present
- Phage (with cluster) where this start called: Abdiel_31 (A4), Alberto7_33 (A4), Arturo_31 (A4), BangNhom_32 (A4), BellusTerra_32 (A4), Camperdownii_31 (A4), Commander_32 (A4), DirtyDunning_32 (A4), Eurydice_32 (A4), Gail_40 (A14), ICleared_32 (A4), Iracema64_33 (A4), IronMan_35 (A2), Jaan_36 (A2), Jeeves_39 (A14), Kamy_32 (A4), Koreni_31 (A4), Kratark_32 (A4), Kremtemulon_32 (A4), LeoAvram_32 (A4), LittleGuy_32 (A4), LochMonster_32 (A4), Maxo_32 (A4), Medusa_32 (A4), Melvin_32 (A4), Morrow_32 (A4), Mundrea_32 (A4), Nebs_32 (A4), Nyxis_32 (A4), Ohfah_32 (A4), Phelipe_32 (A4), Phighter1804_32 (A4), Phontbonne_32 (A4), Polymorphads_32 (A4), Pumbaa_32 (A4), Rosa24_31 (A4), Sparxx_32 (A4), TinaFeyge_32 (A4), Tinybot_31 (A4), Tristan_34 (A2), TroyPia_32 (A4), Ulysses_31 (A4),

Start 27:

- Found in 8 of 213 (3.8%) of genes in pham
- Manual Annotations of this start: 1 of 206
- Called 12.5% of time when present
- Phage (with cluster) where this start called: SheldonCooper_33 (A4),

Start 29:

- Found in 39 of 213 (18.3%) of genes in pham
- Manual Annotations of this start: 1 of 206
- Called 5.1% of time when present
- Phage (with cluster) where this start called: Anthony_31 (A20), FatCactus_30 (A20),

Start 30:

- Found in 99 of 213 (46.5%) of genes in pham
- Manual Annotations of this start: 12 of 206
- Called 13.1% of time when present
- Phage (with cluster) where this start called: Annyong_32 (A4), Cintron_32 (A4), EagleEye_40 (A16), Gadost_32 (A4), Katalie136_32 (A4), KekoraPapaka_31 (A4), Kingmustik0402_32 (A4), Koan_32 (A4), Lucyedi_39 (A16), PainterBoy_39 (A16), Skipitt_32 (A4), Thanksgivukkah_32 (A4), Wander_32 (A4),

Start 31:

- Found in 1 of 213 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kinmap_37 (A21),

Summary by clusters:

There are 11 clusters represented in this pham: A20, A14, A17, A16, A21, F3, A18, N, A2, A5, A4,

Info for manual annotations of cluster A14:

- Start number 25 was manually annotated 1 time for cluster A14.
- Start number 26 was manually annotated 2 times for cluster A14.

Info for manual annotations of cluster A16:

- Start number 30 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A18:

- Start number 7 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A2:

- Start number 8 was manually annotated 1 time for cluster A2.
- Start number 15 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 3 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 29 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A4:

- Start number 17 was manually annotated 14 times for cluster A4.
- Start number 21 was manually annotated 6 times for cluster A4.
- Start number 22 was manually annotated 2 times for cluster A4.
- Start number 23 was manually annotated 1 time for cluster A4.
- Start number 25 was manually annotated 71 times for cluster A4.
- Start number 26 was manually annotated 36 times for cluster A4.
- Start number 27 was manually annotated 1 time for cluster A4.
- Start number 30 was manually annotated 9 times for cluster A4.

Info for manual annotations of cluster A5:

- Start number 12 was manually annotated 6 times for cluster A5.

Info for manual annotations of cluster F3:

- Start number 10 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster N:

- Start number 10 was manually annotated 45 times for cluster N.

Gene Information:

Gene: 40AC_40 Start: 29229, Stop: 29498, Start Num: 14

Candidate Starts for 40AC_40:

(14, 29229), (18, 29256), (37, 29340), (39, 29349), (44, 29379), (46, 29391), (54, 29421), (58, 29436), (61, 29454), (65, 29472), (67, 29478),

Gene: AbbysRanger_32 Start: 25121, Stop: 24906, Start Num: 25

Candidate Starts for AbbysRanger_32:

(Start: 17 @25163 has 14 MA's), (Start: 22 @25130 has 2 MA's), (Start: 25 @25121 has 73 MA's), (Start: 30 @25109 has 12 MA's), (43, 25028), (45, 25010), (50, 24995), (54, 24983), (56, 24974), (61, 24950), (64, 24938), (67, 24926),

Gene: Abdiel_31 Start: 25079, Stop: 24879, Start Num: 26

Candidate Starts for Abdiel_31:

(Start: 26 @25079 has 41 MA's), (Start: 29 @25073 has 1 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Achebe_31 Start: 25146, Stop: 24889, Start Num: 17

Candidate Starts for Achebe_31:

(Start: 17 @25146 has 14 MA's), (Start: 22 @25113 has 2 MA's), (Start: 25 @25104 has 73 MA's), (Start: 30 @25092 has 12 MA's), (43, 25011), (45, 24993), (50, 24978), (54, 24966), (56, 24957), (61, 24933), (64, 24921), (67, 24909),

Gene: Aggie_33 Start: 26384, Stop: 26043, Start Num: 10

Candidate Starts for Aggie_33:

(Start: 10 @26384 has 46 MA's), (36, 26240), (48, 26174), (49, 26171), (56, 26126), (60, 26114), (61, 26102), (63, 26093), (68, 26072), (69, 26060),

Gene: Airmid_30 Start: 23936, Stop: 23637, Start Num: 12

Candidate Starts for Airmid_30:

(Start: 12 @23936 has 6 MA's), (28, 23849), (41, 23786), (44, 23765), (52, 23726), (55, 23723), (56, 23717), (60, 23705), (61, 23693), (63, 23684),

Gene: Albee_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Albee_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Alberto7_33 Start: 25381, Stop: 25181, Start Num: 26

Candidate Starts for Alberto7_33:

(Start: 26 @25381 has 41 MA's), (Start: 29 @25375 has 1 MA's), (49, 25276), (56, 25249), (61, 25225), (64, 25213), (67, 25201),

Gene: Andies_32 Start: 26902, Stop: 26561, Start Num: 10

Candidate Starts for Andies_32:

(Start: 10 @26902 has 46 MA's), (36, 26758), (48, 26692), (49, 26689), (53, 26659), (56, 26644), (60, 26632), (61, 26620), (68, 26590), (69, 26578),

Gene: Annyong_32 Start: 25086, Stop: 24880, Start Num: 30

Candidate Starts for Annyong_32:

(Start: 17 @25140 has 14 MA's), (Start: 22 @25107 has 2 MA's), (Start: 25 @25098 has 73 MA's), (Start: 30 @25086 has 12 MA's), (49, 24975), (56, 24948), (61, 24924), (64, 24912), (67, 24900),

Gene: Anthony_31 Start: 23189, Stop: 22983, Start Num: 29

Candidate Starts for Anthony_31:

(24, 23207), (Start: 29 @23189 has 1 MA's), (37, 23141), (42, 23120), (61, 23027), (64, 23015), (67, 23003),

Gene: Arturo_31 Start: 25198, Stop: 24983, Start Num: 26

Candidate Starts for Arturo_31:

(4, 25312), (5, 25303), (19, 25225), (Start: 26 @25198 has 41 MA's), (33, 25174), (50, 25072), (54, 25060), (56, 25051), (57, 25048), (61, 25027), (64, 25015), (67, 25003),

Gene: Avle17_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Avle17_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: BabeRuth_37 Start: 28019, Stop: 27681, Start Num: 10

Candidate Starts for BabeRuth_37:

(Start: 10 @28019 has 46 MA's), (46, 27818), (51, 27803), (59, 27755), (61, 27740), (69, 27698),

Gene: Baby16_32 Start: 25108, Stop: 24890, Start Num: 25

Candidate Starts for Baby16_32:

(Start: 17 @25150 has 14 MA's), (Start: 22 @25117 has 2 MA's), (Start: 25 @25108 has 73 MA's), (Start: 30 @25096 has 12 MA's), (49, 24985), (56, 24958), (61, 24934), (64, 24922), (67, 24910),

Gene: Backyardigan_32 Start: 25116, Stop: 24901, Start Num: 25

Candidate Starts for Backyardigan_32:

(Start: 17 @25158 has 14 MA's), (Start: 22 @25125 has 2 MA's), (Start: 25 @25116 has 73 MA's), (Start: 30 @25104 has 12 MA's), (43, 25023), (45, 25005), (50, 24990), (54, 24978), (56, 24969), (61, 24945), (64, 24933), (67, 24921),

Gene: Badger_32 Start: 25105, Stop: 24890, Start Num: 25

Candidate Starts for Badger_32:

(Start: 17 @25147 has 14 MA's), (Start: 22 @25114 has 2 MA's), (Start: 25 @25105 has 73 MA's), (Start: 30 @25093 has 12 MA's), (43, 25012), (45, 24994), (50, 24979), (54, 24967), (56, 24958), (61, 24934), (64, 24922), (67, 24910),

Gene: BangNhom_32 Start: 25416, Stop: 25195, Start Num: 26

Candidate Starts for BangNhom_32:

(Start: 21 @25440 has 6 MA's), (Start: 26 @25416 has 41 MA's), (Start: 27 @25413 has 1 MA's), (Start: 29 @25407 has 1 MA's), (33, 25389), (35, 25380), (57, 25260), (61, 25239), (67, 25215),

Gene: Bartimeaus_32 Start: 25099, Stop: 24881, Start Num: 25

Candidate Starts for Bartimeaus_32:

(Start: 17 @25141 has 14 MA's), (Start: 22 @25108 has 2 MA's), (Start: 25 @25099 has 73 MA's), (Start: 30 @25087 has 12 MA's), (49, 24976), (56, 24949), (61, 24925), (64, 24913), (67, 24901),

Gene: BellusTerra_32 Start: 25078, Stop: 24878, Start Num: 26

Candidate Starts for BellusTerra_32:

(Start: 26 @25078 has 41 MA's), (Start: 29 @25072 has 1 MA's), (49, 24973), (56, 24946), (61, 24922), (64, 24910), (67, 24898),

Gene: Benedict_30 Start: 23939, Stop: 23640, Start Num: 12

Candidate Starts for Benedict_30:

(Start: 12 @23939 has 6 MA's), (28, 23852), (41, 23789), (44, 23768), (52, 23729), (55, 23726), (56, 23720), (60, 23708), (61, 23696), (63, 23687),

Gene: Blackmoor_32 Start: 25099, Stop: 24881, Start Num: 25

Candidate Starts for Blackmoor_32:

(Start: 17 @25141 has 14 MA's), (Start: 22 @25108 has 2 MA's), (Start: 25 @25099 has 73 MA's), (Start: 30 @25087 has 12 MA's), (49, 24976), (56, 24949), (61, 24925), (64, 24913), (67, 24901),

Gene: Bombshell_32 Start: 25139, Stop: 24879, Start Num: 17

Candidate Starts for Bombshell_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Bosection6_33 Start: 26405, Stop: 26064, Start Num: 10

Candidate Starts for Bosection6_33:

(Start: 10 @26405 has 46 MA's), (36, 26261), (48, 26195), (49, 26192), (56, 26147), (60, 26135), (61, 26123), (63, 26114), (68, 26093), (69, 26081),

Gene: Broseidon_32 Start: 25099, Stop: 24881, Start Num: 25

Candidate Starts for Broseidon_32:

(Start: 17 @25141 has 14 MA's), (Start: 22 @25108 has 2 MA's), (Start: 25 @25099 has 73 MA's), (Start: 30 @25087 has 12 MA's), (49, 24976), (56, 24949), (61, 24925), (64, 24913), (67, 24901),

Gene: Bruiser_31 Start: 25139, Stop: 24879, Start Num: 17

Candidate Starts for Bruiser_31:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: BubbleTrouble_32 Start: 25139, Stop: 24879, Start Num: 17

Candidate Starts for BubbleTrouble_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Bumblebee11_32 Start: 25107, Stop: 24892, Start Num: 25

Candidate Starts for Bumblebee11_32:

(Start: 17 @25149 has 14 MA's), (Start: 22 @25116 has 2 MA's), (Start: 25 @25107 has 73 MA's),
(Start: 30 @25095 has 12 MA's), (43, 25014), (45, 24996), (50, 24981), (54, 24969), (56, 24960), (61,
24936), (64, 24924), (67, 24912),

Gene: Burger_31 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Burger_31:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Butters_36 Start: 28446, Stop: 28135, Start Num: 10

Candidate Starts for Butters_36:

(Start: 10 @28446 has 46 MA's), (39, 28296), (44, 28266), (50, 28248), (52, 28227), (55, 28224), (57,
28215), (59, 28209), (61, 28194), (68, 28164), (69, 28152),

Gene: Caelakin_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Caelakin_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Camperdownii_31 Start: 24716, Stop: 24498, Start Num: 26

Candidate Starts for Camperdownii_31:

(Start: 26 @24716 has 41 MA's), (Start: 29 @24710 has 1 MA's), (49, 24593), (61, 24542), (62, 24536),
(67, 24518),

Gene: Carcharodon_35 Start: 27713, Stop: 27372, Start Num: 10

Candidate Starts for Carcharodon_35:

(Start: 10 @27713 has 46 MA's), (36, 27569), (48, 27503), (49, 27500), (53, 27470), (56, 27455), (60,
27443), (61, 27431), (68, 27401), (69, 27389),

Gene: CentreCat_32 Start: 25100, Stop: 24882, Start Num: 25

Candidate Starts for CentreCat_32:

(Start: 17 @25142 has 14 MA's), (Start: 22 @25109 has 2 MA's), (Start: 25 @25100 has 73 MA's),
(Start: 30 @25088 has 12 MA's), (49, 24977), (56, 24950), (61, 24926), (64, 24914), (67, 24902),

Gene: Cerulean_33 Start: 25441, Stop: 25196, Start Num: 21

Candidate Starts for Cerulean_33:

(Start: 21 @25441 has 6 MA's), (Start: 26 @25417 has 41 MA's), (Start: 27 @25414 has 1 MA's),
(Start: 29 @25408 has 1 MA's), (33, 25390), (35, 25381), (57, 25261), (61, 25240), (67, 25216),

Gene: ChampagnePapi_33 Start: 25440, Stop: 25195, Start Num: 21

Candidate Starts for ChampagnePapi_33:

(Start: 21 @25440 has 6 MA's), (Start: 26 @25416 has 41 MA's), (Start: 27 @25413 has 1 MA's),
(Start: 29 @25407 has 1 MA's), (33, 25389), (35, 25380), (57, 25260), (61, 25239), (67, 25215),

Gene: Chaph_32 Start: 25108, Stop: 24890, Start Num: 25

Candidate Starts for Chaph_32:

(Start: 17 @25150 has 14 MA's), (Start: 22 @25117 has 2 MA's), (Start: 25 @25108 has 73 MA's),
(Start: 30 @25096 has 12 MA's), (49, 24985), (56, 24958), (61, 24934), (64, 24922), (67, 24910),

Gene: Charlie_33 Start: 26404, Stop: 26063, Start Num: 10

Candidate Starts for Charlie_33:

(Start: 10 @26404 has 46 MA's), (36, 26260), (48, 26194), (49, 26191), (56, 26146), (60, 26134), (61, 26122), (63, 26113), (68, 26092), (69, 26080),

Gene: Chewbacca_36 Start: 27713, Stop: 27372, Start Num: 10

Candidate Starts for Chewbacca_36:

(Start: 10 @27713 has 46 MA's), (36, 27569), (48, 27503), (49, 27500), (53, 27470), (56, 27455), (60, 27443), (61, 27431), (68, 27401), (69, 27389),

Gene: Cici_32 Start: 25101, Stop: 24886, Start Num: 25

Candidate Starts for Cici_32:

(Start: 17 @25143 has 14 MA's), (Start: 22 @25110 has 2 MA's), (Start: 25 @25101 has 73 MA's), (Start: 30 @25089 has 12 MA's), (43, 25008), (45, 24990), (50, 24975), (54, 24963), (56, 24954), (61, 24930), (64, 24918), (67, 24906),

Gene: Cindaradix_31 Start: 24847, Stop: 24602, Start Num: 21

Candidate Starts for Cindaradix_31:

(4, 24937), (Start: 21 @24847 has 6 MA's), (Start: 26 @24823 has 41 MA's), (Start: 27 @24820 has 1 MA's), (Start: 29 @24814 has 1 MA's), (33, 24796), (35, 24787), (45, 24706), (54, 24679), (57, 24667), (61, 24646), (64, 24634), (67, 24622),

Gene: Cintron_32 Start: 25133, Stop: 24927, Start Num: 30

Candidate Starts for Cintron_32:

(1, 25334), (Start: 22 @25154 has 2 MA's), (Start: 25 @25145 has 73 MA's), (Start: 30 @25133 has 12 MA's), (46, 25031), (61, 24971), (62, 24965), (64, 24959), (67, 24947),

Gene: Citius_32 Start: 25112, Stop: 24894, Start Num: 25

Candidate Starts for Citius_32:

(Start: 17 @25154 has 14 MA's), (Start: 22 @25121 has 2 MA's), (Start: 25 @25112 has 73 MA's), (Start: 30 @25100 has 12 MA's), (49, 24989), (56, 24962), (61, 24938), (64, 24926), (67, 24914),

Gene: Clarenza_32 Start: 25136, Stop: 24876, Start Num: 17

Candidate Starts for Clarenza_32:

(Start: 17 @25136 has 14 MA's), (Start: 22 @25103 has 2 MA's), (Start: 25 @25094 has 73 MA's), (Start: 30 @25082 has 12 MA's), (49, 24971), (56, 24944), (61, 24920), (64, 24908), (67, 24896),

Gene: Cocoaberry_32 Start: 25101, Stop: 24883, Start Num: 25

Candidate Starts for Cocoaberry_32:

(Start: 17 @25143 has 14 MA's), (Start: 22 @25110 has 2 MA's), (Start: 25 @25101 has 73 MA's), (Start: 30 @25089 has 12 MA's), (49, 24978), (56, 24951), (61, 24927), (64, 24915), (67, 24903),

Gene: Commander_32 Start: 25079, Stop: 24879, Start Num: 26

Candidate Starts for Commander_32:

(Start: 26 @25079 has 41 MA's), (Start: 29 @25073 has 1 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Connomayer_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Connomayer_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Datway_32 Start: 25116, Stop: 24901, Start Num: 25

Candidate Starts for Datway_32:

(Start: 17 @25158 has 14 MA's), (Start: 22 @25125 has 2 MA's), (Start: 25 @25116 has 73 MA's), (Start: 30 @25104 has 12 MA's), (43, 25023), (45, 25005), (50, 24990), (54, 24978), (56, 24969), (61, 24945), (64, 24933), (67, 24921),

Gene: Deano_32 Start: 25105, Stop: 24887, Start Num: 25

Candidate Starts for Deano_32:

(Start: 17 @25147 has 14 MA's), (Start: 22 @25114 has 2 MA's), (Start: 25 @25105 has 73 MA's), (Start: 30 @25093 has 12 MA's), (49, 24982), (56, 24955), (61, 24931), (64, 24919), (67, 24907),

Gene: Dhanush_32 Start: 25100, Stop: 24882, Start Num: 25

Candidate Starts for Dhanush_32:

(Start: 17 @25142 has 14 MA's), (Start: 22 @25109 has 2 MA's), (Start: 25 @25100 has 73 MA's), (Start: 30 @25088 has 12 MA's), (49, 24977), (56, 24950), (61, 24926), (64, 24914), (67, 24902),

Gene: DirtyDunning_32 Start: 25082, Stop: 24867, Start Num: 26

Candidate Starts for DirtyDunning_32:

(19, 25109), (Start: 26 @25082 has 41 MA's), (33, 25058), (43, 24989), (50, 24956), (54, 24944), (56, 24935), (57, 24932), (61, 24911), (64, 24899), (67, 24887),

Gene: Druantia_32 Start: 25100, Stop: 24882, Start Num: 25

Candidate Starts for Druantia_32:

(Start: 17 @25142 has 14 MA's), (Start: 22 @25109 has 2 MA's), (Start: 25 @25100 has 73 MA's), (Start: 30 @25088 has 12 MA's), (49, 24977), (56, 24950), (61, 24926), (64, 24914), (67, 24902),

Gene: Duplicity_35 Start: 27722, Stop: 27381, Start Num: 10

Candidate Starts for Duplicity_35:

(Start: 10 @27722 has 46 MA's), (36, 27578), (48, 27512), (49, 27509), (53, 27479), (56, 27464), (60, 27452), (61, 27440), (68, 27410), (69, 27398),

Gene: EGUunicorn_33 Start: 26404, Stop: 26063, Start Num: 10

Candidate Starts for EGUunicorn_33:

(Start: 10 @26404 has 46 MA's), (36, 26260), (48, 26194), (49, 26191), (56, 26146), (60, 26134), (61, 26122), (63, 26113), (68, 26092), (69, 26080),

Gene: Eagle_31 Start: 25126, Stop: 24881, Start Num: 21

Candidate Starts for Eagle_31:

(Start: 21 @25126 has 6 MA's), (Start: 26 @25102 has 41 MA's), (Start: 27 @25099 has 1 MA's), (Start: 29 @25093 has 1 MA's), (33, 25075), (35, 25066), (57, 24946), (61, 24925), (67, 24901),

Gene: EagleEye_40 Start: 27446, Stop: 27649, Start Num: 30

Candidate Starts for EagleEye_40:

(Start: 30 @27446 has 12 MA's), (38, 27506), (39, 27509), (48, 27557),

Gene: Eapen_32 Start: 25095, Stop: 24877, Start Num: 25

Candidate Starts for Eapen_32:

(Start: 17 @25137 has 14 MA's), (Start: 22 @25104 has 2 MA's), (Start: 25 @25095 has 73 MA's), (Start: 30 @25083 has 12 MA's), (49, 24972), (56, 24945), (61, 24921), (64, 24909), (67, 24897),

Gene: EITiger69_30 Start: 23937, Stop: 23638, Start Num: 12

Candidate Starts for EITiger69_30:

(Start: 12 @23937 has 6 MA's), (28, 23850), (41, 23787), (44, 23766), (52, 23727), (55, 23724), (56, 23718), (60, 23706), (61, 23694), (63, 23685),

Gene: Eris_31 Start: 25139, Stop: 24879, Start Num: 17

Candidate Starts for Eris_31:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Eros_32 Start: 25099, Stop: 24881, Start Num: 25

Candidate Starts for Eros_32:

(Start: 17 @25141 has 14 MA's), (Start: 22 @25108 has 2 MA's), (Start: 25 @25099 has 73 MA's), (Start: 30 @25087 has 12 MA's), (49, 24976), (56, 24949), (61, 24925), (64, 24913), (67, 24901),

Gene: Eurydice_32 Start: 25077, Stop: 24877, Start Num: 26

Candidate Starts for Eurydice_32:

(Start: 26 @25077 has 41 MA's), (Start: 29 @25071 has 1 MA's), (49, 24972), (56, 24945), (61, 24921), (64, 24909), (67, 24897),

Gene: FatCactus_30 Start: 23118, Stop: 22897, Start Num: 29

Candidate Starts for FatCactus_30:

(20, 23154), (24, 23136), (Start: 29 @23118 has 1 MA's), (39, 23061), (42, 23049), (45, 23022), (61, 22941), (64, 22929), (67, 22917),

Gene: Florean_32 Start: 25096, Stop: 24878, Start Num: 25

Candidate Starts for Florean_32:

(Start: 17 @25138 has 14 MA's), (Start: 22 @25105 has 2 MA's), (Start: 25 @25096 has 73 MA's), (Start: 30 @25084 has 12 MA's), (49, 24973), (56, 24946), (61, 24922), (64, 24910), (67, 24898),

Gene: Flux_32 Start: 25099, Stop: 24881, Start Num: 25

Candidate Starts for Flux_32:

(Start: 17 @25141 has 14 MA's), (Start: 22 @25108 has 2 MA's), (Start: 25 @25099 has 73 MA's), (Start: 30 @25087 has 12 MA's), (49, 24976), (56, 24949), (61, 24925), (64, 24913), (67, 24901),

Gene: Fulbright_34 Start: 26802, Stop: 26461, Start Num: 10

Candidate Starts for Fulbright_34:

(Start: 10 @26802 has 46 MA's), (36, 26658), (48, 26592), (49, 26589), (53, 26559), (56, 26544), (60, 26532), (61, 26520), (68, 26490), (69, 26478),

Gene: Funston_32 Start: 25139, Stop: 24879, Start Num: 17

Candidate Starts for Funston_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Gadost_32 Start: 25089, Stop: 24883, Start Num: 30

Candidate Starts for Gadost_32:

(Start: 17 @25143 has 14 MA's), (Start: 22 @25110 has 2 MA's), (Start: 25 @25101 has 73 MA's), (Start: 30 @25089 has 12 MA's), (49, 24978), (56, 24951), (61, 24927), (64, 24915), (67, 24903),

Gene: Gail_40 Start: 28919, Stop: 29125, Start Num: 26

Candidate Starts for Gail_40:

(Start: 26 @28919 has 41 MA's), (37, 28973), (39, 28982), (47, 29027), (50, 29036), (57, 29060), (61, 29081), (67, 29105),

Gene: Gex_35 Start: 27729, Stop: 27388, Start Num: 10

Candidate Starts for Gex_35:

(Start: 10 @27729 has 46 MA's), (36, 27585), (48, 27519), (49, 27516), (53, 27486), (56, 27471), (60, 27459), (61, 27447), (68, 27417), (69, 27405),

Gene: HamSlice_31 Start: 25104, Stop: 24877, Start Num: 22

Candidate Starts for HamSlice_31:

(Start: 17 @25137 has 14 MA's), (Start: 22 @25104 has 2 MA's), (Start: 25 @25095 has 73 MA's), (Start: 30 @25083 has 12 MA's), (43, 25002), (49, 24972), (56, 24945), (61, 24921), (64, 24909), (67, 24897),

Gene: Hanako_36 Start: 28018, Stop: 27680, Start Num: 10

Candidate Starts for Hanako_36:

(Start: 10 @28018 has 46 MA's), (46, 27817), (51, 27802), (59, 27754), (61, 27739), (69, 27697),

Gene: Happiness_32 Start: 25102, Stop: 24884, Start Num: 25

Candidate Starts for Happiness_32:

(Start: 17 @25144 has 14 MA's), (Start: 22 @25111 has 2 MA's), (Start: 25 @25102 has 73 MA's), (Start: 30 @25090 has 12 MA's), (49, 24979), (56, 24952), (61, 24928), (64, 24916), (67, 24904),

Gene: Herbertwm_30 Start: 24275, Stop: 23961, Start Num: 8

Candidate Starts for Herbertwm_30:

(3, 24311), (Start: 8 @24275 has 1 MA's), (11, 24260), (37, 24113), (67, 23981),

Gene: Holli_32 Start: 24887, Stop: 24669, Start Num: 25

Candidate Starts for Holli_32:

(Start: 17 @24929 has 14 MA's), (Start: 22 @24896 has 2 MA's), (Start: 25 @24887 has 73 MA's), (Start: 30 @24875 has 12 MA's), (49, 24764), (56, 24737), (61, 24713), (64, 24701), (67, 24689),

Gene: Houdini22_32 Start: 25101, Stop: 24883, Start Num: 25

Candidate Starts for Houdini22_32:

(Start: 17 @25143 has 14 MA's), (Start: 22 @25110 has 2 MA's), (Start: 25 @25101 has 73 MA's), (Start: 30 @25089 has 12 MA's), (49, 24978), (56, 24951), (61, 24927), (64, 24915), (67, 24903),

Gene: Huxley_32 Start: 25158, Stop: 24940, Start Num: 25

Candidate Starts for Huxley_32:

(Start: 17 @25200 has 14 MA's), (Start: 22 @25167 has 2 MA's), (Start: 25 @25158 has 73 MA's), (Start: 30 @25146 has 12 MA's), (49, 25035), (56, 25008), (61, 24984), (64, 24972), (67, 24960),

Gene: ICleared_32 Start: 25076, Stop: 24876, Start Num: 26

Candidate Starts for ICleared_32:

(Start: 26 @25076 has 41 MA's), (Start: 29 @25070 has 1 MA's), (49, 24971), (56, 24944), (61, 24920), (64, 24908), (67, 24896),

Gene: Iceman_33 Start: 25386, Stop: 25168, Start Num: 25

Candidate Starts for Iceman_33:

(Start: 17 @25428 has 14 MA's), (Start: 22 @25395 has 2 MA's), (Start: 25 @25386 has 73 MA's), (Start: 30 @25374 has 12 MA's), (49, 25263), (56, 25236), (61, 25212), (64, 25200), (67, 25188),

Gene: Impisi_38 Start: 28574, Stop: 28236, Start Num: 10

Candidate Starts for Impisi_38:

(Start: 10 @28574 has 46 MA's), (46, 28373), (51, 28358), (59, 28310), (61, 28295), (69, 28253),

Gene: Iracema64_33 Start: 25397, Stop: 25182, Start Num: 26

Candidate Starts for Iracema64_33:

(19, 25424), (Start: 26 @25397 has 41 MA's), (33, 25373), (43, 25304), (50, 25271), (54, 25259), (56, 25250), (57, 25247), (61, 25226), (64, 25214), (67, 25202),

Gene: IronMan_35 Start: 26874, Stop: 26668, Start Num: 26

Candidate Starts for IronMan_35:

(Start: 26 @26874 has 41 MA's), (57, 26733), (61, 26712), (66, 26691), (67, 26688),

Gene: Iwokeuplikedis_36 Start: 27079, Stop: 27276, Start Num: 25

Candidate Starts for Iwokeuplikedis_36:

(Start: 25 @27079 has 73 MA's), (38, 27130), (46, 27175), (64, 27244), (67, 27256),

Gene: Jaan_36 Start: 27278, Stop: 27060, Start Num: 26

Candidate Starts for Jaan_36:

(Start: 15 @27329 has 1 MA's), (16, 27323), (Start: 26 @27278 has 41 MA's), (33, 27254), (35, 27245), (43, 27182), (45, 27164), (54, 27137), (56, 27128), (57, 27125), (61, 27104), (67, 27080),

Gene: Jabiru_30 Start: 23986, Stop: 23687, Start Num: 12

Candidate Starts for Jabiru_30:

(Start: 12 @23986 has 6 MA's), (28, 23899), (41, 23836), (44, 23815), (52, 23776), (55, 23773), (56, 23767), (60, 23755), (61, 23743), (63, 23734),

Gene: Jamie19_32 Start: 26783, Stop: 26442, Start Num: 10

Candidate Starts for Jamie19_32:

(Start: 10 @26783 has 46 MA's), (36, 26639), (48, 26573), (49, 26570), (53, 26540), (56, 26525), (60, 26513), (61, 26501), (68, 26471), (69, 26459),

Gene: Jaykayelowell_32 Start: 25093, Stop: 24875, Start Num: 25

Candidate Starts for Jaykayelowell_32:

(Start: 17 @25135 has 14 MA's), (Start: 22 @25102 has 2 MA's), (Start: 25 @25093 has 73 MA's), (Start: 30 @25081 has 12 MA's), (49, 24970), (56, 24943), (61, 24919), (64, 24907), (67, 24895),

Gene: Jeeves_39 Start: 27596, Stop: 27802, Start Num: 26

Candidate Starts for Jeeves_39:

(Start: 26 @27596 has 41 MA's), (39, 27659), (47, 27704), (50, 27713), (61, 27758), (64, 27770), (66, 27779), (67, 27782),

Gene: JetBlade_32 Start: 25094, Stop: 24876, Start Num: 25

Candidate Starts for JetBlade_32:

(Start: 17 @25136 has 14 MA's), (Start: 22 @25103 has 2 MA's), (Start: 25 @25094 has 73 MA's), (Start: 30 @25082 has 12 MA's), (49, 24971), (56, 24944), (61, 24920), (64, 24908), (67, 24896),

Gene: JoongJeon_32 Start: 25139, Stop: 24879, Start Num: 17

Candidate Starts for JoongJeon_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Journey_33 Start: 26404, Stop: 26063, Start Num: 10

Candidate Starts for Journey_33:

(Start: 10 @26404 has 46 MA's), (36, 26260), (48, 26194), (49, 26191), (56, 26146), (60, 26134), (61, 26122), (63, 26113), (68, 26092), (69, 26080),

Gene: KFPoly_32 Start: 25136, Stop: 24876, Start Num: 17

Candidate Starts for KFPoly_32:

(Start: 17 @25136 has 14 MA's), (Start: 22 @25103 has 2 MA's), (Start: 25 @25094 has 73 MA's),
(Start: 30 @25082 has 12 MA's), (49, 24971), (56, 24944), (61, 24920), (64, 24908), (67, 24896),

Gene: Kamy_32 Start: 25079, Stop: 24879, Start Num: 26

Candidate Starts for Kamy_32:

(Start: 26 @25079 has 41 MA's), (Start: 29 @25073 has 1 MA's), (49, 24974), (56, 24947), (61, 24923),
(64, 24911), (67, 24899),

Gene: Katalie136_32 Start: 25095, Stop: 24892, Start Num: 30

Candidate Starts for Katalie136_32:

(Start: 17 @25149 has 14 MA's), (Start: 22 @25116 has 2 MA's), (Start: 25 @25107 has 73 MA's),
(Start: 30 @25095 has 12 MA's), (43, 25014), (45, 24996), (50, 24981), (54, 24969), (56, 24960), (61,
24936), (64, 24924), (67, 24912),

Gene: KekoraPapaka_31 Start: 25085, Stop: 24879, Start Num: 30

Candidate Starts for KekoraPapaka_31:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Kevin1_34 Start: 27625, Stop: 27314, Start Num: 10

Candidate Starts for Kevin1_34:

(Start: 10 @27625 has 46 MA's), (39, 27475), (44, 27445), (50, 27427), (52, 27406), (55, 27403), (57,
27394), (59, 27388), (61, 27373), (68, 27343), (69, 27331),

Gene: Kingmustik0402_32 Start: 25077, Stop: 24871, Start Num: 30

Candidate Starts for Kingmustik0402_32:

(Start: 17 @25131 has 14 MA's), (Start: 22 @25098 has 2 MA's), (Start: 25 @25089 has 73 MA's),
(Start: 30 @25077 has 12 MA's), (49, 24966), (56, 24939), (61, 24915), (64, 24903), (67, 24891),

Gene: Kinmap_37 Start: 27332, Stop: 27529, Start Num: 31

Candidate Starts for Kinmap_37:

(28, 27326), (31, 27332), (39, 27380), (40, 27383), (41, 27389), (57, 27464), (61, 27485), (64, 27497),
(67, 27509),

Gene: Koan_32 Start: 25085, Stop: 24879, Start Num: 30

Candidate Starts for Koan_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Koreni_31 Start: 24725, Stop: 24525, Start Num: 26

Candidate Starts for Koreni_31:

(Start: 26 @24725 has 41 MA's), (Start: 29 @24719 has 1 MA's), (49, 24620), (56, 24593), (61, 24569),
(64, 24557), (67, 24545),

Gene: Kratak_32 Start: 25081, Stop: 24866, Start Num: 26

Candidate Starts for Kratak_32:

(4, 25195), (5, 25186), (19, 25108), (Start: 26 @25081 has 41 MA's), (33, 25057), (45, 24970), (50,
24955), (54, 24943), (56, 24934), (57, 24931), (61, 24910), (64, 24898), (67, 24886),

Gene: Kremtemulon_32 Start: 25131, Stop: 24931, Start Num: 26

Candidate Starts for Kremtemulon_32:

(Start: 26 @25131 has 41 MA's), (Start: 29 @25125 has 1 MA's), (49, 25026), (56, 24999), (61, 24975), (64, 24963), (67, 24951),

Gene: Kyee_32 Start: 25095, Stop: 24877, Start Num: 25

Candidate Starts for Kyee_32:

(Start: 17 @25137 has 14 MA's), (Start: 22 @25104 has 2 MA's), (Start: 25 @25095 has 73 MA's), (Start: 30 @25083 has 12 MA's), (49, 24972), (56, 24945), (61, 24921), (64, 24909), (67, 24897),

Gene: LHTSCC_33 Start: 25440, Stop: 25195, Start Num: 21

Candidate Starts for LHTSCC_33:

(Start: 21 @25440 has 6 MA's), (Start: 26 @25416 has 41 MA's), (Start: 27 @25413 has 1 MA's), (Start: 29 @25407 has 1 MA's), (33, 25389), (35, 25380), (57, 25260), (61, 25239), (67, 25215),

Gene: LappelDuVide_32 Start: 25096, Stop: 24878, Start Num: 25

Candidate Starts for LappelDuVide_32:

(Start: 17 @25138 has 14 MA's), (Start: 22 @25105 has 2 MA's), (Start: 25 @25096 has 73 MA's), (Start: 30 @25084 has 12 MA's), (42, 25012), (49, 24973), (56, 24946), (61, 24922), (64, 24910), (67, 24898),

Gene: Lemur_32 Start: 25136, Stop: 24876, Start Num: 17

Candidate Starts for Lemur_32:

(Start: 17 @25136 has 14 MA's), (Start: 22 @25103 has 2 MA's), (Start: 25 @25094 has 73 MA's), (Start: 30 @25082 has 12 MA's), (49, 24971), (56, 24944), (61, 24920), (64, 24908), (67, 24896),

Gene: LeoAvram_32 Start: 25077, Stop: 24877, Start Num: 26

Candidate Starts for LeoAvram_32:

(Start: 26 @25077 has 41 MA's), (Start: 29 @25071 has 1 MA's), (49, 24972), (56, 24945), (61, 24921), (64, 24909), (67, 24897),

Gene: LittleB_32 Start: 25098, Stop: 24880, Start Num: 25

Candidate Starts for LittleB_32:

(Start: 17 @25140 has 14 MA's), (Start: 22 @25107 has 2 MA's), (Start: 25 @25098 has 73 MA's), (Start: 30 @25086 has 12 MA's), (49, 24975), (56, 24948), (61, 24924), (64, 24912), (67, 24900),

Gene: LittleGuy_32 Start: 25026, Stop: 24826, Start Num: 26

Candidate Starts for LittleGuy_32:

(Start: 26 @25026 has 41 MA's), (Start: 29 @25020 has 1 MA's), (49, 24921), (56, 24894), (61, 24870), (64, 24858), (67, 24846),

Gene: LochMonster_32 Start: 25061, Stop: 24846, Start Num: 26

Candidate Starts for LochMonster_32:

(19, 25088), (Start: 26 @25061 has 41 MA's), (33, 25037), (43, 24968), (50, 24935), (54, 24923), (56, 24914), (57, 24911), (61, 24890), (64, 24878), (67, 24866),

Gene: Lorenzo_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Lorenzo_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Lucyedi_39 Start: 27447, Stop: 27650, Start Num: 30

Candidate Starts for Lucyedi_39:

(Start: 30 @27447 has 12 MA's), (38, 27507), (39, 27510), (48, 27558), (67, 27636),

Gene: Lunsford_33 Start: 25136, Stop: 24876, Start Num: 17

Candidate Starts for Lunsford_33:

(Start: 17 @25136 has 14 MA's), (Start: 22 @25103 has 2 MA's), (Start: 25 @25094 has 73 MA's),
(Start: 30 @25082 has 12 MA's), (49, 24971), (56, 24944), (61, 24920), (64, 24908), (67, 24896),

Gene: Magsby_35 Start: 27730, Stop: 27389, Start Num: 10

Candidate Starts for Magsby_35:

(Start: 10 @27730 has 46 MA's), (36, 27586), (48, 27520), (49, 27517), (53, 27487), (56, 27472), (60,
27460), (61, 27448), (68, 27418), (69, 27406),

Gene: Maverick_32 Start: 25139, Stop: 24879, Start Num: 17

Candidate Starts for Maverick_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Maxo_32 Start: 25079, Stop: 24879, Start Num: 26

Candidate Starts for Maxo_32:

(Start: 26 @25079 has 41 MA's), (Start: 29 @25073 has 1 MA's), (49, 24974), (56, 24947), (61, 24923),
(64, 24911), (67, 24899),

Gene: Mayonnaise_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Mayonnaise_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Mazhar510_32 Start: 25098, Stop: 24880, Start Num: 25

Candidate Starts for Mazhar510_32:

(Start: 17 @25140 has 14 MA's), (Start: 22 @25107 has 2 MA's), (Start: 25 @25098 has 73 MA's),
(Start: 30 @25086 has 12 MA's), (49, 24975), (56, 24948), (61, 24924), (64, 24912), (67, 24900),

Gene: Medusa_32 Start: 25080, Stop: 24880, Start Num: 26

Candidate Starts for Medusa_32:

(Start: 26 @25080 has 41 MA's), (Start: 29 @25074 has 1 MA's), (49, 24975), (56, 24948), (61, 24924),
(64, 24912), (67, 24900),

Gene: MeeZee_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for MeeZee_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Melville_37 Start: 27714, Stop: 27373, Start Num: 10

Candidate Starts for Melville_37:

(Start: 10 @27714 has 46 MA's), (36, 27570), (48, 27504), (49, 27501), (53, 27471), (56, 27456), (60,
27444), (61, 27432), (68, 27402), (69, 27390),

Gene: Melvin_32 Start: 25078, Stop: 24878, Start Num: 26

Candidate Starts for Melvin_32:

(Start: 26 @25078 has 41 MA's), (Start: 29 @25072 has 1 MA's), (49, 24973), (56, 24946), (61, 24922),
(64, 24910), (67, 24898),

Gene: MichelleMyBell_33 Start: 26721, Stop: 26380, Start Num: 10

Candidate Starts for MichelleMyBell_33:

(Start: 10 @26721 has 46 MA's), (36, 26577), (48, 26511), (49, 26508), (53, 26478), (56, 26463), (60, 26451), (61, 26439), (68, 26409), (69, 26397),

Gene: Millski_31 Start: 25108, Stop: 24884, Start Num: 23

Candidate Starts for Millski_31:

(Start: 23 @25108 has 1 MA's), (49, 24979), (56, 24952), (61, 24928), (64, 24916), (67, 24904),

Gene: Morpher26_32 Start: 25107, Stop: 24892, Start Num: 25

Candidate Starts for Morpher26_32:

(Start: 17 @25149 has 14 MA's), (Start: 22 @25116 has 2 MA's), (Start: 25 @25107 has 73 MA's), (Start: 30 @25095 has 12 MA's), (43, 25014), (45, 24996), (50, 24981), (54, 24969), (56, 24960), (61, 24936), (64, 24924), (67, 24912),

Gene: Morrow_32 Start: 25083, Stop: 24883, Start Num: 26

Candidate Starts for Morrow_32:

(Start: 26 @25083 has 41 MA's), (Start: 29 @25077 has 1 MA's), (49, 24978), (56, 24951), (61, 24927), (64, 24915), (67, 24903),

Gene: Mundrea_32 Start: 25060, Stop: 24842, Start Num: 26

Candidate Starts for Mundrea_32:

(4, 25174), (19, 25087), (Start: 26 @25060 has 41 MA's), (45, 24946), (54, 24919), (61, 24886), (64, 24874), (67, 24862),

Gene: MyraDee_32 Start: 25082, Stop: 24768, Start Num: 7

Candidate Starts for MyraDee_32:

(Start: 7 @25082 has 1 MA's), (9, 25076), (34, 24956), (38, 24914), (39, 24911), (61, 24806),

Gene: Naca_30 Start: 24473, Stop: 24174, Start Num: 12

Candidate Starts for Naca_30:

(Start: 12 @24473 has 6 MA's), (28, 24386), (41, 24323), (44, 24302), (52, 24263), (55, 24260), (56, 24254), (60, 24242), (61, 24230), (63, 24221),

Gene: Nebs_32 Start: 25077, Stop: 24877, Start Num: 26

Candidate Starts for Nebs_32:

(Start: 26 @25077 has 41 MA's), (Start: 29 @25071 has 1 MA's), (49, 24972), (56, 24945), (61, 24921), (64, 24909), (67, 24897),

Gene: Nemo27_32 Start: 25138, Stop: 24878, Start Num: 17

Candidate Starts for Nemo27_32:

(Start: 17 @25138 has 14 MA's), (Start: 22 @25105 has 2 MA's), (Start: 25 @25096 has 73 MA's), (Start: 30 @25084 has 12 MA's), (49, 24973), (56, 24946), (61, 24922), (64, 24910), (67, 24898),

Gene: Nenae_36 Start: 28021, Stop: 27683, Start Num: 10

Candidate Starts for Nenae_36:

(Start: 10 @28021 has 46 MA's), (46, 27820), (51, 27805), (59, 27757), (61, 27742), (69, 27700),

Gene: Noelle_32 Start: 25174, Stop: 24959, Start Num: 25

Candidate Starts for Noelle_32:

(13, 25240), (Start: 22 @25183 has 2 MA's), (Start: 25 @25174 has 73 MA's), (50, 25048), (54, 25036), (56, 25027), (57, 25024), (61, 25003), (66, 24982), (67, 24979),

Gene: NorthStar_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for NorthStar_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: NotAPhaseMom_32 Start: 25101, Stop: 24883, Start Num: 25

Candidate Starts for NotAPhaseMom_32:

(Start: 17 @25143 has 14 MA's), (Start: 22 @25110 has 2 MA's), (Start: 25 @25101 has 73 MA's),
(Start: 30 @25089 has 12 MA's), (49, 24978), (56, 24951), (61, 24927), (64, 24915), (67, 24903),

Gene: Nyxis_32 Start: 25020, Stop: 24820, Start Num: 26

Candidate Starts for Nyxis_32:

(Start: 26 @25020 has 41 MA's), (Start: 29 @25014 has 1 MA's), (49, 24915), (56, 24888), (61, 24864),
(64, 24852), (67, 24840),

Gene: OKaNui_33 Start: 25150, Stop: 24932, Start Num: 25

Candidate Starts for OKaNui_33:

(Start: 17 @25192 has 14 MA's), (Start: 22 @25159 has 2 MA's), (Start: 25 @25150 has 73 MA's),
(Start: 30 @25138 has 12 MA's), (49, 25027), (56, 25000), (61, 24976), (64, 24964), (67, 24952),

Gene: Obama12_33 Start: 25442, Stop: 25197, Start Num: 21

Candidate Starts for Obama12_33:

(Start: 21 @25442 has 6 MA's), (Start: 26 @25418 has 41 MA's), (Start: 27 @25415 has 1 MA's),
(Start: 29 @25409 has 1 MA's), (33, 25391), (35, 25382), (57, 25262), (61, 25241), (67, 25217),

Gene: Ohfah_32 Start: 25077, Stop: 24877, Start Num: 26

Candidate Starts for Ohfah_32:

(Start: 26 @25077 has 41 MA's), (Start: 29 @25071 has 1 MA's), (49, 24972), (56, 24945), (61, 24921),
(64, 24909), (67, 24897),

Gene: PainterBoy_39 Start: 27383, Stop: 27586, Start Num: 30

Candidate Starts for PainterBoy_39:

(Start: 30 @27383 has 12 MA's), (38, 27443), (39, 27446), (48, 27494), (67, 27572),

Gene: Palestino_31 Start: 25139, Stop: 24879, Start Num: 17

Candidate Starts for Palestino_31:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Panchino_31 Start: 28129, Stop: 27788, Start Num: 10

Candidate Starts for Panchino_31:

(Start: 10 @28129 has 46 MA's), (36, 27985), (48, 27919), (49, 27916), (53, 27886), (56, 27871), (60,
27859), (61, 27847), (68, 27817), (69, 27805),

Gene: Parmesanjohn_35 Start: 27733, Stop: 27392, Start Num: 10

Candidate Starts for Parmesanjohn_35:

(Start: 10 @27733 has 46 MA's), (36, 27589), (48, 27523), (49, 27520), (53, 27490), (56, 27475), (60,
27463), (61, 27451), (68, 27421), (69, 27409),

Gene: Peaches_32 Start: 25096, Stop: 24878, Start Num: 25

Candidate Starts for Peaches_32:

(Start: 17 @25138 has 14 MA's), (Start: 22 @25105 has 2 MA's), (Start: 25 @25096 has 73 MA's),
(Start: 30 @25084 has 12 MA's), (49, 24973), (56, 24946), (61, 24922), (64, 24910), (67, 24898),

Gene: Perplexer_32 Start: 25104, Stop: 24889, Start Num: 25

Candidate Starts for Perplexer_32:

(Start: 17 @25146 has 14 MA's), (Start: 22 @25113 has 2 MA's), (Start: 25 @25104 has 73 MA's), (Start: 30 @25092 has 12 MA's), (43, 25011), (45, 24993), (50, 24978), (54, 24966), (56, 24957), (61, 24933), (64, 24921), (67, 24909),

Gene: PeterPeter_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for PeterPeter_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: PetiteSangsue_32 Start: 25107, Stop: 24892, Start Num: 25

Candidate Starts for PetiteSangsue_32:

(Start: 17 @25149 has 14 MA's), (Start: 22 @25116 has 2 MA's), (Start: 25 @25107 has 73 MA's), (Start: 30 @25095 has 12 MA's), (43, 25014), (45, 24996), (50, 24981), (54, 24969), (56, 24960), (61, 24936), (64, 24924), (67, 24912),

Gene: Phacado_32 Start: 25096, Stop: 24878, Start Num: 25

Candidate Starts for Phacado_32:

(Start: 17 @25138 has 14 MA's), (Start: 22 @25105 has 2 MA's), (Start: 25 @25096 has 73 MA's), (Start: 30 @25084 has 12 MA's), (49, 24973), (56, 24946), (61, 24922), (64, 24910), (67, 24898),

Gene: PhancyPhin_36 Start: 28015, Stop: 27677, Start Num: 10

Candidate Starts for PhancyPhin_36:

(Start: 10 @28015 has 46 MA's), (46, 27814), (51, 27799), (59, 27751), (61, 27736), (69, 27694),

Gene: Phelipe_32 Start: 25080, Stop: 24880, Start Num: 26

Candidate Starts for Phelipe_32:

(Start: 26 @25080 has 41 MA's), (Start: 29 @25074 has 1 MA's), (49, 24975), (56, 24948), (61, 24924), (64, 24912), (67, 24900),

Gene: Phighter1804_32 Start: 25064, Stop: 24849, Start Num: 26

Candidate Starts for Phighter1804_32:

(19, 25091), (Start: 26 @25064 has 41 MA's), (33, 25040), (43, 24971), (50, 24938), (54, 24926), (56, 24917), (57, 24914), (61, 24893), (64, 24881), (67, 24869),

Gene: Philonius_33 Start: 26395, Stop: 26054, Start Num: 10

Candidate Starts for Philonius_33:

(Start: 10 @26395 has 46 MA's), (36, 26251), (48, 26185), (49, 26182), (56, 26137), (60, 26125), (61, 26113), (63, 26104), (68, 26083), (69, 26071),

Gene: Phloss_33 Start: 27140, Stop: 26799, Start Num: 10

Candidate Starts for Phloss_33:

(Start: 10 @27140 has 46 MA's), (36, 26996), (48, 26930), (49, 26927), (53, 26897), (56, 26882), (60, 26870), (61, 26858), (68, 26828), (69, 26816),

Gene: Phontbonne_32 Start: 25021, Stop: 24821, Start Num: 26

Candidate Starts for Phontbonne_32:

(Start: 26 @25021 has 41 MA's), (Start: 29 @25015 has 1 MA's), (49, 24916), (56, 24889), (61, 24865), (64, 24853), (67, 24841),

Gene: Phrann_36 Start: 28799, Stop: 28461, Start Num: 10

Candidate Starts for Phrann_36:

(Start: 10 @28799 has 46 MA's), (46, 28598), (51, 28583), (59, 28535), (61, 28520), (69, 28478),

Gene: Pipcraft_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Pipcraft_32:

(11, 25172), (Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Pipsqueaks_35 Start: 27710, Stop: 27369, Start Num: 10

Candidate Starts for Pipsqueaks_35:

(Start: 10 @27710 has 46 MA's), (36, 27566), (48, 27500), (49, 27497), (53, 27467), (56, 27452), (60, 27440), (61, 27428), (68, 27398), (69, 27386),

Gene: Polymorphads_32 Start: 25077, Stop: 24877, Start Num: 26

Candidate Starts for Polymorphads_32:

(Start: 26 @25077 has 41 MA's), (Start: 29 @25071 has 1 MA's), (49, 24972), (56, 24945), (61, 24921), (64, 24909), (67, 24897),

Gene: Pukovnik_34 Start: 26424, Stop: 26155, Start Num: 15

Candidate Starts for Pukovnik_34:

(Start: 15 @26424 has 1 MA's), (16, 26418), (Start: 26 @26373 has 41 MA's), (33, 26349), (35, 26340), (45, 26259), (54, 26232), (57, 26220), (61, 26199), (67, 26175),

Gene: Pumbaa_32 Start: 25072, Stop: 24854, Start Num: 26

Candidate Starts for Pumbaa_32:

(Start: 10 @25156 has 46 MA's), (Start: 26 @25072 has 41 MA's), (Start: 29 @25066 has 1 MA's), (49, 24949), (61, 24898), (62, 24892), (67, 24874),

Gene: Purgamenstris_36 Start: 28019, Stop: 27681, Start Num: 10

Candidate Starts for Purgamenstris_36:

(Start: 10 @28019 has 46 MA's), (46, 27818), (51, 27803), (59, 27755), (61, 27740), (69, 27698),

Gene: Raymond7_30 Start: 27839, Stop: 27504, Start Num: 10

Candidate Starts for Raymond7_30:

(2, 27935), (Start: 10 @27839 has 46 MA's), (32, 27737), (34, 27722), (36, 27695), (59, 27578), (61, 27563), (68, 27533), (69, 27521),

Gene: Redi_36 Start: 28018, Stop: 27680, Start Num: 10

Candidate Starts for Redi_36:

(Start: 10 @28018 has 46 MA's), (46, 27817), (51, 27802), (59, 27754), (61, 27739), (69, 27697),

Gene: Relief_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Relief_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: RockieBear_31 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for RockieBear_31:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Romney_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Romney_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Roosevelt_32 Start: 25099, Stop: 24881, Start Num: 25

Candidate Starts for Roosevelt_32:

(Start: 17 @25141 has 14 MA's), (Start: 22 @25108 has 2 MA's), (Start: 25 @25099 has 73 MA's),
(Start: 30 @25087 has 12 MA's), (49, 24976), (56, 24949), (61, 24925), (64, 24913), (67, 24901),

Gene: Rosa24_31 Start: 25071, Stop: 24853, Start Num: 26

Candidate Starts for Rosa24_31:

(Start: 26 @25071 has 41 MA's), (Start: 29 @25065 has 1 MA's), (49, 24948), (61, 24897), (62, 24891),
(67, 24873),

Gene: Rubeelu_36 Start: 28446, Stop: 28135, Start Num: 10

Candidate Starts for Rubeelu_36:

(Start: 10 @28446 has 46 MA's), (39, 28296), (44, 28266), (50, 28248), (52, 28227), (55, 28224), (57,
28215), (59, 28209), (61, 28194), (68, 28164), (69, 28152),

Gene: Ruin_32 Start: 25093, Stop: 24875, Start Num: 25

Candidate Starts for Ruin_32:

(Start: 17 @25135 has 14 MA's), (Start: 22 @25102 has 2 MA's), (Start: 25 @25093 has 73 MA's),
(Start: 30 @25081 has 12 MA's), (49, 24970), (56, 24943), (61, 24919), (64, 24907), (67, 24895),

Gene: Sabertooth_32 Start: 25096, Stop: 24878, Start Num: 25

Candidate Starts for Sabertooth_32:

(Start: 17 @25138 has 14 MA's), (Start: 22 @25105 has 2 MA's), (Start: 25 @25096 has 73 MA's),
(Start: 30 @25084 has 12 MA's), (49, 24973), (56, 24946), (61, 24922), (64, 24910), (67, 24898),

Gene: Scamp_32 Start: 25099, Stop: 24881, Start Num: 25

Candidate Starts for Scamp_32:

(Start: 17 @25141 has 14 MA's), (Start: 22 @25108 has 2 MA's), (Start: 25 @25099 has 73 MA's),
(Start: 30 @25087 has 12 MA's), (49, 24976), (56, 24949), (61, 24925), (64, 24913), (67, 24901),

Gene: Schnauzer_35 Start: 27733, Stop: 27392, Start Num: 10

Candidate Starts for Schnauzer_35:

(Start: 10 @27733 has 46 MA's), (36, 27589), (48, 27523), (49, 27520), (53, 27490), (56, 27475), (60,
27463), (61, 27451), (68, 27421), (69, 27409),

Gene: Scorpia_31 Start: 23910, Stop: 23611, Start Num: 12

Candidate Starts for Scorpia_31:

(Start: 12 @23910 has 6 MA's), (28, 23823), (41, 23760), (44, 23739), (52, 23700), (55, 23697), (56,
23691), (60, 23679), (61, 23667), (63, 23658),

Gene: SenorClean_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for SenorClean_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Shaka_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Shaka_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: SheldonCooper_33 Start: 25414, Stop: 25196, Start Num: 27
Candidate Starts for SheldonCooper_33:
(Start: 21 @25441 has 6 MA's), (Start: 26 @25417 has 41 MA's), (Start: 27 @25414 has 1 MA's),
(Start: 29 @25408 has 1 MA's), (33, 25390), (35, 25381), (57, 25261), (61, 25240), (67, 25216),

Gene: ShrimpFriedEgg_36 Start: 28018, Stop: 27680, Start Num: 10
Candidate Starts for ShrimpFriedEgg_36:
(Start: 10 @28018 has 46 MA's), (46, 27817), (51, 27802), (59, 27754), (61, 27739), (69, 27697),

Gene: Shweta_32 Start: 26913, Stop: 26572, Start Num: 10
Candidate Starts for Shweta_32:
(Start: 10 @26913 has 46 MA's), (36, 26769), (48, 26703), (49, 26700), (53, 26670), (56, 26655), (60, 26643), (61, 26631), (68, 26601), (69, 26589),

Gene: Shygu2_32 Start: 25091, Stop: 24876, Start Num: 25
Candidate Starts for Shygu2_32:
(Start: 17 @25133 has 14 MA's), (Start: 22 @25100 has 2 MA's), (Start: 25 @25091 has 73 MA's),
(Start: 30 @25079 has 12 MA's), (57, 24941), (61, 24920), (67, 24896),

Gene: Silvafighter_36 Start: 27706, Stop: 27365, Start Num: 10
Candidate Starts for Silvafighter_36:
(Start: 10 @27706 has 46 MA's), (36, 27562), (48, 27496), (49, 27493), (53, 27463), (56, 27448), (60, 27436), (61, 27424), (68, 27394), (69, 27382),

Gene: Silvy_33 Start: 26384, Stop: 26043, Start Num: 10
Candidate Starts for Silvy_33:
(Start: 10 @26384 has 46 MA's), (36, 26240), (48, 26174), (49, 26171), (56, 26126), (60, 26114), (61, 26102), (63, 26093), (68, 26072), (69, 26060),

Gene: SkinnyPete_30 Start: 25444, Stop: 25103, Start Num: 10
Candidate Starts for SkinnyPete_30:
(Start: 10 @25444 has 46 MA's), (36, 25300), (48, 25234), (49, 25231), (56, 25186), (60, 25174), (61, 25162), (63, 25153), (68, 25132), (69, 25120),

Gene: Skipitt_32 Start: 25082, Stop: 24876, Start Num: 30
Candidate Starts for Skipitt_32:
(Start: 17 @25136 has 14 MA's), (Start: 22 @25103 has 2 MA's), (Start: 25 @25094 has 73 MA's),
(Start: 30 @25082 has 12 MA's), (49, 24971), (56, 24944), (61, 24920), (64, 24908), (67, 24896),

Gene: Smurph_35 Start: 27733, Stop: 27392, Start Num: 10
Candidate Starts for Smurph_35:
(Start: 10 @27733 has 46 MA's), (36, 27589), (48, 27523), (49, 27520), (53, 27490), (56, 27475), (60, 27463), (61, 27451), (68, 27421), (69, 27409),

Gene: Snekmaggedon_32 Start: 26783, Stop: 26442, Start Num: 10
Candidate Starts for Snekmaggedon_32:
(Start: 10 @26783 has 46 MA's), (36, 26639), (48, 26573), (49, 26570), (53, 26540), (56, 26525), (60, 26513), (61, 26501), (68, 26471), (69, 26459),

Gene: SororFago_40 Start: 29178, Stop: 29375, Start Num: 25
Candidate Starts for SororFago_40:
(Start: 25 @29178 has 73 MA's), (44, 29265), (60, 29319), (65, 29349), (67, 29355),

Gene: Sparxx_32 Start: 25078, Stop: 24878, Start Num: 26

Candidate Starts for Sparxx_32:

(Start: 26 @25078 has 41 MA's), (Start: 29 @25072 has 1 MA's), (49, 24973), (56, 24946), (61, 24922), (64, 24910), (67, 24898),

Gene: Spinach_36 Start: 28018, Stop: 27680, Start Num: 10

Candidate Starts for Spinach_36:

(Start: 10 @28018 has 46 MA's), (46, 27817), (51, 27802), (59, 27754), (61, 27739), (69, 27697),

Gene: Spino_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for Spino_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: SpongeBob_32 Start: 26783, Stop: 26442, Start Num: 10

Candidate Starts for SpongeBob_32:

(Start: 10 @26783 has 46 MA's), (36, 26639), (48, 26573), (49, 26570), (53, 26540), (56, 26525), (60, 26513), (61, 26501), (68, 26471), (69, 26459),

Gene: Squirty_33 Start: 28243, Stop: 27905, Start Num: 10

Candidate Starts for Squirty_33:

(Start: 10 @28243 has 46 MA's), (51, 28027), (59, 27979), (61, 27964), (69, 27922),

Gene: Stasia_33 Start: 25530, Stop: 25306, Start Num: 22

Candidate Starts for Stasia_33:

(Start: 22 @25530 has 2 MA's), (Start: 25 @25521 has 73 MA's), (Start: 30 @25509 has 12 MA's), (50, 25395), (54, 25383), (56, 25374), (57, 25371), (61, 25350), (66, 25329), (67, 25326),

Gene: SteMason_32 Start: 25097, Stop: 24879, Start Num: 25

Candidate Starts for SteMason_32:

(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's), (Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Sultana_32 Start: 25098, Stop: 24880, Start Num: 25

Candidate Starts for Sultana_32:

(Start: 17 @25140 has 14 MA's), (Start: 22 @25107 has 2 MA's), (Start: 25 @25098 has 73 MA's), (Start: 30 @25086 has 12 MA's), (49, 24975), (56, 24948), (61, 24924), (64, 24912), (67, 24900),

Gene: Tapioca_36 Start: 27699, Stop: 27358, Start Num: 10

Candidate Starts for Tapioca_36:

(Start: 10 @27699 has 46 MA's), (36, 27555), (48, 27489), (49, 27486), (53, 27456), (56, 27441), (60, 27429), (61, 27417), (68, 27387), (69, 27375),

Gene: Taquarus_32 Start: 25100, Stop: 24882, Start Num: 25

Candidate Starts for Taquarus_32:

(Start: 17 @25142 has 14 MA's), (Start: 22 @25109 has 2 MA's), (Start: 25 @25100 has 73 MA's), (Start: 30 @25088 has 12 MA's), (49, 24977), (56, 24950), (61, 24926), (64, 24914), (67, 24902),

Gene: Thanksgivukkah_32 Start: 25086, Stop: 24880, Start Num: 30

Candidate Starts for Thanksgivukkah_32:

(Start: 17 @25140 has 14 MA's), (Start: 22 @25107 has 2 MA's), (Start: 25 @25098 has 73 MA's), (Start: 30 @25086 has 12 MA's), (49, 24975), (56, 24948), (61, 24924), (64, 24912), (67, 24900),

Gene: TinaFeyge_32 Start: 25076, Stop: 24876, Start Num: 26
Candidate Starts for TinaFeyge_32:
(Start: 26 @25076 has 41 MA's), (Start: 29 @25070 has 1 MA's), (49, 24971), (56, 24944), (61, 24920),
(64, 24908), (67, 24896),

Gene: Tinybot_31 Start: 25073, Stop: 24855, Start Num: 26
Candidate Starts for Tinybot_31:
(4, 25187), (6, 25178), (Start: 26 @25073 has 41 MA's), (Start: 29 @25067 has 1 MA's), (61, 24899),
(62, 24893), (64, 24887), (67, 24875),

Gene: TiroTheta9_32 Start: 25094, Stop: 24876, Start Num: 25
Candidate Starts for TiroTheta9_32:
(Start: 17 @25136 has 14 MA's), (Start: 22 @25103 has 2 MA's), (Start: 25 @25094 has 73 MA's),
(Start: 30 @25082 has 12 MA's), (49, 24971), (56, 24944), (61, 24920), (64, 24908), (67, 24896),

Gene: Tortoise12_33 Start: 26416, Stop: 26075, Start Num: 10
Candidate Starts for Tortoise12_33:
(Start: 10 @26416 has 46 MA's), (36, 26272), (48, 26206), (49, 26203), (56, 26158), (60, 26146), (61,
26134), (63, 26125), (68, 26104), (69, 26092),

Gene: Tristan_34 Start: 26949, Stop: 26731, Start Num: 26
Candidate Starts for Tristan_34:
(Start: 15 @27000 has 1 MA's), (16, 26994), (Start: 26 @26949 has 41 MA's), (Start: 29 @26943 has 1
MA's), (33, 26925), (35, 26916), (45, 26835), (54, 26808), (56, 26799), (57, 26796), (61, 26775), (67,
26751),

Gene: TroyPia_32 Start: 25079, Stop: 24879, Start Num: 26
Candidate Starts for TroyPia_32:
(Start: 26 @25079 has 41 MA's), (Start: 29 @25073 has 1 MA's), (49, 24974), (56, 24947), (61, 24923),
(64, 24911), (67, 24899),

Gene: TygerBlood_32 Start: 25097, Stop: 24879, Start Num: 25
Candidate Starts for TygerBlood_32:
(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Ulysses_31 Start: 24807, Stop: 24592, Start Num: 26
Candidate Starts for Ulysses_31:
(19, 24834), (Start: 26 @24807 has 41 MA's), (33, 24783), (43, 24714), (50, 24681), (54, 24669), (56,
24660), (57, 24657), (61, 24636), (64, 24624), (67, 24612),

Gene: Wander_32 Start: 25085, Stop: 24879, Start Num: 30
Candidate Starts for Wander_32:
(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Wilbur_32 Start: 25097, Stop: 24879, Start Num: 25
Candidate Starts for Wilbur_32:
(Start: 17 @25139 has 14 MA's), (Start: 22 @25106 has 2 MA's), (Start: 25 @25097 has 73 MA's),
(Start: 30 @25085 has 12 MA's), (49, 24974), (56, 24947), (61, 24923), (64, 24911), (67, 24899),

Gene: Wile_32 Start: 25117, Stop: 24902, Start Num: 25
Candidate Starts for Wile_32:

(Start: 17 @25159 has 14 MA's), (Start: 22 @25126 has 2 MA's), (Start: 25 @25117 has 73 MA's),
(Start: 30 @25105 has 12 MA's), (43, 25024), (45, 25006), (50, 24991), (54, 24979), (56, 24970), (61,
24946), (64, 24934), (67, 24922),

Gene: Wizard007_32 Start: 25102, Stop: 24884, Start Num: 25

Candidate Starts for Wizard007_32:

(Start: 17 @25144 has 14 MA's), (Start: 22 @25111 has 2 MA's), (Start: 25 @25102 has 73 MA's),
(Start: 30 @25090 has 12 MA's), (49, 24979), (56, 24952), (61, 24928), (64, 24916), (67, 24904),

Gene: Xena_32 Start: 25104, Stop: 24889, Start Num: 25

Candidate Starts for Xena_32:

(Start: 17 @25146 has 14 MA's), (Start: 22 @25113 has 2 MA's), (Start: 25 @25104 has 73 MA's),
(Start: 30 @25092 has 12 MA's), (43, 25011), (45, 24993), (50, 24978), (54, 24966), (56, 24957), (61,
24933), (64, 24921), (67, 24909),

Gene: Xeno_32 Start: 26170, Stop: 25829, Start Num: 10

Candidate Starts for Xeno_32:

(Start: 10 @26170 has 46 MA's), (36, 26026), (48, 25960), (49, 25957), (53, 25927), (56, 25912), (60,
25900), (61, 25888), (68, 25858), (69, 25846),

Gene: Xerxes_35 Start: 27730, Stop: 27389, Start Num: 10

Candidate Starts for Xerxes_35:

(Start: 10 @27730 has 46 MA's), (36, 27586), (48, 27520), (49, 27517), (53, 27487), (56, 27472), (60,
27460), (61, 27448), (68, 27418), (69, 27406),

Gene: YoSam321_32 Start: 25094, Stop: 24876, Start Num: 25

Candidate Starts for YoSam321_32:

(Start: 17 @25136 has 14 MA's), (Start: 22 @25103 has 2 MA's), (Start: 25 @25094 has 73 MA's),
(Start: 30 @25082 has 12 MA's), (49, 24971), (56, 24944), (61, 24920), (64, 24908), (67, 24896),