



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 157713 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157713 has 118 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Kimona_54
- Track 2 : LittleGuy_54, Wander_54, Koreni_53, Polymorphads_55, Nemo27_54, Lemur_54, PeterPeter_54, Gadost_54, Taquarus_54, Avle17_54, NotAPhaseMom_54, Ulysses_53, Phighter1804_54, TroyPia_55, Caelakin_54, Lunsford_55, Bruiser_53, Pipcraft_52, DirtyDunning_53, Phacado_54, Thanksgivukkah_53, Scamp_54, Houdini22_54, Tinybot_53, Iceman_54, Eris_53, Annyong_54, Funston_53, Palestino_53, Kyee_54, OKaNui_54, Cocoaberry_54, Pumbaa_54, LeoAvram_54, MeeZee_54, ICleared_54, Spino_53, LochMonster_55, Kingmustik0402_54, Relief_53, Maverick_54, JoongJeon_53, Mazhar510_54, Eagle_54
- Track 3 : Nyxis_54, Commander_54, TygerBlood_54, Bombshell_54, Nebs_55, Medusa_54, BellusTerra_55, Chaph_54, Connomayer_54, KFPoly_53, Phelipe_55, Albee_54, Ruin_54, JetBlade_54, Eros_54, Sabertooth_54, Blackmoor_54, Bartimeaus_54, LittleB_54, Morrow_55, Alberto7_55, Citius_54, Camperdownii_52, Burger_52, Baby16_54, Millski_53, Romney_54, Iracema64_55, Clarenza_53, Eapen_54, Shaka_54, Maxo_55, Wizard007_54, Flux_54, Cintron_53, LappelDuVide_53, BubbleTrouble_53, Noelle_54, Skipitt_53, Ohfah_55, Eurydice_55, Druantia_54, Abdiel_54, Kremtemulon_52, Broseidon_54, Sparxx_55, Holli_53, Stasia_53, Lorenzo_54, Florean_54, YoSam321_54, Roosevelt_53, NorthStar_53, Dhanush_54, Wilbur_54, Jaykayelowell_52, Deano_53, CentreCat_54, Melvin_56
- Track 4 : Bumblebee11_52, Xena_52, Cici_53, Datway_53, AbbysRanger_53, Wile_53, Badger_52, PetiteSangsue_53, Phontbonne_54, Perplexer_53, Katalie136_53, Achebe_52, Morpher26_53, Shygu2_53

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

The start number called the most often in the published annotations is 2, it was called in 114 of the 115 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbysRanger_53, Abdiel_54, Achebe_52, Albee_54, Alberto7_55, Annyong_54, Avle17_54, Baby16_54, Badger_52, Bartimeaus_54, BellusTerra_55, Blackmoor_54, Bombshell_54, Broseidon_54, Bruiser_53, BubbleTrouble_53, Bumblebee11_52,

Burger_52, Caelakin_54, Camperdownii_52, CentreCat_54, Chaph_54, Cici_53, Cintron_53, Citius_54, Clarenza_53, Cocoaberry_54, Commander_54, Connomayer_54, Datway_53, Deano_53, Dhanush_54, DirtyDunning_53, Druantia_54, Eagle_54, Eapen_54, Eris_53, Eros_54, Eurydice_55, Florean_54, Flux_54, Funston_53, Gadost_54, Holli_53, Houdini22_54, ICleared_54, Iceman_54, Iracema64_55, Jaykayelowell_52, JetBlade_54, JoongJeon_53, KFPoly_53, Katalie136_53, Kingmustik0402_54, Koreni_53, Kremtemulon_52, Kyee_54, LappelDuVide_53, Lemur_54, LeoAvram_54, LittleB_54, LittleGuy_54, LochMonster_55, Lorenzo_54, Lunsford_55, Maverick_54, Maxo_55, Mazhar510_54, Medusa_54, MeeZee_54, Melvin_56, Millski_53, Morpher26_53, Morrow_55, Nebs_55, Nemo27_54, Noelle_54, NorthStar_53, NotAPhaseMom_54, Nyxis_54, OKaNui_54, Ohfah_55, Palestino_53, Perplexer_53, PeterPeter_54, PetiteSangsue_53, Phacado_54, Phelipe_55, Phighter1804_54, Phontbonne_54, Pipcraft_52, Polymorphads_55, Pumbaa_54, Relief_53, Romney_54, Roosevelt_53, Ruin_54, Sabertooth_54, Scamp_54, Shaka_54, Shygu2_53, Skipitt_53, Sparxx_55, Spino_53, Stasia_53, Taquarus_54, Thanksgivukkah_53, Tinybot_53, TroyPia_55, TygerBlood_54, Ulysses_53, Wander_54, Wilbur_54, Wile_53, Wizard007_54, Xena_52, YoSam321_54,

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

- Kimona_54,

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

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Summary by start number:

Start 2:

- Found in 118 of 118 (100.0%) of genes in pham
- Manual Annotations of this start: 114 of 115
- Called 99.2% of time when present
- Phage (with cluster) where this start called: AbbysRanger_53 (A4), Abdiel_54 (A4), Achebe_52 (A4), Albee_54 (A4), Alberto7_55 (A4), Annyong_54 (A4), Avle17_54 (A4), Baby16_54 (A4), Badger_52 (A4), Bartimeaus_54 (A4), BellusTerra_55 (A4), Blackmoor_54 (A4), Bombshell_54 (A4), Broseidon_54 (A4), Bruiser_53 (A4), BubbleTrouble_53 (A4), Bumblebee11_52 (A4), Burger_52 (A4), Caelakin_54 (A4), Camperdownii_52 (A4), CentreCat_54 (A4), Chaph_54 (A4), Cici_53 (A4), Cintron_53 (A4), Citius_54 (A4), Clarenza_53 (A4), Cocoaberry_54 (A4), Commander_54 (A4), Connomayer_54 (A4), Datway_53 (A4), Deano_53 (A4), Dhanush_54 (A4), DirtyDunning_53 (A4), Druantia_54 (A4), Eagle_54 (A4), Eapen_54 (A4), Eris_53 (A4), Eros_54 (A4), Eurydice_55 (A4), Florean_54 (A4), Flux_54 (A4), Funston_53 (A4), Gadost_54 (A4), Holli_53 (A4), Houdini22_54 (A4), ICleared_54 (A4), Iceman_54 (A4), Iracema64_55 (A4), Jaykayelowell_52 (A4), JetBlade_54 (A4), JoongJeon_53 (A4), KFPoly_53 (A4), Katalie136_53 (A4), Kingmustik0402_54 (A4), Koreni_53 (A4), Kremtemulon_52 (A4), Kyee_54 (A4), LappelDuVide_53 (A4), Lemur_54 (A4), LeoAvram_54 (A4), LittleB_54 (A4), LittleGuy_54 (A4), LochMonster_55 (A4), Lorenzo_54 (A4), Lunsford_55 (A4), Maverick_54 (A4), Maxo_55 (A4), Mazhar510_54 (A4), Medusa_54 (A4), MeeZee_54 (A4), Melvin_56 (A4), Millski_53 (A4), Morpher26_53 (A4), Morrow_55 (A4), Nebs_55 (A4), Nemo27_54 (A4), Noelle_54 (A4), NorthStar_53 (A4), NotAPhaseMom_54 (A4), Nyxis_54 (A4), OKaNui_54 (A4), Ohfah_55 (A4), Palestino_53 (A4), Perplexer_53 (A4), PeterPeter_54 (A4), PetiteSangsue_53 (A4), Phacado_54 (A4), Phelipe_55 (A4), Phighter1804_54 (A4), Phontbonne_54 (A4), Pipcraft_52 (A4),

Polymorphads_55 (A4), Pumbaa_54 (A4), Relief_53 (A4), Romney_54 (A4), Roosevelt_53 (A4), Ruin_54 (A4), Sabertooth_54 (A4), Scamp_54 (A4), Shaka_54 (A4), Shygu2_53 (A4), Skipitt_53 (A4), Sparxx_55 (A4), Spino_53 (A4), Stasia_53 (A4), Taquarus_54 (A4), Thanksgivukkah_53 (A4), Tinybot_53 (A4), TroyPia_55 (A4), TygerBlood_54 (A4), Ulysses_53 (A4), Wander_54 (A4), Wilbur_54 (A4), Wile_53 (A4), Wizard007_54 (A4), Xena_52 (A4), YoSam321_54 (A4),

Start 3:

- Found in 1 of 118 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 115
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kimona_54 (A19),

Summary by clusters:

There are 2 clusters represented in this pham: A19, A4,

Info for manual annotations of cluster A19:

- Start number 3 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A4:

- Start number 2 was manually annotated 114 times for cluster A4.

Gene Information:

Gene: AbbysRanger_53 Start: 37450, Stop: 37343, Start Num: 2

Candidate Starts for AbbysRanger_53:

(Start: 2 @37450 has 114 MA's),

Gene: Abdiel_54 Start: 37484, Stop: 37374, Start Num: 2

Candidate Starts for Abdiel_54:

(1, 37685), (Start: 2 @37484 has 114 MA's),

Gene: Achebe_52 Start: 37433, Stop: 37326, Start Num: 2

Candidate Starts for Achebe_52:

(Start: 2 @37433 has 114 MA's),

Gene: Albee_54 Start: 37483, Stop: 37373, Start Num: 2

Candidate Starts for Albee_54:

(1, 37684), (Start: 2 @37483 has 114 MA's),

Gene: Alberto7_55 Start: 37820, Stop: 37710, Start Num: 2

Candidate Starts for Alberto7_55:

(1, 38021), (Start: 2 @37820 has 114 MA's),

Gene: Annyong_54 Start: 37528, Stop: 37418, Start Num: 2

Candidate Starts for Annyong_54:

(Start: 2 @37528 has 114 MA's),

Gene: Avle17_54 Start: 37480, Stop: 37370, Start Num: 2

Candidate Starts for Avle17_54:

(Start: 2 @37480 has 114 MA's),

Gene: Baby16_54 Start: 37494, Stop: 37384, Start Num: 2

Candidate Starts for Baby16_54:

(1, 37695), (Start: 2 @37494 has 114 MA's),

Gene: Badger_52 Start: 37434, Stop: 37327, Start Num: 2

Candidate Starts for Badger_52:

(Start: 2 @37434 has 114 MA's),

Gene: Bartimeaus_54 Start: 37485, Stop: 37375, Start Num: 2

Candidate Starts for Bartimeaus_54:

(1, 37686), (Start: 2 @37485 has 114 MA's),

Gene: BellusTerra_55 Start: 37484, Stop: 37374, Start Num: 2

Candidate Starts for BellusTerra_55:

(1, 37685), (Start: 2 @37484 has 114 MA's),

Gene: Blackmoor_54 Start: 37485, Stop: 37375, Start Num: 2

Candidate Starts for Blackmoor_54:

(1, 37686), (Start: 2 @37485 has 114 MA's),

Gene: Bombshell_54 Start: 37480, Stop: 37370, Start Num: 2

Candidate Starts for Bombshell_54:

(1, 37681), (Start: 2 @37480 has 114 MA's),

Gene: Broseidon_54 Start: 37485, Stop: 37375, Start Num: 2

Candidate Starts for Broseidon_54:

(1, 37686), (Start: 2 @37485 has 114 MA's),

Gene: Bruiser_53 Start: 37483, Stop: 37373, Start Num: 2

Candidate Starts for Bruiser_53:

(Start: 2 @37483 has 114 MA's),

Gene: BubbleTrouble_53 Start: 37483, Stop: 37373, Start Num: 2

Candidate Starts for BubbleTrouble_53:

(1, 37684), (Start: 2 @37483 has 114 MA's),

Gene: Bumblebee11_52 Start: 37436, Stop: 37329, Start Num: 2

Candidate Starts for Bumblebee11_52:

(Start: 2 @37436 has 114 MA's),

Gene: Burger_52 Start: 37483, Stop: 37373, Start Num: 2

Candidate Starts for Burger_52:

(1, 37684), (Start: 2 @37483 has 114 MA's),

Gene: Caelakin_54 Start: 37483, Stop: 37373, Start Num: 2

Candidate Starts for Caelakin_54:

(Start: 2 @37483 has 114 MA's),

Gene: Camperdownii_52 Start: 37157, Stop: 37047, Start Num: 2

Candidate Starts for Camperdownii_52:

(1, 37358), (Start: 2 @37157 has 114 MA's),

Gene: CentreCat_54 Start: 37486, Stop: 37376, Start Num: 2
Candidate Starts for CentreCat_54:
(1, 37687), (Start: 2 @37486 has 114 MA's),

Gene: Chaph_54 Start: 37494, Stop: 37384, Start Num: 2
Candidate Starts for Chaph_54:
(1, 37695), (Start: 2 @37494 has 114 MA's),

Gene: Cici_53 Start: 37451, Stop: 37344, Start Num: 2
Candidate Starts for Cici_53:
(Start: 2 @37451 has 114 MA's),

Gene: Cintron_53 Start: 37460, Stop: 37350, Start Num: 2
Candidate Starts for Cintron_53:
(1, 37661), (Start: 2 @37460 has 114 MA's),

Gene: Citius_54 Start: 37504, Stop: 37394, Start Num: 2
Candidate Starts for Citius_54:
(1, 37705), (Start: 2 @37504 has 114 MA's),

Gene: Clarenza_53 Start: 37480, Stop: 37370, Start Num: 2
Candidate Starts for Clarenza_53:
(1, 37681), (Start: 2 @37480 has 114 MA's),

Gene: Cocoaberry_54 Start: 37487, Stop: 37377, Start Num: 2
Candidate Starts for Cocoaberry_54:
(Start: 2 @37487 has 114 MA's),

Gene: Commander_54 Start: 37482, Stop: 37372, Start Num: 2
Candidate Starts for Commander_54:
(1, 37683), (Start: 2 @37482 has 114 MA's),

Gene: Connomayer_54 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for Connomayer_54:
(1, 37684), (Start: 2 @37483 has 114 MA's),

Gene: Datway_53 Start: 37422, Stop: 37315, Start Num: 2
Candidate Starts for Datway_53:
(Start: 2 @37422 has 114 MA's),

Gene: Deano_53 Start: 37491, Stop: 37381, Start Num: 2
Candidate Starts for Deano_53:
(1, 37692), (Start: 2 @37491 has 114 MA's),

Gene: Dhanush_54 Start: 37486, Stop: 37376, Start Num: 2
Candidate Starts for Dhanush_54:
(1, 37687), (Start: 2 @37486 has 114 MA's),

Gene: DirtyDunning_53 Start: 37495, Stop: 37385, Start Num: 2
Candidate Starts for DirtyDunning_53:
(Start: 2 @37495 has 114 MA's),

Gene: Druantia_54 Start: 37486, Stop: 37376, Start Num: 2
Candidate Starts for Druantia_54:
(1, 37687), (Start: 2 @37486 has 114 MA's),

Gene: Eagle_54 Start: 37508, Stop: 37398, Start Num: 2
Candidate Starts for Eagle_54:
(Start: 2 @37508 has 114 MA's),

Gene: Eapen_54 Start: 37478, Stop: 37368, Start Num: 2
Candidate Starts for Eapen_54:
(1, 37679), (Start: 2 @37478 has 114 MA's),

Gene: Eris_53 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for Eris_53:
(Start: 2 @37483 has 114 MA's),

Gene: Eros_54 Start: 37485, Stop: 37375, Start Num: 2
Candidate Starts for Eros_54:
(1, 37686), (Start: 2 @37485 has 114 MA's),

Gene: Eurydice_55 Start: 37480, Stop: 37370, Start Num: 2
Candidate Starts for Eurydice_55:
(1, 37681), (Start: 2 @37480 has 114 MA's),

Gene: Florean_54 Start: 37482, Stop: 37372, Start Num: 2
Candidate Starts for Florean_54:
(1, 37683), (Start: 2 @37482 has 114 MA's),

Gene: Flux_54 Start: 37482, Stop: 37372, Start Num: 2
Candidate Starts for Flux_54:
(1, 37683), (Start: 2 @37482 has 114 MA's),

Gene: Funston_53 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for Funston_53:
(Start: 2 @37483 has 114 MA's),

Gene: Gadost_54 Start: 37487, Stop: 37377, Start Num: 2
Candidate Starts for Gadost_54:
(Start: 2 @37487 has 114 MA's),

Gene: Holli_53 Start: 37273, Stop: 37163, Start Num: 2
Candidate Starts for Holli_53:
(1, 37474), (Start: 2 @37273 has 114 MA's),

Gene: Houdini22_54 Start: 37487, Stop: 37377, Start Num: 2
Candidate Starts for Houdini22_54:
(Start: 2 @37487 has 114 MA's),

Gene: ICleared_54 Start: 37512, Stop: 37402, Start Num: 2
Candidate Starts for ICleared_54:
(Start: 2 @37512 has 114 MA's),

Gene: Iceman_54 Start: 37769, Stop: 37659, Start Num: 2

Candidate Starts for Iceman_54:
(Start: 2 @37769 has 114 MA's),

Gene: Iracema64_55 Start: 37747, Stop: 37637, Start Num: 2
Candidate Starts for Iracema64_55:
(1, 37948), (Start: 2 @37747 has 114 MA's),

Gene: Jaykayelowell_52 Start: 37476, Stop: 37366, Start Num: 2
Candidate Starts for Jaykayelowell_52:
(1, 37677), (Start: 2 @37476 has 114 MA's),

Gene: JetBlade_54 Start: 37477, Stop: 37367, Start Num: 2
Candidate Starts for JetBlade_54:
(1, 37678), (Start: 2 @37477 has 114 MA's),

Gene: JoongJeon_53 Start: 37480, Stop: 37370, Start Num: 2
Candidate Starts for JoongJeon_53:
(Start: 2 @37480 has 114 MA's),

Gene: KFPoly_53 Start: 37477, Stop: 37367, Start Num: 2
Candidate Starts for KFPoly_53:
(1, 37678), (Start: 2 @37477 has 114 MA's),

Gene: Katalie136_53 Start: 37436, Stop: 37329, Start Num: 2
Candidate Starts for Katalie136_53:
(Start: 2 @37436 has 114 MA's),

Gene: Kimona_54 Start: 36110, Stop: 35979, Start Num: 3
Candidate Starts for Kimona_54:
(Start: 2 @36113 has 114 MA's), (Start: 3 @36110 has 1 MA's),

Gene: Kingmustik0402_54 Start: 37472, Stop: 37362, Start Num: 2
Candidate Starts for Kingmustik0402_54:
(Start: 2 @37472 has 114 MA's),

Gene: Koreni_53 Start: 37164, Stop: 37054, Start Num: 2
Candidate Starts for Koreni_53:
(Start: 2 @37164 has 114 MA's),

Gene: Kremtemulon_52 Start: 37431, Stop: 37321, Start Num: 2
Candidate Starts for Kremtemulon_52:
(1, 37632), (Start: 2 @37431 has 114 MA's),

Gene: Kyee_54 Start: 37481, Stop: 37371, Start Num: 2
Candidate Starts for Kyee_54:
(Start: 2 @37481 has 114 MA's),

Gene: LappelDuVide_53 Start: 37482, Stop: 37372, Start Num: 2
Candidate Starts for LappelDuVide_53:
(1, 37683), (Start: 2 @37482 has 114 MA's),

Gene: Lemur_54 Start: 37480, Stop: 37370, Start Num: 2
Candidate Starts for Lemur_54:

(Start: 2 @37480 has 114 MA's),

Gene: LeoAvram_54 Start: 37483, Stop: 37373, Start Num: 2

Candidate Starts for LeoAvram_54:

(Start: 2 @37483 has 114 MA's),

Gene: LittleB_54 Start: 37484, Stop: 37374, Start Num: 2

Candidate Starts for LittleB_54:

(1, 37685), (Start: 2 @37484 has 114 MA's),

Gene: LittleGuy_54 Start: 37379, Stop: 37269, Start Num: 2

Candidate Starts for LittleGuy_54:

(Start: 2 @37379 has 114 MA's),

Gene: LochMonster_55 Start: 37719, Stop: 37609, Start Num: 2

Candidate Starts for LochMonster_55:

(Start: 2 @37719 has 114 MA's),

Gene: Lorenzo_54 Start: 37483, Stop: 37373, Start Num: 2

Candidate Starts for Lorenzo_54:

(1, 37684), (Start: 2 @37483 has 114 MA's),

Gene: Lunsford_55 Start: 37477, Stop: 37367, Start Num: 2

Candidate Starts for Lunsford_55:

(Start: 2 @37477 has 114 MA's),

Gene: Maverick_54 Start: 37483, Stop: 37373, Start Num: 2

Candidate Starts for Maverick_54:

(Start: 2 @37483 has 114 MA's),

Gene: Maxo_55 Start: 37485, Stop: 37375, Start Num: 2

Candidate Starts for Maxo_55:

(1, 37686), (Start: 2 @37485 has 114 MA's),

Gene: Mazhar510_54 Start: 37484, Stop: 37374, Start Num: 2

Candidate Starts for Mazhar510_54:

(Start: 2 @37484 has 114 MA's),

Gene: Medusa_54 Start: 37482, Stop: 37372, Start Num: 2

Candidate Starts for Medusa_54:

(1, 37683), (Start: 2 @37482 has 114 MA's),

Gene: MeeZee_54 Start: 37480, Stop: 37370, Start Num: 2

Candidate Starts for MeeZee_54:

(Start: 2 @37480 has 114 MA's),

Gene: Melvin_56 Start: 37478, Stop: 37368, Start Num: 2

Candidate Starts for Melvin_56:

(1, 37679), (Start: 2 @37478 has 114 MA's),

Gene: Millski_53 Start: 37484, Stop: 37374, Start Num: 2

Candidate Starts for Millski_53:

(1, 37685), (Start: 2 @37484 has 114 MA's),

Gene: Morpher26_53 Start: 37457, Stop: 37350, Start Num: 2
Candidate Starts for Morpher26_53:
(Start: 2 @37457 has 114 MA's),

Gene: Morrow_55 Start: 37489, Stop: 37379, Start Num: 2
Candidate Starts for Morrow_55:
(1, 37690), (Start: 2 @37489 has 114 MA's),

Gene: Nebs_55 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for Nebs_55:
(1, 37684), (Start: 2 @37483 has 114 MA's),

Gene: Nemo27_54 Start: 37482, Stop: 37372, Start Num: 2
Candidate Starts for Nemo27_54:
(Start: 2 @37482 has 114 MA's),

Gene: Noelle_54 Start: 37758, Stop: 37648, Start Num: 2
Candidate Starts for Noelle_54:
(1, 37959), (Start: 2 @37758 has 114 MA's),

Gene: NorthStar_53 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for NorthStar_53:
(1, 37684), (Start: 2 @37483 has 114 MA's),

Gene: NotAPhaseMom_54 Start: 37487, Stop: 37377, Start Num: 2
Candidate Starts for NotAPhaseMom_54:
(Start: 2 @37487 has 114 MA's),

Gene: Nyxis_54 Start: 37373, Stop: 37263, Start Num: 2
Candidate Starts for Nyxis_54:
(1, 37574), (Start: 2 @37373 has 114 MA's),

Gene: OKaNui_54 Start: 37533, Stop: 37423, Start Num: 2
Candidate Starts for OKaNui_54:
(Start: 2 @37533 has 114 MA's),

Gene: Ohfah_55 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for Ohfah_55:
(1, 37684), (Start: 2 @37483 has 114 MA's),

Gene: Palestino_53 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for Palestino_53:
(Start: 2 @37483 has 114 MA's),

Gene: Perplexer_53 Start: 37433, Stop: 37326, Start Num: 2
Candidate Starts for Perplexer_53:
(Start: 2 @37433 has 114 MA's),

Gene: PeterPeter_54 Start: 37480, Stop: 37370, Start Num: 2
Candidate Starts for PeterPeter_54:
(Start: 2 @37480 has 114 MA's),

Gene: PetiteSangsue_53 Start: 37436, Stop: 37329, Start Num: 2
Candidate Starts for PetiteSangsue_53:
(Start: 2 @37436 has 114 MA's),

Gene: Phacado_54 Start: 37482, Stop: 37372, Start Num: 2
Candidate Starts for Phacado_54:
(Start: 2 @37482 has 114 MA's),

Gene: Phelipe_55 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for Phelipe_55:
(1, 37684), (Start: 2 @37483 has 114 MA's),

Gene: Phighter1804_54 Start: 37544, Stop: 37434, Start Num: 2
Candidate Starts for Phighter1804_54:
(Start: 2 @37544 has 114 MA's),

Gene: Phontbonne_54 Start: 37374, Stop: 37264, Start Num: 2
Candidate Starts for Phontbonne_54:
(Start: 2 @37374 has 114 MA's),

Gene: Pipcraft_52 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for Pipcraft_52:
(Start: 2 @37483 has 114 MA's),

Gene: Polymorphads_55 Start: 37476, Stop: 37366, Start Num: 2
Candidate Starts for Polymorphads_55:
(Start: 2 @37476 has 114 MA's),

Gene: Pumbaa_54 Start: 37428, Stop: 37318, Start Num: 2
Candidate Starts for Pumbaa_54:
(Start: 2 @37428 has 114 MA's),

Gene: Relief_53 Start: 37480, Stop: 37370, Start Num: 2
Candidate Starts for Relief_53:
(Start: 2 @37480 has 114 MA's),

Gene: Romney_54 Start: 37480, Stop: 37370, Start Num: 2
Candidate Starts for Romney_54:
(1, 37681), (Start: 2 @37480 has 114 MA's),

Gene: Roosevelt_53 Start: 37485, Stop: 37375, Start Num: 2
Candidate Starts for Roosevelt_53:
(1, 37686), (Start: 2 @37485 has 114 MA's),

Gene: Ruin_54 Start: 37476, Stop: 37366, Start Num: 2
Candidate Starts for Ruin_54:
(1, 37677), (Start: 2 @37476 has 114 MA's),

Gene: Sabertooth_54 Start: 37485, Stop: 37375, Start Num: 2
Candidate Starts for Sabertooth_54:
(1, 37686), (Start: 2 @37485 has 114 MA's),

Gene: Scamp_54 Start: 37485, Stop: 37375, Start Num: 2

Candidate Starts for Scamp_54:
(Start: 2 @37485 has 114 MA's),

Gene: Shaka_54 Start: 37480, Stop: 37370, Start Num: 2
Candidate Starts for Shaka_54:
(1, 37681), (Start: 2 @37480 has 114 MA's),

Gene: Shygu2_53 Start: 37485, Stop: 37378, Start Num: 2
Candidate Starts for Shygu2_53:
(Start: 2 @37485 has 114 MA's),

Gene: Skipitt_53 Start: 37477, Stop: 37367, Start Num: 2
Candidate Starts for Skipitt_53:
(1, 37678), (Start: 2 @37477 has 114 MA's),

Gene: Sparxx_55 Start: 37478, Stop: 37368, Start Num: 2
Candidate Starts for Sparxx_55:
(1, 37679), (Start: 2 @37478 has 114 MA's),

Gene: Spino_53 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for Spino_53:
(Start: 2 @37483 has 114 MA's),

Gene: Stasia_53 Start: 37361, Stop: 37254, Start Num: 2
Candidate Starts for Stasia_53:
(1, 37562), (Start: 2 @37361 has 114 MA's),

Gene: Taquarus_54 Start: 37486, Stop: 37376, Start Num: 2
Candidate Starts for Taquarus_54:
(Start: 2 @37486 has 114 MA's),

Gene: Thanksgivukkah_53 Start: 37481, Stop: 37371, Start Num: 2
Candidate Starts for Thanksgivukkah_53:
(Start: 2 @37481 has 114 MA's),

Gene: Tinybot_53 Start: 37510, Stop: 37400, Start Num: 2
Candidate Starts for Tinybot_53:
(Start: 2 @37510 has 114 MA's),

Gene: TroyPia_55 Start: 37481, Stop: 37371, Start Num: 2
Candidate Starts for TroyPia_55:
(Start: 2 @37481 has 114 MA's),

Gene: TygerBlood_54 Start: 37483, Stop: 37373, Start Num: 2
Candidate Starts for TygerBlood_54:
(1, 37684), (Start: 2 @37483 has 114 MA's),

Gene: Ulysses_53 Start: 37160, Stop: 37050, Start Num: 2
Candidate Starts for Ulysses_53:
(Start: 2 @37160 has 114 MA's),

Gene: Wander_54 Start: 37480, Stop: 37370, Start Num: 2
Candidate Starts for Wander_54:

(Start: 2 @37480 has 114 MA's),

Gene: Wilbur_54 Start: 37480, Stop: 37370, Start Num: 2

Candidate Starts for Wilbur_54:

(1, 37681), (Start: 2 @37480 has 114 MA's),

Gene: Wile_53 Start: 37467, Stop: 37360, Start Num: 2

Candidate Starts for Wile_53:

(Start: 2 @37467 has 114 MA's),

Gene: Wizard007_54 Start: 37488, Stop: 37378, Start Num: 2

Candidate Starts for Wizard007_54:

(1, 37689), (Start: 2 @37488 has 114 MA's),

Gene: Xena_52 Start: 37433, Stop: 37326, Start Num: 2

Candidate Starts for Xena_52:

(Start: 2 @37433 has 114 MA's),

Gene: YoSam321_54 Start: 37477, Stop: 37367, Start Num: 2

Candidate Starts for YoSam321_54:

(1, 37678), (Start: 2 @37477 has 114 MA's),