Pham 290962

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 290962 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290962 has 128 members, 30 are drafts.

Phages represented in each track:
• Track 1 : Niblet_8, Chicken_8, Zixiang_8
• Track 2 : Abidatro_8, Galaxy_8
• Track 3 : Shen_9, Amanises_9, Pelletreau_9, Orcanus_8, Toad24_9, KendraB23_9, Gravel_9, Eesa_8, Westrich_9
• Track 4 : Chickaboom_7, WileyE_7
• Track 5 : Vulpecula_8
• Track 6 : Ruchi_8
• Track 7 : Cote_9, Amelia_9, Daob_9, OtsoOtso_8, Jerole_9, Polka_8, Lunar_9, Melons_9, Pineda_9, Bedetta_9, Bibble12_9, PhirstandPhine_9, Kepler_8, Colusalem_8, HannahPhantana_9
• Track 8 : Kuleana_8
• Track 9 : Cygnet_8
• Track 10 : Antrice_8
• Track 11 : LittleTokyo_8, TaylorSipht_8
• Track 12 : Coral_8
• Track 13 : AmiCi24_7, Oppalora_7, DanHam62_7, Camara_7, Juno112_7, KHumphrey_7, PhluffyCoco_7, HamCheese_7, Glotell_7, Amphitrite_7, Laphuphu24k_7, AdoptaAdorbs_7, RedFox_7, Atlantica_7
• Track 14 : Rattail_7, Azaz_7
• Track 15 : Fingolfin_7
• Track 16 : AlexMinion_7, StuartMinion_7
• Track 17 : Leona_7
• Track 18 : Andrew_8
• Track 19 : Renna12_8
• Track 20 : Babushka_7
• Track 21 : Trine_6
• Track 22 : Mahdia_6
• Track 23 : Gustav_6
• Track 24 : Pepperoni_7, Lton_7
• Track 25 : OneDirection_7
• Track 26 : Faith5x5_7
• Track 27 : Moosehead_7
• Track 28 : Alatato_6
• Track 29 : JeanClaude_7
• Track 30 : Pigu_7
• Track 31 : Shoya_6
• Track 32 : Kumotta_8

- Track 33 : Sarge_7
- Track 34 : Rooter_7
- Track 35 : Cubone_6, Snekmaggedon_7
- Track 36 : Jamie19_7, PhancyPhin_7, Hanako_7, Spinach_7, Phrann_7, Impisi_7, Raymond7_7, Shweta_7, Redi_7, SpongeBob_7, Nenae_7, ShrimpFriedEgg_7, Panchino_7, Rebel_7, SkinnyPete_7, BabeRuth_7, Purgamenstris_7
- Track 37 : Melville_7, Scitech_7, Tessdabest_6
- Track 38 : Carcharodon_7, Xerxes_7, Bosection6_7, Parmesanjohn_7, Duplicity_7, Andies_7, Gex_7, Pipsqueaks_7, Philonius_7, Fulbright_7, Xeno_7, Tortoise12_7, Schnauzer_7, Silvafighter_7, Journey_7, Tapioca_7, EGUnicorn_7, Magsby_7, Aggie_7, Charlie_7, Silvy_7, Smurph_7, Chewbacca_7, Phloss_7
- Track 39 : MichelleMyBell_7
- Track 40 : Rubeelu_7, Butters_7
- Track 41 : Kevin1_7
- Track 42 : Gudmit_8

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

The start number called the most often in the published annotations is 13, it was called in 43 of the 98 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Aggie_7, Andies_7, BabeRuth_7, Bosection6_7, Butters_7, Carcharodon_7, Charlie_7, Chewbacca_7, Duplicity_7, EGUnicorn_7, Fulbright_7, Gex_7, Hanako_7, Impisi_7, Jamie19_7, Journey_7, Kevin1_7, Magsby_7, Nenae_7, Panchino_7, Parmesanjohn_7, PhancyPhin_7, Philonius_7, Phloss_7, Phrann_7, Pipsqueaks_7, Purgamenstris_7, Raymond7_7, Rebel_7, Redi_7, Rubeelu_7, Schnauzer_7, ShrimpFriedEgg_7, Shweta_7, Silvafighter_7, Silvy_7, SkinnyPete_7, Smurph_7, Spinach_7, SpongeBob_7, Tapioca_7, Tortoise12_7, Xeno_7, Xerxes_7,

Genes that have the "Most Annotated" start but do not call it:
- Chickaboom_7, Cubone_6, Melville_7, Ruchi_8, Scitech_7, Snekmaggedon_7, Tessdabest_6, WileyE_7,

Genes that do not have the "Most Annotated" start:
- Abidatro_8, AdoptaAdorbs_7, Alatato_6, AlexMinion_7, Amanises_9, Amelia_9, AmiCi24_7, Amphitrite_7, Andrew_8, Antrice_8, Atlantica_7, Azaz_7, Babushka_7, Bedetta_9, Bibble12_9, Camara_7, Chicken_8, Colusalem_8, Coral_8, Cote_9, Cygnet_8, DanHam62_7, Daob_9, Eesa_8, Faith5x5_7, Fingolfin_7, Galaxy_8, Glotell_7, Gravel_9, Gudmit_8, Gustav_6, HamCheese_7, HannahPhantana_9, JeanClaude_7, Jerole_9, Juno112_7, KHumphrey_7, KendraB23_9, Kepler_8, Kuleana_8, Kumotta_8, Laphuphu24k_7, Leona_7, LittleTokyo_8, Lton_7, Lunar_9, Mahdia_6, Melons_9, MichelleMyBell_7, Moosehead_7, Niblet_8, OneDirection_7, Oppalora_7, Orcanus_8, OtsoOtso_8, Pelletreau_9, Pepperoni_7, PhirstandPhine_9, PhluffyCoco_7, Pigu_7, Pineda_9, Polka_8, Rattail_7, RedFox_7, Renna12_8, Rooter_7, Sarge_7, Shen_9, Shoya_6, StuartMinion_7, TaylorSipht_8, Toad24_9, Trine_6, Vulpecula_8, Westrich_9, Zixiang_8,

Summary by start number:

Start 6:
- Found in 5 of 128 (3.9%) of genes in pham
- Manual Annotations of this start: 3 of 98
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Faith5x5_7 (CZ6), Lton_7 (CZ), Moosehead_7 (CZ6), Pepperoni_7 (CZ),

Start 12:
- Found in 3 of 128 (2.3%) of genes in pham
- Manual Annotations of this start: 1 of 98
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Leona_7 (AS3),

Start 13:
- Found in 52 of 128 (40.6%) of genes in pham
- Manual Annotations of this start: 43 of 98
- Called 84.6% of time when present
- Phage (with cluster) where this start called: Aggie_7 (N), Andies_7 (N), BabeRuth_7 (N), Bosection6_7 (N), Butters_7 (N), Carcharodon_7 (N), Charlie_7 (N), Chewbacca_7 (N), Duplicity_7 (N), EGUnicorn_7 (N), Fulbright_7 (N), Gex_7 (N), Hanako_7 (N), Impisi_7 (N), Jamie19_7 (N), Journey_7 (N), Kevin1_7 (N), Magsby_7 (N), Nenae_7 (N), Panchino_7 (N), Parmesanjohn_7 (N), PhancyPhin_7 (N), Philonius_7 (N), Phloss_7 (N), Phrann_7 (N), Pipsqueaks_7 (N), Purgamenstris_7 (N), Raymond7_7 (N), Rebel_7 (N), Redi_7 (N), Rubeelu_7 (N), Schnauzer_7 (N), ShrimpFriedEgg_7 (N), Shweta_7 (N), Silvafighter_7 (N), Silvy_7 (N), SkinnyPete_7 (N), Smurph_7 (N), Spinach_7 (N), SpongeBob_7 (N), Tapioca_7 (N), Tortoise12_7 (N), Xeno_7 (N), Xerxes_7 (N),

Start 14:
- Found in 4 of 128 (3.1%) of genes in pham
- Manual Annotations of this start: 1 of 98
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Mahdia_6 (CD),

Start 15:
- Found in 1 of 128 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MichelleMyBell_7 (N),

Start 18:
- Found in 6 of 128 (4.7%) of genes in pham
- Manual Annotations of this start: 2 of 98
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Gudmit_8 (singleton), OneDirection_7 (CZ6),

Start 21:
- Found in 3 of 128 (2.3%) of genes in pham
- Manual Annotations of this start: 3 of 98
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alatato_6 (FB), Gustav_6 (CD), Kumotta_8 (FB),

Start 22:
• Found in 64 of 128 (50.0%) of genes in pham
• Manual Annotations of this start: 40 of 98
• Called 98.4% of time when present
• Phage (with cluster) where this start called: Abidatro_8 (AS1), AdoptaAdorbs_7 (AS3), AlexMinion_7 (AS3), Amanises_9 (AS1), Amelia_9 (AS2), AmiCi24_7 (AS3), Amphitrite_7 (AS3), Andrew_8 (AS3), Antrice_8 (AS2), Atlantica_7 (AS3), Azaz_7 (AS3), Babushka_7 (AS3), Bedetta_9 (AS2), Bibble12_9 (AS2), Camara_7 (AS3), Chickaboom_7 (AS1), Chicken_8 (AS1), Colusalem_8 (AS2), Coral_8 (AS2), Cote_9 (AS2), Cygnet_8 (AS2), DanHam62_7 (AS3), Daob_9 (AS2), Eesa_8 (AS1), Fingolfin_7 (AS3), Galaxy_8 (AS1), Glotell_7 (AS3), Gravel_9 (AS1), HamCheese_7 (AS3), HannahPhantana_9 (AS2), JeanClaude_7 (FB), Jerole_9 (AS2), Juno112_7 (AS3), KHumphrey_7 (AS3), KendraB23_9 (AS1), Kepler_8 (AS2), Kuleana_8 (AS2), Laphuphu24k_7 (AS3), LittleTokyo_8 (AS2), Lunar_9 (AS2), Melons_9 (AS2), Niblet_8 (AS1), Oppalora_7 (AS3), Orcanus_8 (AS1), OtsoOtso_8 (AS2), Pelletreau_9 (AS1), PhirstandPhine_9 (AS2), PhluffyCoco_7 (AS3), Pineda_9 (AS2), Polka_8 (AS2), Rattail_7 (AS3), RedFox_7 (AS3), Renna12_8 (AS3), Ruchi_8 (AS1), Sarge_7 (FB), Shen_9 (AS1), StuartMinion_7 (AS3), TaylorSipht_8 (AS1), Toad24_9 (AS1), Vulpecula_8 (AS1), Westrich_9 (AS1), WileyE_7 (AS1), Zixiang_8 (AS1),

Start 23:
• Found in 2 of 128 (1.6%) of genes in pham
• Manual Annotations of this start: 1 of 98
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Trine_6 (CD),

Start 25:
• Found in 55 of 128 (43.0%) of genes in pham
• Manual Annotations of this start: 3 of 98
• Called 14.5% of time when present
• Phage (with cluster) where this start called: Cubone_6 (N), Melville_7 (N), Pigu_7 (FB), Rooter_7 (FB), Scitech_7 (N), Shoya_6 (FB), Snekmaggedon_7 (N), Tessdabest_6 (N),

Summary by clusters:

There are 9 clusters represented in this pham: AS3, AS2, AS1, CZ6, singleton, N, CZ, FB, CD,

Info for manual annotations of cluster AS1:
•Start number 22 was manually annotated 10 times for cluster AS1.

Info for manual annotations of cluster AS2:
•Start number 22 was manually annotated 16 times for cluster AS2.

Info for manual annotations of cluster AS3:
•Start number 12 was manually annotated 1 time for cluster AS3.
•Start number 22 was manually annotated 13 times for cluster AS3.

Info for manual annotations of cluster CD:
•Start number 14 was manually annotated 1 time for cluster CD.
•Start number 21 was manually annotated 1 time for cluster CD.

•Start number 23 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CZ:
•Start number 6 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ6:
•Start number 6 was manually annotated 2 times for cluster CZ6.
•Start number 18 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster FB:
•Start number 21 was manually annotated 2 times for cluster FB.
•Start number 22 was manually annotated 1 time for cluster FB.
•Start number 25 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster N:
•Start number 13 was manually annotated 43 times for cluster N.
•Start number 15 was manually annotated 1 time for cluster N.
•Start number 25 was manually annotated 2 times for cluster N.

Gene Information:

Gene: Abidatro_8 Start: 6875, Stop: 7084, Start Num: 22
Candidate Starts for Abidatro_8:
(16, 6830), (Start: 22 @6875 has 40 MA's),

Gene: AdoptaAdorbs_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for AdoptaAdorbs_7:
(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: Aggie_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Aggie_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Alatato_6 Start: 5818, Stop: 5973, Start Num: 21
Candidate Starts for Alatato_6:
(Start: 21 @5818 has 3 MA's), (26, 5845),

Gene: AlexMinion_7 Start: 6509, Stop: 6718, Start Num: 22
Candidate Starts for AlexMinion_7:
(11, 6431), (Start: 22 @6509 has 40 MA's), (26, 6530), (36, 6611),

Gene: Amanises_9 Start: 7098, Stop: 7280, Start Num: 22
Candidate Starts for Amanises_9:
(Start: 22 @7098 has 40 MA's),

Gene: Amelia_9 Start: 7077, Stop: 7280, Start Num: 22
Candidate Starts for Amelia_9:
(Start: 22 @7077 has 40 MA's), (26, 7098), (29, 7113), (30, 7122),

Gene: AmiCi24_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for AmiCi24_7:

(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: Amphitrite_7 Start: 6508, Stop: 6690, Start Num: 22
Candidate Starts for Amphitrite_7:
(Start: 22 @6508 has 40 MA's), (26, 6529),

Gene: Andies_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Andies_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Andrew_8 Start: 6895, Stop: 7071, Start Num: 22
Candidate Starts for Andrew_8:
(Start: 22 @6895 has 40 MA's), (26, 6916), (30, 6940), (36, 6997),

Gene: Antrice_8 Start: 6824, Stop: 7024, Start Num: 22
Candidate Starts for Antrice_8:
(17, 6785), (Start: 22 @6824 has 40 MA's),

Gene: Atlantica_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for Atlantica_7:
(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: Azaz_7 Start: 6552, Stop: 6743, Start Num: 22
Candidate Starts for Azaz_7:
(Start: 12 @6489 has 1 MA's), (Start: 22 @6552 has 40 MA's), (26, 6573), (36, 6654),

Gene: BabeRuth_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for BabeRuth_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Babushka_7 Start: 6552, Stop: 6740, Start Num: 22
Candidate Starts for Babushka_7:
(Start: 22 @6552 has 40 MA's), (26, 6573), (36, 6654),

Gene: Bedetta_9 Start: 7077, Stop: 7280, Start Num: 22
Candidate Starts for Bedetta_9:
(Start: 22 @7077 has 40 MA's), (26, 7098), (29, 7113), (30, 7122),

Gene: Bibble12_9 Start: 7080, Stop: 7283, Start Num: 22
Candidate Starts for Bibble12_9:
(Start: 22 @7080 has 40 MA's), (26, 7101), (29, 7116), (30, 7125),

Gene: Bosection6_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Bosection6_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Butters_7 Start: 5729, Stop: 5977, Start Num: 13
Candidate Starts for Butters_7:
(5, 5600), (7, 5675), (8, 5678), (Start: 13 @5729 has 43 MA's), (Start: 25 @5798 has 3 MA's), (26, 5813), (31, 5840),

Gene: Camara_7 Start: 6511, Stop: 6693, Start Num: 22
Candidate Starts for Camara_7:

(Start: 22 @6511 has 40 MA's), (26, 6532),

Gene: Carcharodon_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Carcharodon_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Charlie_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Charlie_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Chewbacca_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Chewbacca_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Chickaboom_7 Start: 6580, Stop: 6765, Start Num: 22
Candidate Starts for Chickaboom_7:
(Start: 13 @6526 has 43 MA's), (Start: 14 @6532 has 1 MA's), (Start: 22 @6580 has 40 MA's), (35, 6679),

Gene: Chicken_8 Start: 6886, Stop: 7068, Start Num: 22
Candidate Starts for Chicken_8:
(Start: 22 @6886 has 40 MA's), (28, 6913),

Gene: Colusalem_8 Start: 6916, Stop: 7119, Start Num: 22
Candidate Starts for Colusalem_8:
(Start: 22 @6916 has 40 MA's), (26, 6937), (29, 6952), (30, 6961),

Gene: Coral_8 Start: 6916, Stop: 7119, Start Num: 22
Candidate Starts for Coral_8:
(Start: 22 @6916 has 40 MA's), (26, 6937), (29, 6952), (30, 6961), (38, 7051),

Gene: Cote_9 Start: 7077, Stop: 7280, Start Num: 22
Candidate Starts for Cote_9:
(Start: 22 @7077 has 40 MA's), (26, 7098), (29, 7113), (30, 7122),

Gene: Cubone_6 Start: 5805, Stop: 5987, Start Num: 25
Candidate Starts for Cubone_6:
(1, 5334), (2, 5436), (Start: 13 @5736 has 43 MA's), (Start: 25 @5805 has 3 MA's), (26, 5820),

Gene: Cygnet_8 Start: 6857, Stop: 7063, Start Num: 22
Candidate Starts for Cygnet_8:
(Start: 22 @6857 has 40 MA's),

Gene: DanHam62_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for DanHam62_7:
(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: Daob_9 Start: 7080, Stop: 7283, Start Num: 22
Candidate Starts for Daob_9:
(Start: 22 @7080 has 40 MA's), (26, 7101), (29, 7116), (30, 7125),

Gene: Duplicity_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Duplicity_7:

(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: EGUnicorn_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for EGUnicorn_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Eesa_8 Start: 7101, Stop: 7283, Start Num: 22
Candidate Starts for Eesa_8:
(Start: 22 @7101 has 40 MA's),

Gene: Faith5x5_7 Start: 5658, Stop: 5912, Start Num: 6
Candidate Starts for Faith5x5_7:
(Start: 6 @5658 has 3 MA's), (9, 5682), (Start: 18 @5733 has 2 MA's), (33, 5820),

Gene: Fingolfin_7 Start: 6511, Stop: 6693, Start Num: 22
Candidate Starts for Fingolfin_7:
(Start: 22 @6511 has 40 MA's), (26, 6532),

Gene: Fulbright_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Fulbright_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Galaxy_8 Start: 6882, Stop: 7091, Start Num: 22
Candidate Starts for Galaxy_8:
(16, 6837), (Start: 22 @6882 has 40 MA's),

Gene: Gex_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Gex_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Glotell_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for Glotell_7:
(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: Gravel_9 Start: 7098, Stop: 7280, Start Num: 22
Candidate Starts for Gravel_9:
(Start: 22 @7098 has 40 MA's),

Gene: Gudmit_8 Start: 6514, Stop: 6726, Start Num: 18
Candidate Starts for Gudmit_8:
(9, 6463), (Start: 18 @6514 has 2 MA's), (20, 6538), (31, 6601),

Gene: Gustav_6 Start: 5862, Stop: 6029, Start Num: 21
Candidate Starts for Gustav_6:
(Start: 21 @5862 has 3 MA's), (Start: 25 @5874 has 3 MA's),

Gene: HamCheese_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for HamCheese_7:
(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: Hanako_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Hanako_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: HannahPhantana_9 Start: 7080, Stop: 7283, Start Num: 22
Candidate Starts for HannahPhantana_9:
(Start: 22 @7080 has 40 MA's), (26, 7101), (29, 7116), (30, 7125),

Gene: Impisi_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Impisi_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Jamie19_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Jamie19_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: JeanClaude_7 Start: 6199, Stop: 6378, Start Num: 22
Candidate Starts for JeanClaude_7:
(3, 5911), (4, 5992), (Start: 22 @6199 has 40 MA's), (26, 6220),

Gene: Jerole_9 Start: 7077, Stop: 7280, Start Num: 22
Candidate Starts for Jerole_9:
(Start: 22 @7077 has 40 MA's), (26, 7098), (29, 7113), (30, 7122),

Gene: Journey_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Journey_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Juno112_7 Start: 6511, Stop: 6693, Start Num: 22
Candidate Starts for Juno112_7:
(Start: 22 @6511 has 40 MA's), (26, 6532),

Gene: KHumphrey_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for KHumphrey_7:
(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: KendraB23_9 Start: 7098, Stop: 7280, Start Num: 22
Candidate Starts for KendraB23_9:
(Start: 22 @7098 has 40 MA's),

Gene: Kepler_8 Start: 6915, Stop: 7118, Start Num: 22
Candidate Starts for Kepler_8:
(Start: 22 @6915 has 40 MA's), (26, 6936), (29, 6951), (30, 6960),

Gene: Kevin1_7 Start: 5729, Stop: 5977, Start Num: 13
Candidate Starts for Kevin1_7:
(5, 5600), (7, 5675), (8, 5678), (Start: 13 @5729 has 43 MA's), (Start: 25 @5798 has 3 MA's),

Gene: Kuleana_8 Start: 6883, Stop: 7083, Start Num: 22
Candidate Starts for Kuleana_8:
(Start: 22 @6883 has 40 MA's), (26, 6904), (30, 6928), (37, 6994),

Gene: Kumotta_8 Start: 7171, Stop: 7326, Start Num: 21
Candidate Starts for Kumotta_8:
(Start: 21 @7171 has 3 MA's), (26, 7198), (32, 7231),

Gene: Laphuphu24k_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for Laphuphu24k_7:
(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: Leona_7 Start: 6489, Stop: 6743, Start Num: 12
Candidate Starts for Leona_7:
(Start: 12 @6489 has 1 MA's), (Start: 22 @6552 has 40 MA's), (26, 6573), (36, 6654),

Gene: LittleTokyo_8 Start: 6828, Stop: 7022, Start Num: 22
Candidate Starts for LittleTokyo_8:
(Start: 22 @6828 has 40 MA's),

Gene: Lton_7 Start: 5667, Stop: 5966, Start Num: 6
Candidate Starts for Lton_7:
(Start: 6 @5667 has 3 MA's), (9, 5691), (Start: 18 @5742 has 2 MA's), (24, 5787), (27, 5811),

Gene: Lunar_9 Start: 7077, Stop: 7280, Start Num: 22
Candidate Starts for Lunar_9:
(Start: 22 @7077 has 40 MA's), (26, 7098), (29, 7113), (30, 7122),

Gene: Magsby_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Magsby_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Mahdia_6 Start: 5826, Stop: 6041, Start Num: 14
Candidate Starts for Mahdia_6:
(Start: 14 @5826 has 1 MA's), (Start: 23 @5880 has 1 MA's), (Start: 25 @5889 has 3 MA's), (28, 5910), (29, 5919), (32, 5937),

Gene: Melons_9 Start: 7077, Stop: 7280, Start Num: 22
Candidate Starts for Melons_9:
(Start: 22 @7077 has 40 MA's), (26, 7098), (29, 7113), (30, 7122),

Gene: Melville_7 Start: 5799, Stop: 5963, Start Num: 25
Candidate Starts for Melville_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: MichelleMyBell_7 Start: 5758, Stop: 5997, Start Num: 15
Candidate Starts for MichelleMyBell_7:
(5, 5614), (8, 5692), (10, 5701), (Start: 15 @5758 has 1 MA's), (19, 5788), (Start: 25 @5818 has 3 MA's),

Gene: Moosehead_7 Start: 5649, Stop: 5903, Start Num: 6
Candidate Starts for Moosehead_7:
(Start: 6 @5649 has 3 MA's), (Start: 18 @5724 has 2 MA's),

Gene: Nenae_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Nenae_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Niblet_8 Start: 6886, Stop: 7068, Start Num: 22
Candidate Starts for Niblet_8:
(Start: 22 @6886 has 40 MA's), (28, 6913),

Gene: OneDirection_7 Start: 5719, Stop: 5904, Start Num: 18
Candidate Starts for OneDirection_7:
(Start: 6 @5644 has 3 MA's), (Start: 18 @5719 has 2 MA's), (39, 5881),

Gene: Oppalora_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for Oppalora_7:
(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: Orcanus_8 Start: 6891, Stop: 7073, Start Num: 22
Candidate Starts for Orcanus_8:
(Start: 22 @6891 has 40 MA's),

Gene: OtsoOtso_8 Start: 6916, Stop: 7119, Start Num: 22
Candidate Starts for OtsoOtso_8:
(Start: 22 @6916 has 40 MA's), (26, 6937), (29, 6952), (30, 6961),

Gene: Panchino_7 Start: 5753, Stop: 5980, Start Num: 13
Candidate Starts for Panchino_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Parmesanjohn_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Parmesanjohn_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Pelletreau_9 Start: 7098, Stop: 7280, Start Num: 22
Candidate Starts for Pelletreau_9:
(Start: 22 @7098 has 40 MA's),

Gene: Pepperoni_7 Start: 5961, Stop: 6260, Start Num: 6
Candidate Starts for Pepperoni_7:
(Start: 6 @5961 has 3 MA's), (9, 5985), (Start: 18 @6036 has 2 MA's), (24, 6081), (27, 6105),

Gene: PhancyPhin_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for PhancyPhin_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Philonius_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Philonius_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: PhirstandPhine_9 Start: 7077, Stop: 7280, Start Num: 22
Candidate Starts for PhirstandPhine_9:
(Start: 22 @7077 has 40 MA's), (26, 7098), (29, 7113), (30, 7122),

Gene: Phloss_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Phloss_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: PhluffyCoco_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for PhluffyCoco_7:
(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: Phrann_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Phrann_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Pigu_7 Start: 5789, Stop: 5935, Start Num: 25
Candidate Starts for Pigu_7:
(Start: 25 @5789 has 3 MA's),

Gene: Pineda_9 Start: 7077, Stop: 7280, Start Num: 22
Candidate Starts for Pineda_9:
(Start: 22 @7077 has 40 MA's), (26, 7098), (29, 7113), (30, 7122),

Gene: Pipsqueaks_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Pipsqueaks_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Polka_8 Start: 6916, Stop: 7119, Start Num: 22
Candidate Starts for Polka_8:
(Start: 22 @6916 has 40 MA's), (26, 6937), (29, 6952), (30, 6961),

Gene: Purgamenstris_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Purgamenstris_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Rattail_7 Start: 6552, Stop: 6743, Start Num: 22
Candidate Starts for Rattail_7:
(Start: 12 @6489 has 1 MA's), (Start: 22 @6552 has 40 MA's), (26, 6573), (36, 6654),

Gene: Raymond7_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Raymond7_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Rebel_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Rebel_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: RedFox_7 Start: 6510, Stop: 6692, Start Num: 22
Candidate Starts for RedFox_7:
(Start: 22 @6510 has 40 MA's), (26, 6531),

Gene: Redi_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Redi_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Renna12_8 Start: 6698, Stop: 6889, Start Num: 22
Candidate Starts for Renna12_8:
(Start: 22 @6698 has 40 MA's), (26, 6719), (36, 6800),

Gene: Rooter_7 Start: 5814, Stop: 5960, Start Num: 25
Candidate Starts for Rooter_7:
(Start: 25 @5814 has 3 MA's), (29, 5844), (35, 5907),

Gene: Rubeelu_7 Start: 5729, Stop: 5977, Start Num: 13

Candidate Starts for Rubeelu_7:
(5, 5600), (7, 5675), (8, 5678), (Start: 13 @5729 has 43 MA's), (Start: 25 @5798 has 3 MA's), (26, 5813), (31, 5840),

Gene: Ruchi_8 Start: 7139, Stop: 7354, Start Num: 22
Candidate Starts for Ruchi_8:
(Start: 13 @7082 has 43 MA's), (Start: 14 @7088 has 1 MA's), (Start: 22 @7139 has 40 MA's),

Gene: Sarge_7 Start: 6203, Stop: 6382, Start Num: 22
Candidate Starts for Sarge_7:
(Start: 22 @6203 has 40 MA's), (26, 6224),

Gene: Schnauzer_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Schnauzer_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Scitech_7 Start: 5799, Stop: 5963, Start Num: 25
Candidate Starts for Scitech_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Shen_9 Start: 7098, Stop: 7280, Start Num: 22
Candidate Starts for Shen_9:
(Start: 22 @7098 has 40 MA's),

Gene: Shoya_6 Start: 5816, Stop: 5962, Start Num: 25
Candidate Starts for Shoya_6:
(Start: 25 @5816 has 3 MA's), (29, 5846), (34, 5903),

Gene: ShrimpFriedEgg_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for ShrimpFriedEgg_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Shweta_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Shweta_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Silvafighter_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Silvafighter_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Silvy_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Silvy_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: SkinnyPete_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for SkinnyPete_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Smurph_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Smurph_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Snekmaggedon_7 Start: 5822, Stop: 6004, Start Num: 25

Candidate Starts for Snekmaggedon_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: Spinach_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for Spinach_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: SpongeBob_7 Start: 5753, Stop: 6004, Start Num: 13
Candidate Starts for SpongeBob_7:
(1, 5351), (2, 5453), (Start: 13 @5753 has 43 MA's), (Start: 25 @5822 has 3 MA's), (26, 5837),

Gene: StuartMinion_7 Start: 6509, Stop: 6718, Start Num: 22
Candidate Starts for StuartMinion_7:
(11, 6431), (Start: 22 @6509 has 40 MA's), (26, 6530), (36, 6611),

Gene: Tapioca_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Tapioca_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: TaylorSipht_8 Start: 6914, Stop: 7159, Start Num: 22
Candidate Starts for TaylorSipht_8:
(Start: 22 @6914 has 40 MA's),

Gene: Tessdabest_6 Start: 5799, Stop: 5963, Start Num: 25
Candidate Starts for Tessdabest_6:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Toad24_9 Start: 7098, Stop: 7280, Start Num: 22
Candidate Starts for Toad24_9:
(Start: 22 @7098 has 40 MA's),

Gene: Tortoise12_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Tortoise12_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Trine_6 Start: 5823, Stop: 5981, Start Num: 23
Candidate Starts for Trine_6:
(Start: 23 @5823 has 1 MA's), (28, 5853), (29, 5862),

Gene: Vulpecula_8 Start: 7215, Stop: 7430, Start Num: 22
Candidate Starts for Vulpecula_8:
(Start: 22 @7215 has 40 MA's),

Gene: Westrich_9 Start: 7086, Stop: 7268, Start Num: 22
Candidate Starts for Westrich_9:
(Start: 22 @7086 has 40 MA's),

Gene: WileyE_7 Start: 6580, Stop: 6765, Start Num: 22
Candidate Starts for WileyE_7:
(Start: 13 @6526 has 43 MA's), (Start: 14 @6532 has 1 MA's), (Start: 22 @6580 has 40 MA's), (35, 6679),

Gene: Xeno_7 Start: 5730, Stop: 5963, Start Num: 13

Candidate Starts for Xeno_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Xerxes_7 Start: 5730, Stop: 5963, Start Num: 13
Candidate Starts for Xerxes_7:
(Start: 13 @5730 has 43 MA's), (Start: 25 @5799 has 3 MA's), (26, 5814),

Gene: Zixiang_8 Start: 6886, Stop: 7068, Start Num: 22
Candidate Starts for Zixiang_8:
(Start: 22 @6886 has 40 MA's), (28, 6913),