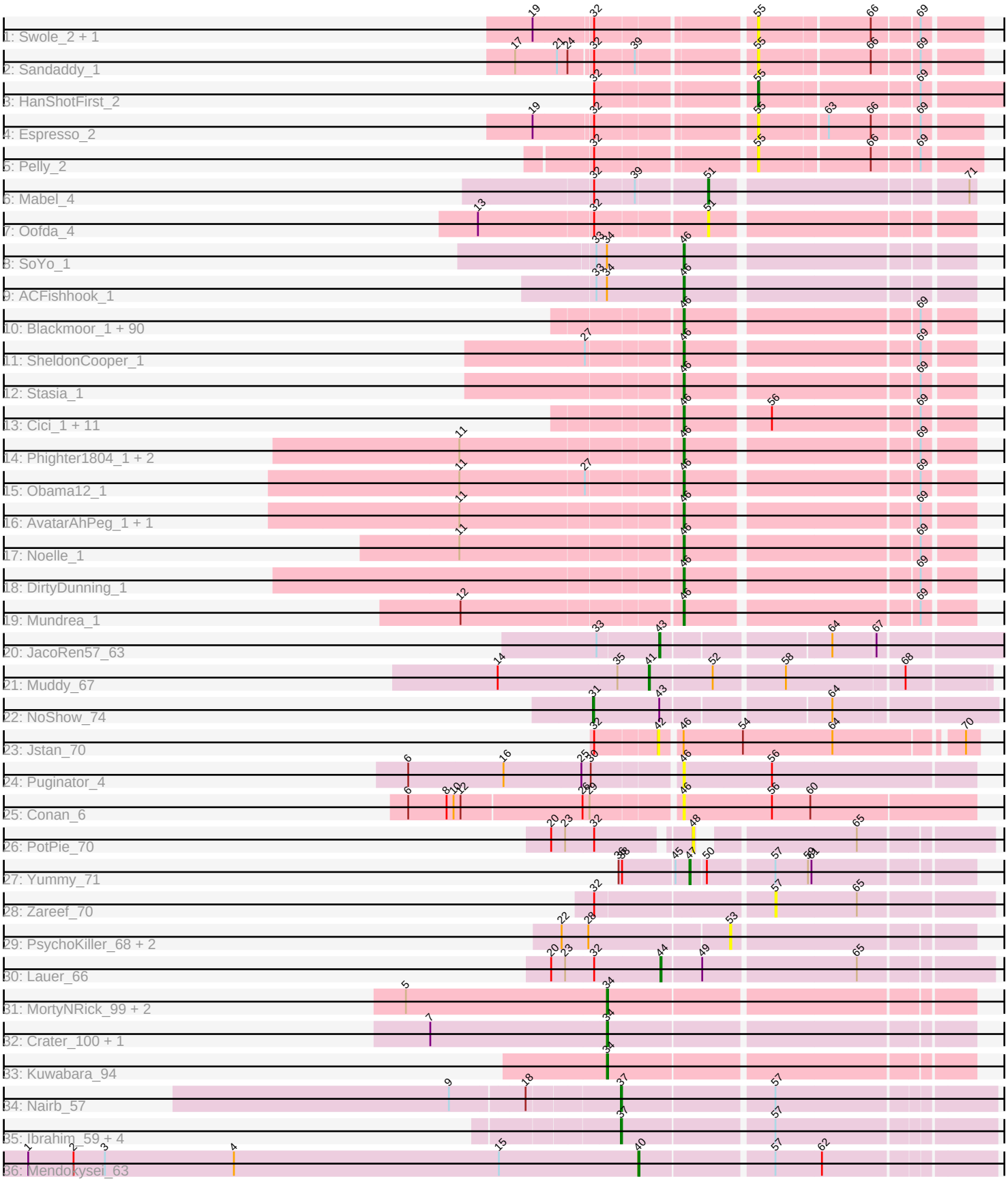
Pham 163403


1: Swole_2 + 1
2: Sandaddy_1
3: HanShotFirst_2
4: Espresso_2
5: Pelly_2
6: Mabel_4
7: Oofda_4
8: SoYo_1
9: ACFishhook_1
10: Blackmoor_1 + 90
11: SheldonCooper_1
12: Stasia_1
13: Cici_1 + 11
14: Phighter1804_1 + 2
15: Obama12_1
16: AvatarAhPeg_1 + 1
17: Noelle_1
18: DirtyDunning_1
19: Mundrea_1
20: JacoRen57_63
21: Muddy_67
22: NoShow_74
23: Jstan_70
24: Puginator_4
25: Conan_6
26: PotPie_70
27: Yummy_71
28: Zareef_70
29: PsychoKiller_68 + 2
30: Lauer_66
31: MortyNRick_99 + 2
32: Crater_100 + 1
33: Kuwabara_94
34: Nairb_57
35: Ibrahim_59 + 4
36: Mendokysei_63

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 163403 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163403 has 150 members, 15 are drafts.

Phages represented in each track:
- Track 1 : Swole_2, Agaliana_2
- Track 2 : Sandaddy_1
- Track 3 : HanShotFirst_2
- Track 4 : Espresso_2
- Track 5 : Pelly_2
- Track 6 : Mabel_4
- Track 7 : Oofda_4
- Track 8 : SoYo_1
- Track 9 : ACFishhook_1
- Track 10 : Blackmoor_1, LittleGuy_1, ICleared_1, Avle17_1, Cocoaberry_1, Holli_1, Pipcraft_1, Polymorphads_1, Kampy_1, Palestino_1, Medusa_1, Wizard007_1, Melvin_1, Annyong_1, Lunsford_1, Funston_1, Houdini22_1, Lorenzo_1, Phontbonne_1, Iracema64_1, Nemo27_1, TroyPia_1, Ohfah_1, Shygu2_1, BubbleTrouble_1, Broseidon_1, OKaNui_1, Sabertooth_1, Taquarus_1, Koreni_1, Millski_1, Citius_1, Jaykayelowell_1, Clarenza_1, JetBlade_1, CentreCat_1, Lemur_1, Cintron_1, Ruin_1, Romney_1, Sparxx_1, Eapen_1, Nebs_1, NotAPhaseMom_1, Arturo_86, Iceman_1, Florean_1, Kyee_1, Maxo_1, Connomayer_1, Kratark_1, Nyxis_1, Skipitt_1, Relief_1, Eris_1, Alberto7_1, Chaph_1, Mazhar510_1, Flux_1, Druantia_1, Spino_1, Roosevelt_1, Eros_1, Albee_1, Eurydice_1, Gadost_1, Thanksgivukkah_1, Bombshell_1, NorthStar_1, TinaFeyge_1, LittleB_1, Scamp_1, Bartimeaus_1, BellusTerra_1, Morrow_1, Baby16_1, TygerBlood_1, JoongJeon_1, KFPoly_1, Happiness_1, Deano_1, YoSam321_1, Wilbur_1, Dhanush_1, Wander_1, Abdiel_1, PeterPeter_1, Bruiser_1, Phacado_1, Kingmustik0402_1, Camperdownii_1
- Track 11 : SheldonCooper_1
- Track 12 : Stasia_1
- Track 13 : Cici_1, Xena_1, Badger_1, Datway_1, PetiteSangsue_1, Morpher26_1, Wile_1, Katalie136_1, Achebe_1, Perplexer_1, AbbysRanger_1, Bumblebee11_1
- Track 14 : Phighter1804_1, Pumbaa_1, LochMonster_1
- Track 15 : Obama12_1
- Track 16 : AvatarAhPeg_1, Miramae_1
- Track 17 : Noelle_1
- Track 18 : DirtyDunning_1
- Track 19 : Mundrea_1
- Track 20 : JacoRen57_63
- Track 21 : Muddy_67
- Track 22 : NoShow_74

• Track 23 : Jstan_70
• Track 24 : Puginator_4
• Track 25 : Conan_6
• Track 26 : PotPie_70
• Track 27 : Yummy_71
• Track 28 : Zareef_70
• Track 29 : PsychoKiller_68, Eliott_69, RedBaron_75
• Track 30 : Lauer_66
• Track 31 : MortyNRick_99, Birdsong_96, BearBQ_102
• Track 32 : Crater_100, Apricot_101
• Track 33 : Kuwabara_94
• Track 34 : Nairb_57
• Track 35 : Ibrahim_59, ZenTime222_65, Whitty_58, RonRayGun_59, Bernal13_59
• Track 36 : Mendokysei_63

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

The start number called the most often in the published annotations is 46, it was called in 116 of the 135 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ACFishhook_1, AbbysRanger_1, Abdiel_1, Achebe_1, Albee_1, Alberto7_1, Annyong_1, Arturo_86, AvatarAhPeg_1, Avle17_1, Baby16_1, Badger_1, Bartimeaus_1, BellusTerra_1, Blackmoor_1, Bombshell_1, Broseidon_1, Bruiser_1, BubbleTrouble_1, Bumblebee11_1, Camperdownii_1, CentreCat_1, Chaph_1, Cici_1, Cintron_1, Citius_1, Clarenza_1, Cocoaberry_1, Conan_6, Connomayer_1, Datway_1, Deano_1, Dhanush_1, DirtyDunning_1, Druantia_1, Eapen_1, Eris_1, Eros_1, Eurydice_1, Florean_1, Flux_1, Funston_1, Gadost_1, Happiness_1, Holli_1, Houdini22_1, ICleared_1, Iceman_1, Iracema64_1, Jaykayelowell_1, JetBlade_1, JoongJeon_1, KFPoly_1, Kampy_1, Katalie136_1, Kingmustik0402_1, Koreni_1, Kratark_1, Kyee_1, Lemur_1, LittleB_1, LittleGuy_1, LochMonster_1, Lorenzo_1, Lunsford_1, Maxo_1, Mazhar510_1, Medusa_1, Melvin_1, Millski_1, Miramae_1, Morpher26_1, Morrow_1, Mundrea_1, Nebs_1, Nemo27_1, Noelle_1, NorthStar_1, NotAPhaseMom_1, Nyxis_1, OKaNui_1, Obama12_1, Ohfah_1, Palestino_1, Perplexer_1, PeterPeter_1, PetiteSangsue_1, Phacado_1, Phighter1804_1, Phontbonne_1, Pipcraft_1, Polymorphads_1, Puginator_4, Pumbaa_1, Relief_1, Romney_1, Roosevelt_1, Ruin_1, Sabertooth_1, Scamp_1, SheldonCooper_1, Shygu2_1, Skipitt_1, SoYo_1, Sparxx_1, Spino_1, Stasia_1, Taquarus_1, Thanksgivukkah_1, TinaFeyge_1, TroyPia_1, TygerBlood_1, Wander_1, Wilbur_1, Wile_1, Wizard007_1, Xena_1, YoSam321_1,

Genes that have the "Most Annotated" start but do not call it:
• Jstan_70,

Genes that do not have the "Most Annotated" start:
• Agaliana_2, Apricot_101, BearBQ_102, Bernal13_59, Birdsong_96, Crater_100, Eliott_69, Espresso_2, HanShotFirst_2, Ibrahim_59, JacoRen57_63, Kuwabara_94, Lauer_66, Mabel_4, Mendokysei_63, MortyNRick_99, Muddy_67, Nairb_57, NoShow_74, Oofda_4, Pelly_2, PotPie_70, PsychoKiller_68, RedBaron_75, RonRayGun_59, Sandaddy_1, Swole_2, Whitty_58, Yummy_71, Zareef_70,

ZenTime222_65,

Summary by start number:

Start 31:
• Found in 1 of 150 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 135
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NoShow_74 (AB),

Start 34:
• Found in 8 of 150 (5.3%) of genes in pham
• Manual Annotations of this start: 5 of 135
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Apricot_101 (DN3), BearBQ_102 (DN), Birdsong_96 (DN), Crater_100 (DN3), Kuwabara_94 (DN4), MortyNRick_99 (DN),

Start 37:
• Found in 6 of 150 (4.0%) of genes in pham
• Manual Annotations of this start: 6 of 135
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bernal13_59 (T), Ibrahim_59 (T), Nairb_57 (T), RonRayGun_59 (T), Whitty_58 (T), ZenTime222_65 (T),

Start 40:
• Found in 1 of 150 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 135
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mendokysei_63 (T),

Start 41:
• Found in 1 of 150 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 135
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Muddy_67 (AB),

Start 42:
• Found in 1 of 150 (0.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Jstan_70 (AZ1),

Start 43:
• Found in 2 of 150 (1.3%) of genes in pham
• Manual Annotations of this start: 1 of 135
• Called 50.0% of time when present
• Phage (with cluster) where this start called: JacoRen57_63 (AB),

Start 44:
• Found in 1 of 150 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 135
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Lauer_66 (CT),

Start 46:
• Found in 119 of 150 (79.3%) of genes in pham
• Manual Annotations of this start: 116 of 135
• Called 99.2% of time when present
• Phage (with cluster) where this start called: ACFishhook_1 (A3), AbbysRanger_1 (A4), Abdiel_1 (A4), Achebe_1 (A4), Albee_1 (A4), Alberto7_1 (A4), Annyong_1 (A4), Arturo_86 (A4), AvatarAhPeg_1 (A4), Avle17_1 (A4), Baby16_1 (A4), Badger_1 (A4), Bartimeaus_1 (A4), BellusTerra_1 (A4), Blackmoor_1 (A4), Bombshell_1 (A4), Broseidon_1 (A4), Bruiser_1 (A4), BubbleTrouble_1 (A4), Bumblebee11_1 (A4), Camperdownii_1 (A4), CentreCat_1 (A4), Chaph_1 (A4), Cici_1 (A4), Cintron_1 (A4), Citius_1 (A4), Clarenza_1 (A4), Cocoaberry_1 (A4), Conan_6 (BD3), Connomayer_1 (A4), Datway_1 (A4), Deano_1 (A4), Dhanush_1 (A4), DirtyDunning_1 (A4), Druantia_1 (A4), Eapen_1 (A4), Eris_1 (A4), Eros_1 (A4), Eurydice_1 (A4), Florean_1 (A4), Flux_1 (A4), Funston_1 (A4), Gadost_1 (A4), Happiness_1 (A4), Holli_1 (A4), Houdini22_1 (A4), ICleared_1 (A4), Iceman_1 (A4), Iracema64_1 (A4), Jaykayelowell_1 (A4), JetBlade_1 (A4), JoongJeon_1 (A4), KFPoly_1 (A4), Kampy_1 (A4), Katalie136_1 (A4), Kingmustik0402_1 (A4), Koreni_1 (A4), Kratark_1 (A4), Kyee_1 (A4), Lemur_1 (A4), LittleB_1 (A4), LittleGuy_1 (A4), LochMonster_1 (A4), Lorenzo_1 (A4), Lunsford_1 (A4), Maxo_1 (A4), Mazhar510_1 (A4), Medusa_1 (A4), Melvin_1 (A4), Millski_1 (A4), Miramae_1 (A4), Morpher26_1 (A4), Morrow_1 (A4), Mundrea_1 (A4), Nebs_1 (A4), Nemo27_1 (A4), Noelle_1 (A4), NorthStar_1 (A4), NotAPhaseMom_1 (A4), Nyxis_1 (A4), OKaNui_1 (A4), Obama12_1 (A4), Ohfah_1 (A4), Palestino_1 (A4), Perplexer_1 (A4), PeterPeter_1 (A4), PetiteSangsue_1 (A4), Phacado_1 (A4), Phighter1804_1 (A4), Phontbonne_1 (A4), Pipcraft_1 (A4), Polymorphads_1 (A4), Puginator_4 (BD2), Pumbaa_1 (A4), Relief_1 (A4), Romney_1 (A4), Roosevelt_1 (A4), Ruin_1 (A4), Sabertooth_1 (A4), Scamp_1 (A4), SheldonCooper_1 (A4), Shygu2_1 (A4), Skipitt_1 (A4), SoYo_1 (A3), Sparxx_1 (A4), Spino_1 (A4), Stasia_1 (A4), Taquarus_1 (A4), Thanksgivukkah_1 (A4), TinaFeyge_1 (A4), TroyPia_1 (A4), TygerBlood_1 (A4), Wander_1 (A4), Wilbur_1 (A4), Wile_1 (A4), Wizard007_1 (A4), Xena_1 (A4), YoSam321_1 (A4),

Start 47:
• Found in 1 of 150 (0.7%) of genes in pham
• Manual Annotations of this start: 1 of 135
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yummy_71 (CT),

Start 48:
• Found in 1 of 150 (0.7%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: PotPie_70 (CT),

Start 51:
• Found in 2 of 150 (1.3%) of genes in pham
• Manual Annotations of this start: 1 of 135
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mabel_4 (A11), Oofda_4 (A15),

Start 53:
• Found in 3 of 150 (2.0%) of genes in pham
• No Manual Annotations of this start.

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Eliott_69 (CT), PsychoKiller_68 (CT), RedBaron_75 (CT),

Start 55:
• Found in 6 of 150 (4.0%) of genes in pham
• Manual Annotations of this start: 1 of 135
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Agaliana_2 (A1), Espresso_2 (A1), HanShotFirst_2 (A1), Pelly_2 (A1), Sandaddy_1 (A1), Swole_2 (A1),

Start 57:
• Found in 9 of 150 (6.0%) of genes in pham
• No Manual Annotations of this start.
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Zareef_70 (CT),

Summary by clusters:

There are 14 clusters represented in this pham: DN, A15, AB, A11, DN3, A1, DN4, A3, A4, BD3, BD2, AZ1, CT, T,

Info for manual annotations of cluster A1:
•Start number 55 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A11:
•Start number 51 was manually annotated 1 time for cluster A11.

Info for manual annotations of cluster A3:
•Start number 46 was manually annotated 2 times for cluster A3.

Info for manual annotations of cluster A4:
•Start number 46 was manually annotated 114 times for cluster A4.

Info for manual annotations of cluster AB:
•Start number 31 was manually annotated 1 time for cluster AB.
•Start number 41 was manually annotated 1 time for cluster AB.
•Start number 43 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster CT:
•Start number 44 was manually annotated 1 time for cluster CT.
•Start number 47 was manually annotated 1 time for cluster CT.

Info for manual annotations of cluster DN:
•Start number 34 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN3:
•Start number 34 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:
•Start number 34 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster T:
•Start number 37 was manually annotated 6 times for cluster T.
•Start number 40 was manually annotated 1 time for cluster T.

Gene Information:

Gene: ACFishhook_1 Start: 596, Stop: 823, Start Num: 46
Candidate Starts for ACFishhook_1:
(33, 521), (Start: 34 @530 has 5 MA's), (Start: 46 @596 has 116 MA's),

Gene: AbbysRanger_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for AbbysRanger_1:
(Start: 46 @542 has 116 MA's), (56, 608), (69, 728),

Gene: Abdiel_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Abdiel_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Achebe_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for Achebe_1:
(Start: 46 @542 has 116 MA's), (56, 608), (69, 728),

Gene: Agaliana_2 Start: 958, Stop: 1131, Start Num: 55
Candidate Starts for Agaliana_2:
(19, 787), (32, 835), (Start: 55 @958 has 1 MA's), (66, 1048), (69, 1084),

Gene: Albee_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Albee_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Alberto7_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Alberto7_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Annyong_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Annyong_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Apricot_101 Start: 51816, Stop: 52109, Start Num: 34
Candidate Starts for Apricot_101:
(7, 51666), (Start: 34 @51816 has 5 MA's),

Gene: Arturo_86 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Arturo_86:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: AvatarAhPeg_1 Start: 535, Stop: 762, Start Num: 46
Candidate Starts for AvatarAhPeg_1:

(11, 355), (Start: 46 @535 has 116 MA's), (69, 721),

Gene: Avle17_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Avle17_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Baby16_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Baby16_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Badger_1 Start: 543, Stop: 770, Start Num: 46
Candidate Starts for Badger_1:
(Start: 46 @543 has 116 MA's), (56, 609), (69, 729),

Gene: Bartimeaus_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Bartimeaus_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: BearBQ_102 Start: 54695, Stop: 54988, Start Num: 34
Candidate Starts for BearBQ_102:
(5, 54524), (Start: 34 @54695 has 5 MA's),

Gene: BellusTerra_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for BellusTerra_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Bernal13_59 Start: 40895, Stop: 41194, Start Num: 37
Candidate Starts for Bernal13_59:
(Start: 37 @40895 has 6 MA's), (57, 41018),

Gene: Birdsong_96 Start: 52683, Stop: 52976, Start Num: 34
Candidate Starts for Birdsong_96:
(5, 52512), (Start: 34 @52683 has 5 MA's),

Gene: Blackmoor_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Blackmoor_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Bombshell_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Bombshell_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Broseidon_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Broseidon_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Bruiser_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Bruiser_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: BubbleTrouble_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for BubbleTrouble_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Bumblebee11_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for Bumblebee11_1:
(Start: 46 @542 has 116 MA's), (56, 608), (69, 728),

Gene: Camperdownii_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Camperdownii_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: CentreCat_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for CentreCat_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Chaph_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Chaph_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Cici_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for Cici_1:
(Start: 46 @542 has 116 MA's), (56, 608), (69, 728),

Gene: Cintron_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Cintron_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Citius_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Citius_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Clarenza_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Clarenza_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Cocoaberry_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Cocoaberry_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Conan_6 Start: 1044, Stop: 1289, Start Num: 46
Candidate Starts for Conan_6:
(6, 822), (8, 855), (10, 861), (12, 867), (26, 969), (29, 975), (Start: 46 @1044 has 116 MA's), (56, 1119), (60, 1152),

Gene: Connomayer_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Connomayer_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Crater_100 Start: 52160, Stop: 52453, Start Num: 34
Candidate Starts for Crater_100:
(7, 52010), (Start: 34 @52160 has 5 MA's),

Gene: Datway_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for Datway_1:
(Start: 46 @542 has 116 MA's), (56, 608), (69, 728),

Gene: Deano_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Deano_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Dhanush_1 Start: 537, Stop: 764, Start Num: 46
Candidate Starts for Dhanush_1:
(Start: 46 @537 has 116 MA's), (69, 723),

Gene: DirtyDunning_1 Start: 536, Stop: 763, Start Num: 46
Candidate Starts for DirtyDunning_1:
(Start: 46 @536 has 116 MA's), (69, 722),

Gene: Druantia_1 Start: 539, Stop: 766, Start Num: 46
Candidate Starts for Druantia_1:
(Start: 46 @539 has 116 MA's), (69, 725),

Gene: Eapen_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Eapen_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Eliott_69 Start: 45873, Stop: 46064, Start Num: 53
Candidate Starts for Eliott_69:
(22, 45738), (28, 45759), (53, 45873),

Gene: Eris_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Eris_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Eros_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Eros_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Espresso_2 Start: 955, Stop: 1128, Start Num: 55
Candidate Starts for Espresso_2:
(19, 784), (32, 832), (Start: 55 @955 has 1 MA's), (63, 1009), (66, 1045), (69, 1081),

Gene: Eurydice_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Eurydice_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Florean_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Florean_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Flux_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Flux_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Funston_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Funston_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Gadost_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Gadost_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: HanShotFirst_2 Start: 873, Stop: 1067, Start Num: 55
Candidate Starts for HanShotFirst_2:
(32, 750), (Start: 55 @873 has 1 MA's), (69, 999),

Gene: Happiness_1 Start: 537, Stop: 764, Start Num: 46
Candidate Starts for Happiness_1:
(Start: 46 @537 has 116 MA's), (69, 723),

Gene: Holli_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Holli_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Houdini22_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Houdini22_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: ICleared_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for ICleared_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Ibrahim_59 Start: 41099, Stop: 41398, Start Num: 37
Candidate Starts for Ibrahim_59:
(Start: 37 @41099 has 6 MA's), (57, 41222),

Gene: Iceman_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Iceman_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Iracema64_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Iracema64_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: JacoRen57_63 Start: 47251, Stop: 47520, Start Num: 43
Candidate Starts for JacoRen57_63:
(33, 47200), (Start: 43 @47251 has 1 MA's), (64, 47383), (67, 47419),

Gene: Jaykayelowell_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Jaykayelowell_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: JetBlade_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for JetBlade_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: JoongJeon_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for JoongJeon_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Jstan_70 Start: 43158, Stop: 43409, Start Num: 42

Candidate Starts for Jstan_70:
(32, 43107), (42, 43158), (Start: 46 @43173 has 116 MA's), (54, 43224), (64, 43299), (70, 43398),

Gene: KFPoly_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for KFPoly_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Kampy_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Kampy_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Katalie136_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for Katalie136_1:
(Start: 46 @542 has 116 MA's), (56, 608), (69, 728),

Gene: Kingmustik0402_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Kingmustik0402_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Koreni_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Koreni_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Kratark_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Kratark_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Kuwabara_94 Start: 53726, Stop: 54019, Start Num: 34
Candidate Starts for Kuwabara_94:
(Start: 34 @53726 has 5 MA's),

Gene: Kyee_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Kyee_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Lauer_66 Start: 47856, Stop: 48119, Start Num: 44
Candidate Starts for Lauer_66:
(20, 47766), (23, 47778), (32, 47802), (Start: 44 @47856 has 1 MA's), (49, 47889), (65, 48015),

Gene: Lemur_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Lemur_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: LittleB_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for LittleB_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: LittleGuy_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for LittleGuy_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: LochMonster_1 Start: 536, Stop: 763, Start Num: 46
Candidate Starts for LochMonster_1:

(11, 356), (Start: 46 @536 has 116 MA's), (69, 722),

Gene: Lorenzo_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Lorenzo_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Lunsford_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Lunsford_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Mabel_4 Start: 2458, Stop: 2664, Start Num: 51
Candidate Starts for Mabel_4:
(32, 2368), (39, 2401), (Start: 51 @2458 has 1 MA's), (71, 2659),

Gene: Maxo_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Maxo_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Mazhar510_1 Start: 539, Stop: 766, Start Num: 46
Candidate Starts for Mazhar510_1:
(Start: 46 @539 has 116 MA's), (69, 725),

Gene: Medusa_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Medusa_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Melvin_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Melvin_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Mendokysei_63 Start: 42026, Stop: 42310, Start Num: 40
Candidate Starts for Mendokysei_63:
(1, 41501), (2, 41540), (3, 41567), (4, 41678), (15, 41906), (Start: 40 @42026 has 1 MA's), (57, 42134), (62, 42173),

Gene: Millski_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Millski_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Miramae_1 Start: 535, Stop: 762, Start Num: 46
Candidate Starts for Miramae_1:
(11, 355), (Start: 46 @535 has 116 MA's), (69, 721),

Gene: Morpher26_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for Morpher26_1:
(Start: 46 @542 has 116 MA's), (56, 608), (69, 728),

Gene: Morrow_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Morrow_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: MortyNRick_99 Start: 53600, Stop: 53893, Start Num: 34
Candidate Starts for MortyNRick_99:

(5, 53429), (Start: 34 @53600 has 5 MA's),

Gene: Muddy_67 Start: 46594, Stop: 46866, Start Num: 41
Candidate Starts for Muddy_67:
(14, 46465), (35, 46567), (Start: 41 @46594 has 1 MA's), (52, 46645), (58, 46702), (68, 46798),

Gene: Mundrea_1 Start: 539, Stop: 766, Start Num: 46
Candidate Starts for Mundrea_1:
(12, 359), (Start: 46 @539 has 116 MA's), (69, 725),

Gene: Nairb_57 Start: 40896, Stop: 41195, Start Num: 37
Candidate Starts for Nairb_57:
(9, 40761), (18, 40821), (Start: 37 @40896 has 6 MA's), (57, 41019),

Gene: Nebs_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Nebs_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Nemo27_1 Start: 537, Stop: 764, Start Num: 46
Candidate Starts for Nemo27_1:
(Start: 46 @537 has 116 MA's), (69, 723),

Gene: NoShow_74 Start: 49650, Stop: 49970, Start Num: 31
Candidate Starts for NoShow_74:
(Start: 31 @49650 has 1 MA's), (Start: 43 @49707 has 1 MA's), (64, 49839),

Gene: Noelle_1 Start: 526, Stop: 753, Start Num: 46
Candidate Starts for Noelle_1:
(11, 346), (Start: 46 @526 has 116 MA's), (69, 712),

Gene: NorthStar_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for NorthStar_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: NotAPhaseMom_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for NotAPhaseMom_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Nyxis_1 Start: 539, Stop: 766, Start Num: 46
Candidate Starts for Nyxis_1:
(Start: 46 @539 has 116 MA's), (69, 725),

Gene: OKaNui_1 Start: 537, Stop: 764, Start Num: 46
Candidate Starts for OKaNui_1:
(Start: 46 @537 has 116 MA's), (69, 723),

Gene: Obama12_1 Start: 537, Stop: 764, Start Num: 46
Candidate Starts for Obama12_1:
(11, 357), (27, 462), (Start: 46 @537 has 116 MA's), (69, 723),

Gene: Ohfah_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Ohfah_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Oofda_4 Start: 2372, Stop: 2578, Start Num: 51
Candidate Starts for Oofda_4:
(13, 2186), (32, 2282), (Start: 51 @2372 has 1 MA's),

Gene: Palestino_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Palestino_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Pelly_2 Start: 905, Stop: 1078, Start Num: 55
Candidate Starts for Pelly_2:
(32, 782), (Start: 55 @905 has 1 MA's), (66, 995), (69, 1031),

Gene: Perplexer_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for Perplexer_1:
(Start: 46 @542 has 116 MA's), (56, 608), (69, 728),

Gene: PeterPeter_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for PeterPeter_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: PetiteSangsue_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for PetiteSangsue_1:
(Start: 46 @542 has 116 MA's), (56, 608), (69, 728),

Gene: Phacado_1 Start: 537, Stop: 764, Start Num: 46
Candidate Starts for Phacado_1:
(Start: 46 @537 has 116 MA's), (69, 723),

Gene: Phighter1804_1 Start: 536, Stop: 763, Start Num: 46
Candidate Starts for Phighter1804_1:
(11, 356), (Start: 46 @536 has 116 MA's), (69, 722),

Gene: Phontbonne_1 Start: 536, Stop: 763, Start Num: 46
Candidate Starts for Phontbonne_1:
(Start: 46 @536 has 116 MA's), (69, 722),

Gene: Pipcraft_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Pipcraft_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Polymorphads_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Polymorphads_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: PotPie_70 Start: 47957, Stop: 48178, Start Num: 48
Candidate Starts for PotPie_70:
(20, 47852), (23, 47864), (32, 47888), (48, 47957), (65, 48074),

Gene: PsychoKiller_68 Start: 45874, Stop: 46065, Start Num: 53
Candidate Starts for PsychoKiller_68:
(22, 45739), (28, 45760), (53, 45874),

Gene: Puginator_4 Start: 1105, Stop: 1350, Start Num: 46
Candidate Starts for Puginator_4:
(6, 883), (16, 964), (25, 1030), (30, 1036), (Start: 46 @1105 has 116 MA's), (56, 1180),

Gene: Pumbaa_1 Start: 536, Stop: 763, Start Num: 46
Candidate Starts for Pumbaa_1:
(11, 356), (Start: 46 @536 has 116 MA's), (69, 722),

Gene: RedBaron_75 Start: 47300, Stop: 47491, Start Num: 53
Candidate Starts for RedBaron_75:
(22, 47165), (28, 47186), (53, 47300),

Gene: Relief_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Relief_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Romney_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Romney_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: RonRayGun_59 Start: 41099, Stop: 41398, Start Num: 37
Candidate Starts for RonRayGun_59:
(Start: 37 @41099 has 6 MA's), (57, 41222),

Gene: Roosevelt_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Roosevelt_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Ruin_1 Start: 537, Stop: 764, Start Num: 46
Candidate Starts for Ruin_1:
(Start: 46 @537 has 116 MA's), (69, 723),

Gene: Sabertooth_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Sabertooth_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Sandaddy_1 Start: 722, Stop: 895, Start Num: 55
Candidate Starts for Sandaddy_1:
(17, 536), (21, 572), (24, 581), (32, 599), (39, 632), (Start: 55 @722 has 1 MA's), (66, 812), (69, 848),

Gene: Scamp_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Scamp_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: SheldonCooper_1 Start: 536, Stop: 763, Start Num: 46
Candidate Starts for SheldonCooper_1:
(27, 461), (Start: 46 @536 has 116 MA's), (69, 722),

Gene: Shygu2_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for Shygu2_1:
(Start: 46 @542 has 116 MA's), (69, 728),

Gene: Skipitt_1 Start: 538, Stop: 765, Start Num: 46

Candidate Starts for Skipitt_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: SoYo_1 Start: 592, Stop: 819, Start Num: 46
Candidate Starts for SoYo_1:
(33, 517), (Start: 34 @526 has 5 MA's), (Start: 46 @592 has 116 MA's),

Gene: Sparxx_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Sparxx_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Spino_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Spino_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Stasia_1 Start: 544, Stop: 771, Start Num: 46
Candidate Starts for Stasia_1:
(Start: 46 @544 has 116 MA's), (69, 730),

Gene: Swole_2 Start: 957, Stop: 1130, Start Num: 55
Candidate Starts for Swole_2:
(19, 786), (32, 834), (Start: 55 @957 has 1 MA's), (66, 1047), (69, 1083),

Gene: Taquarus_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Taquarus_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Thanksgivukkah_1 Start: 539, Stop: 766, Start Num: 46
Candidate Starts for Thanksgivukkah_1:
(Start: 46 @539 has 116 MA's), (69, 725),

Gene: TinaFeyge_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for TinaFeyge_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: TroyPia_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for TroyPia_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: TygerBlood_1 Start: 540, Stop: 767, Start Num: 46
Candidate Starts for TygerBlood_1:
(Start: 46 @540 has 116 MA's), (69, 726),

Gene: Wander_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Wander_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Whitty_58 Start: 40896, Stop: 41195, Start Num: 37
Candidate Starts for Whitty_58:
(Start: 37 @40896 has 6 MA's), (57, 41019),

Gene: Wilbur_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for Wilbur_1:

(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Wile_1 Start: 543, Stop: 770, Start Num: 46
Candidate Starts for Wile_1:
(Start: 46 @543 has 116 MA's), (56, 609), (69, 729),

Gene: Wizard007_1 Start: 540, Stop: 767, Start Num: 46
Candidate Starts for Wizard007_1:
(Start: 46 @540 has 116 MA's), (69, 726),

Gene: Xena_1 Start: 542, Stop: 769, Start Num: 46
Candidate Starts for Xena_1:
(Start: 46 @542 has 116 MA's), (56, 608), (69, 728),

Gene: YoSam321_1 Start: 538, Stop: 765, Start Num: 46
Candidate Starts for YoSam321_1:
(Start: 46 @538 has 116 MA's), (69, 724),

Gene: Yummy_71 Start: 45636, Stop: 45857, Start Num: 47
Candidate Starts for Yummy_71:
(36, 45579), (38, 45582), (45, 45624), (Start: 47 @45636 has 1 MA's), (50, 45648), (57, 45699), (59, 45726), (61, 45729),

Gene: Zareef_70 Start: 45132, Stop: 45311, Start Num: 57
Candidate Starts for Zareef_70:
(32, 44991), (57, 45132), (65, 45201),

Gene: ZenTime222_65 Start: 41847, Stop: 42146, Start Num: 37
Candidate Starts for ZenTime222_65:
(Start: 37 @41847 has 6 MA's), (57, 41970),