Pham 188106


1: Lucky10_1
2: PhorbesPhlower_1 + 1
3: ShaboiShabazz_1 + 19
4: BruceB_1 + 37
5: Liefie_1
6: Paito_1
7: DNAIII_001
8: Taheera_1 + 1
9: Cambiare_2
10: Avocado_1
11: Pace1224_1 + 1
12: MOOREtheMARYer_1
13: Pinnie_2
14: Jolie2_1
15: Mercurio_2
16: Lemuria_1
17: Stargaze_1
18: Antsirabe_1

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 188106 Report

This analysis was run 11/02/24 on database version 579.

Pham number 188106 has 77 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Lucky10_1
• Track 2 : PhorbesPhlower_1, Morkie_1
• Track 3 : ShaboiShabazz_1, Peeb_1, Kasen3_1, Sweets_1, Maliketh_1, Plagueis_1, Schiebel_1, Darionha_1, Wendigo_1, GoldenAsh_1, Cherrybomb426_1, Hotshotbaby7_1, DMoney_1, Phish_1, AzulaCat_1, Sizemore_1, Olga_1, Grizzly_1, Mowgli_1, PinkYoshi_1
• Track 4 : BruceB_1, Coleslaw_1, Barkley26_1, ECartman_1, Hope_1, Rabbs_1, Kareem_1, Gomashi_1, Camri_1, Remy19_1, Cedasite_1, Halo_1, Jolene_1, Aroostook_1, Periodt_1, CassieYates_1, Avrafan_1, Jane_1, Angel_1, Chance64_1, Frosty24_1, TomBrady_1, JorRay_1, Annihilator_1, ZoMa_1, Marmie_1, Zombie_1, Crespo_1, OctaviousRex_1, BPs_1, CLED96_1, Sneeze_1, Phreak_1, LouisV14_1, Renaissance_1, BQuat_1, Gideon_1, Jonghyun_1
• Track 5 : Liefie_1
• Track 6 : Paito_1
• Track 7 : DNAIII_001
• Track 8 : Taheera_1, Terror_1
• Track 9 : Cambiare_2
• Track 10 : Avocado_1
• Track 11 : Pace1224_1, FlagStaff_1
• Track 12 : MOOREtheMARYer_1
• Track 13 : Pinnie_2
• Track 14 : Jolie2_1
• Track 15 : Mercurio_2
• Track 16 : Lemuria_1
• Track 17 : Stargaze_1
• Track 18 : Antsirabe_1

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

The start number called the most often in the published annotations is 10, it was called in 40 of the 71 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Angel_1, Annihilator_1, Aroostook_1, Avrafan_1, BPs_1, BQuat_1, Barkley26_1, BruceB_1, CLED96_1, Camri_1, CassieYates_1, Cedasite_1, Chance64_1, Coleslaw_1, Crespo_1, DNAIII_001, ECartman_1, Frosty24_1, Gideon_1, Gomashi_1, Halo_1, Hope_1, Jane_1, Jolene_1, Jonghyun_1, JorRay_1, Kareem_1, Liefie_1, LouisV14_1, Marmie_1, OctaviousRex_1, Periodt_1, Phreak_1, Rabbs_1, Remy19_1, Renaissance_1, Sneeze_1, TomBrady_1, ZoMa_1, Zombie_1,

Genes that have the "Most Annotated" start but do not call it:
• AzulaCat_1, Cherrybomb426_1, DMoney_1, Darionha_1, GoldenAsh_1, Grizzly_1, Hotshotbaby7_1, Kasen3_1, Maliketh_1, Mowgli_1, Olga_1, Peeb_1, Phish_1, PinkYoshi_1, Plagueis_1, Schiebel_1, ShaboiShabazz_1, Sizemore_1, Sweets_1, Wendigo_1,

Genes that do not have the "Most Annotated" start:
• Antsirabe_1, Avocado_1, Cambiare_2, FlagStaff_1, Jolie2_1, Lemuria_1, Lucky10_1, MOOREtheMARYer_1, Mercurio_2, Morkie_1, Pace1224_1, Paito_1, PhorbesPhlower_1, Pinnie_2, Stargaze_1, Taheera_1, Terror_1,

Summary by start number:

Start 10:
• Found in 60 of 77 (77.9%) of genes in pham
• Manual Annotations of this start: 40 of 71
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Angel_1 (G1), Annihilator_1 (G1), Aroostook_1 (G1), Avrafan_1 (G1), BPs_1 (G1), BQuat_1 (G1), Barkley26_1 (G1), BruceB_1 (G1), CLED96_1 (G1), Camri_1 (G1), CassieYates_1 (G1), Cedasite_1 (G1), Chance64_1 (G1), Coleslaw_1 (G1), Crespo_1 (G1), DNAIII_001 (G1), ECartman_1 (G1), Frosty24_1 (G1), Gideon_1 (G1), Gomashi_1 (G1), Halo_1 (G1), Hope_1 (G1), Jane_1 (G1), Jolene_1 (G1), Jonghyun_1 (G1), JorRay_1 (G1), Kareem_1 (G1), Liefie_1 (G1), LouisV14_1 (G1), Marmie_1 (G1), OctaviousRex_1 (G1), Periodt_1 (G1), Phreak_1 (G1), Rabbs_1 (G1), Remy19_1 (G1), Renaissance_1 (G1), Sneeze_1 (G1), TomBrady_1 (G1), ZoMa_1 (G1), Zombie_1 (G1),

Start 11:
• Found in 65 of 77 (84.4%) of genes in pham
• Manual Annotations of this start: 20 of 71
• Called 36.9% of time when present
• Phage (with cluster) where this start called: AzulaCat_1 (G1), Cherrybomb426_1 (G1), DMoney_1 (G1), Darionha_1 (G1), GoldenAsh_1 (G1), Grizzly_1 (G1), Hotshotbaby7_1 (G1), Jolie2_1 (G4), Kasen3_1 (G1), Lemuria_1 (G4), Maliketh_1 (G1), Mowgli_1 (G1), Olga_1 (G1), Peeb_1 (G1), Phish_1 (G1), PinkYoshi_1 (G1), Plagueis_1 (G1), Schiebel_1 (G1), ShaboiShabazz_1 (G1), Sizemore_1 (G1), Sweets_1 (G1), Taheera_1 (G1), Terror_1 (G1), Wendigo_1 (G1),

Start 13:
• Found in 1 of 77 (1.3%) of genes in pham
• Manual Annotations of this start: 1 of 71
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cambiare_2 (G2),

Start 14:

• Found in 10 of 77 (13.0%) of genes in pham
• Manual Annotations of this start: 8 of 71
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antsirabe_1 (G5), Avocado_1 (G2), FlagStaff_1 (G2), Lucky10_1 (DH), MOOREtheMARYer_1 (G3), Morkie_1 (DH), Pace1224_1 (G2), PhorbesPhlower_1 (DH), Pinnie_2 (G3), Stargaze_1 (G5),

Start 16:
• Found in 1 of 77 (1.3%) of genes in pham
• Manual Annotations of this start: 1 of 71
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Paito_1 (G1),

Start 18:
• Found in 1 of 77 (1.3%) of genes in pham
• Manual Annotations of this start: 1 of 71
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mercurio_2 (G4),

Summary by clusters:

There are 6 clusters represented in this pham: G5, G4, G3, G1, DH, G2,

Info for manual annotations of cluster DH:
•Start number 14 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster G1:
•Start number 10 was manually annotated 40 times for cluster G1.
•Start number 11 was manually annotated 19 times for cluster G1.
•Start number 16 was manually annotated 1 time for cluster G1.

Info for manual annotations of cluster G2:
•Start number 13 was manually annotated 1 time for cluster G2.
•Start number 14 was manually annotated 2 times for cluster G2.

Info for manual annotations of cluster G3:
•Start number 14 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:
•Start number 11 was manually annotated 1 time for cluster G4.
•Start number 18 was manually annotated 1 time for cluster G4.

Info for manual annotations of cluster G5:
•Start number 14 was manually annotated 1 time for cluster G5.

Gene Information:

Gene: Angel_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Angel_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Annihilator_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Annihilator_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Antsirabe_1 Start: 53, Stop: 382, Start Num: 14
Candidate Starts for Antsirabe_1:
(Start: 14 @53 has 8 MA's), (20, 80), (23, 146), (27, 191), (29, 215), (30, 245), (34, 266),

Gene: Aroostook_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Aroostook_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Avocado_1 Start: 54, Stop: 380, Start Num: 14
Candidate Starts for Avocado_1:
(Start: 14 @54 has 8 MA's), (23, 144), (25, 177), (27, 189), (33, 255), (36, 273), (37, 276), (39, 285),

Gene: Avrafan_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Avrafan_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: AzulaCat_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for AzulaCat_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: BPs_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for BPs_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: BQuat_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for BQuat_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Barkley26_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Barkley26_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: BruceB_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for BruceB_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: CLED96_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for CLED96_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Cambiare_2 Start: 534, Stop: 869, Start Num: 13
Candidate Starts for Cambiare_2:
(9, 384), (Start: 11 @525 has 20 MA's), (Start: 13 @534 has 1 MA's), (19, 555), (20, 564), (23, 633), (24, 651), (25, 666), (35, 756), (39, 774), (40, 783),

Gene: Camri_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Camri_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: CassieYates_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for CassieYates_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Cedasite_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Cedasite_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Chance64_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Chance64_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Cherrybomb426_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Cherrybomb426_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Coleslaw_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Coleslaw_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Crespo_1 Start: 44, Stop: 388, Start Num: 10
Candidate Starts for Crespo_1:
(Start: 10 @44 has 40 MA's), (Start: 11 @47 has 20 MA's), (23, 149), (29, 218), (34, 269),

Gene: DMoney_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for DMoney_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: DNAIII_001 Start: 52, Stop: 396, Start Num: 10
Candidate Starts for DNAIII_001:
(Start: 10 @52 has 40 MA's), (Start: 11 @55 has 20 MA's), (23, 157), (29, 226), (34, 277),

Gene: Darionha_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Darionha_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: ECartman_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for ECartman_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: FlagStaff_1 Start: 52, Stop: 387, Start Num: 14
Candidate Starts for FlagStaff_1:
(Start: 14 @52 has 8 MA's), (20, 79), (29, 214), (30, 244),

Gene: Frosty24_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Frosty24_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Gideon_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Gideon_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: GoldenAsh_1 Start: 46, Stop: 387, Start Num: 11

Candidate Starts for GoldenAsh_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Gomashi_1 Start: 44, Stop: 388, Start Num: 10
Candidate Starts for Gomashi_1:
(Start: 10 @44 has 40 MA's), (Start: 11 @47 has 20 MA's), (23, 149), (29, 218), (34, 269),

Gene: Grizzly_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Grizzly_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Halo_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Halo_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Hope_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Hope_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Hotshotbaby7_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Hotshotbaby7_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Jane_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Jane_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Jolene_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Jolene_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Jolie2_1 Start: 45, Stop: 404, Start Num: 11
Candidate Starts for Jolie2_1:
(Start: 11 @45 has 20 MA's), (32, 264), (36, 285), (44, 363),

Gene: Jonghyun_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Jonghyun_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: JorRay_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for JorRay_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Kareem_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Kareem_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Kasen3_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Kasen3_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Lemuria_1 Start: 45, Stop: 404, Start Num: 11
Candidate Starts for Lemuria_1:

(Start: 11 @45 has 20 MA's), (29, 225), (36, 285), (43, 360),

Gene: Liefie_1 Start: 42, Stop: 386, Start Num: 10
Candidate Starts for Liefie_1:
(Start: 10 @42 has 40 MA's), (Start: 11 @45 has 20 MA's), (23, 147), (29, 216), (34, 267), (40, 297),

Gene: LouisV14_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for LouisV14_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Lucky10_1 Start: 45, Stop: 347, Start Num: 14
Candidate Starts for Lucky10_1:
(Start: 14 @45 has 8 MA's), (21, 111), (22, 117), (23, 120), (26, 156), (27, 165), (28, 177), (35, 243), (42, 300),

Gene: MOOREtheMARYer_1 Start: 53, Stop: 379, Start Num: 14
Candidate Starts for MOOREtheMARYer_1:
(12, 50), (Start: 14 @53 has 8 MA's), (20, 80), (23, 143), (25, 176), (27, 188), (33, 254), (36, 272),

Gene: Maliketh_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Maliketh_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Marmie_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Marmie_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Mercurio_2 Start: 700, Stop: 1044, Start Num: 18
Candidate Starts for Mercurio_2:
(1, 271), (2, 343), (3, 349), (4, 355), (5, 415), (7, 514), (8, 523), (15, 691), (17, 697), (Start: 18 @700 has 1 MA's), (27, 844), (29, 868), (30, 898), (31, 901), (43, 1000),

Gene: Morkie_1 Start: 44, Stop: 346, Start Num: 14
Candidate Starts for Morkie_1:
(Start: 14 @44 has 8 MA's), (21, 110), (26, 155), (27, 164), (28, 176), (35, 242), (42, 299),

Gene: Mowgli_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Mowgli_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: OctaviousRex_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for OctaviousRex_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Olga_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Olga_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Pace1224_1 Start: 52, Stop: 387, Start Num: 14
Candidate Starts for Pace1224_1:
(Start: 14 @52 has 8 MA's), (20, 79), (29, 214), (30, 244),

Gene: Paito_1 Start: 47, Stop: 382, Start Num: 16

Candidate Starts for Paito_1:
(Start: 16 @47 has 1 MA's), (19, 62), (25, 173), (29, 209), (31, 242),

Gene: Peeb_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Peeb_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Periodt_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Periodt_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Phish_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Phish_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: PhorbesPhlower_1 Start: 44, Stop: 346, Start Num: 14
Candidate Starts for PhorbesPhlower_1:
(Start: 14 @44 has 8 MA's), (21, 110), (26, 155), (27, 164), (28, 176), (35, 242), (42, 299),

Gene: Phreak_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Phreak_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: PinkYoshi_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for PinkYoshi_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Pinnie_2 Start: 520, Stop: 846, Start Num: 14
Candidate Starts for Pinnie_2:
(6, 322), (Start: 14 @520 has 8 MA's), (20, 547), (23, 613), (25, 646), (27, 658), (33, 724), (36, 742), (38, 748),

Gene: Plagueis_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Plagueis_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Rabbs_1 Start: 44, Stop: 388, Start Num: 10
Candidate Starts for Rabbs_1:
(Start: 10 @44 has 40 MA's), (Start: 11 @47 has 20 MA's), (23, 149), (29, 218), (34, 269),

Gene: Remy19_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Remy19_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Renaissance_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Renaissance_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Schiebel_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Schiebel_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: ShaboiShabazz_1 Start: 46, Stop: 387, Start Num: 11

Candidate Starts for ShaboiShabazz_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Sizemore_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Sizemore_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Sneeze_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Sneeze_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Stargaze_1 Start: 52, Stop: 372, Start Num: 14
Candidate Starts for Stargaze_1:
(Start: 14 @52 has 8 MA's), (23, 136), (27, 181), (29, 205), (34, 256), (41, 310),

Gene: Sweets_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Sweets_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Taheera_1 Start: 47, Stop: 391, Start Num: 11
Candidate Starts for Taheera_1:
(Start: 11 @47 has 20 MA's), (23, 149), (29, 218),

Gene: Terror_1 Start: 47, Stop: 391, Start Num: 11
Candidate Starts for Terror_1:
(Start: 11 @47 has 20 MA's), (23, 149), (29, 218),

Gene: TomBrady_1 Start: 44, Stop: 388, Start Num: 10
Candidate Starts for TomBrady_1:
(Start: 10 @44 has 40 MA's), (Start: 11 @47 has 20 MA's), (23, 149), (29, 218), (34, 269),

Gene: Wendigo_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Wendigo_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: ZoMa_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for ZoMa_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),

Gene: Zombie_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Zombie_1:
(Start: 10 @43 has 40 MA's), (Start: 11 @46 has 20 MA's), (23, 148), (29, 217), (34, 268),