Pham 283709


1: Jeilious_1
2: ShaboiShabazz_1 + 23
3: Rabbs_1 + 41
4: Taheera_1 + 1
5: Liefie_1
6: DNAIII_001
7: Paito_1
8: GodSpeed_1 + 2
9: Avocado_1
10: Cambiare_2
11: Cloudyecho_1
12: Pinnie_2
13: MOOREtheMARYer_1
14: Jolie2_1
15: Mercurio_2
16: Lemuria_1
17: YangYin_1 + 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 283709 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283709 has 86 members, 15 are drafts.

Phages represented in each track:
• Track 1 : Jeilious_1
• Track 2 : ShaboiShabazz_1, Peeb_1, Sweets_1, Maliketh_1, Darionha_1, Cherrybomb426_1, Sizemore_1, Mowgli_1, Ruriko_1, TinaBug_1, Schiebel_1, GoldenAsh_1, Phish_1, AizenPogi_1, Grizzly_1, DingDing_1, Rattrick_1, PinkYoshi_1, Kasen3_1, Plagueis_1, Wendigo_1, DMoney_1, Olga_1, Hotshotbaby7_1
• Track 3 : Rabbs_1, Phreak_1, Phloodle_1, AzulaCat_1, Marmie_1, Crespo_1, OctaviousRex_1, Aroostook_1, Barkley26_1, Halo_1, Gideon_1, LouisV14_1, BruceB_1, ECartman_1, Hope_1, Jolene_1, Gomashi_1, Frosty24_1, Avrafan_1, Jane_1, JorRay_1, TomBrady_1, ZoMa_1, Zombie_1, BPs_1, CLED96_1, Jonghyun_1, Camri_1, Annihilator_1, Renaissance_1, Neoh_1, Sneeze_1, Kareem_1, Remy19_1, Cedasite_1, Periodt_1, CassieYates_1, Angel_1, Chance64_1, Richarlison_1, BQuat_1, Coleslaw_1
• Track 4 : Taheera_1, Terror_1
• Track 5 : Liefie_1
• Track 6 : DNAIII_001
• Track 7 : Paito_1
• Track 8 : GodSpeed_1, Pace1224_1, FlagStaff_1
• Track 9 : Avocado_1
• Track 10 : Cambiare_2
• Track 11 : Cloudyecho_1
• Track 12 : Pinnie_2
• Track 13 : MOOREtheMARYer_1
• Track 14 : Jolie2_1
• Track 15 : Mercurio_2
• Track 16 : Lemuria_1
• Track 17 : YangYin_1, 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 41 of the 71 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Angel_1, Annihilator_1, Aroostook_1, Avrafan_1, AzulaCat_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, Jeilious_1, Jolene_1, Jonghyun_1, JorRay_1, Kareem_1, Liefie_1, LouisV14_1, Marmie_1, Neoh_1, OctaviousRex_1, Periodt_1, Phloodle_1, Phreak_1, Rabbs_1, Remy19_1, Renaissance_1, Richarlison_1, Sneeze_1, TomBrady_1, ZoMa_1, Zombie_1,

Genes that have the "Most Annotated" start but do not call it:
• AizenPogi_1, Cherrybomb426_1, DMoney_1, Darionha_1, DingDing_1, GoldenAsh_1, Grizzly_1, Hotshotbaby7_1, Kasen3_1, Maliketh_1, Mowgli_1, Olga_1, Peeb_1, Phish_1, PinkYoshi_1, Plagueis_1, Rattrick_1, Ruriko_1, Schiebel_1, ShaboiShabazz_1, Sizemore_1, Sweets_1, TinaBug_1, Wendigo_1,

Genes that do not have the "Most Annotated" start:
• Antsirabe_1, Avocado_1, Cambiare_2, Cloudyecho_1, FlagStaff_1, GodSpeed_1, Jolie2_1, Lemuria_1, MOOREtheMARYer_1, Mercurio_2, Pace1224_1, Paito_1, Pinnie_2, Stargaze_1, Taheera_1, Terror_1, YangYin_1,

Summary by start number:

Start 10:
• Found in 69 of 86 (80.2%) of genes in pham
• Manual Annotations of this start: 41 of 71
• Called 65.2% of time when present
• Phage (with cluster) where this start called: Angel_1 (G1), Annihilator_1 (G1), Aroostook_1 (G1), Avrafan_1 (G1), AzulaCat_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), Jeilious_1 (G), Jolene_1 (G1), Jonghyun_1 (G1), JorRay_1 (G1), Kareem_1 (G1), Liefie_1 (G1), LouisV14_1 (G1), Marmie_1 (G1), Neoh_1 (G), OctaviousRex_1 (G1), Periodt_1 (G1), Phloodle_1 (G1), Phreak_1 (G1), Rabbs_1 (G1), Remy19_1 (G1), Renaissance_1 (G1), Richarlison_1 (G1), Sneeze_1 (G1), TomBrady_1 (G1), ZoMa_1 (G1), Zombie_1 (G1),

Start 11:
• Found in 73 of 86 (84.9%) of genes in pham
• Manual Annotations of this start: 21 of 71
• Called 38.4% of time when present
• Phage (with cluster) where this start called: AizenPogi_1 (G1), Cherrybomb426_1 (G1), DMoney_1 (G1), Darionha_1 (G1), DingDing_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), Rattrick_1 (G1), Ruriko_1 (G1), Schiebel_1 (G1), ShaboiShabazz_1 (G1), Sizemore_1 (G1), Sweets_1 (G1), Taheera_1 (G1), Terror_1 (G1), TinaBug_1 (G1), Wendigo_1 (G1),

Start 15:
• Found in 2 of 86 (2.3%) of genes in pham
• Manual Annotations of this start: 2 of 71
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Cambiare_2 (G2), Paito_1 (G1),

Start 16:
• Found in 11 of 86 (12.8%) of genes in pham
• Manual Annotations of this start: 6 of 71
• Called 90.9% of time when present
• Phage (with cluster) where this start called: Antsirabe_1 (G5), Avocado_1 (G2), Cloudyecho_1 (G3), FlagStaff_1 (G2), GodSpeed_1 (G2), MOOREtheMARYer_1 (G3), Pace1224_1 (G2), Pinnie_2 (G3), Stargaze_1 (G5), YangYin_1 (G5),

Start 17:
• Found in 1 of 86 (1.2%) 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, G2, G, G1,

Info for manual annotations of cluster G1:
•Start number 10 was manually annotated 41 times for cluster G1.
•Start number 11 was manually annotated 20 times for cluster G1.
•Start number 15 was manually annotated 1 time for cluster G1.

Info for manual annotations of cluster G2:
•Start number 15 was manually annotated 1 time for cluster G2.
•Start number 16 was manually annotated 2 times for cluster G2.

Info for manual annotations of cluster G3:
•Start number 16 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 17 was manually annotated 1 time for cluster G4.

Info for manual annotations of cluster G5:
•Start number 16 was manually annotated 2 times for cluster G5.

Gene Information:

Gene: AizenPogi_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for AizenPogi_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Angel_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Angel_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Annihilator_1 Start: 43, Stop: 387, Start Num: 10

Candidate Starts for Annihilator_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Antsirabe_1 Start: 53, Stop: 382, Start Num: 16
Candidate Starts for Antsirabe_1:
(Start: 16 @53 has 6 MA's), (19, 80), (20, 146), (23, 191), (24, 215), (25, 245), (29, 266),

Gene: Aroostook_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Aroostook_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Avocado_1 Start: 54, Stop: 380, Start Num: 16
Candidate Starts for Avocado_1:
(Start: 16 @54 has 6 MA's), (20, 144), (22, 177), (23, 189), (28, 255), (31, 273), (32, 276), (34, 285),

Gene: Avrafan_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Avrafan_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: AzulaCat_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for AzulaCat_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: BPs_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for BPs_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: BQuat_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for BQuat_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Barkley26_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Barkley26_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: BruceB_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for BruceB_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: CLED96_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for CLED96_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Cambiare_2 Start: 534, Stop: 869, Start Num: 15
Candidate Starts for Cambiare_2:
(9, 384), (12, 525), (Start: 15 @534 has 2 MA's), (18, 555), (19, 564), (20, 633), (21, 651), (22, 666), (30, 756), (34, 774), (35, 783),

Gene: Camri_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Camri_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: CassieYates_1 Start: 43, Stop: 387, Start Num: 10

Candidate Starts for CassieYates_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Cedasite_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Cedasite_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Chance64_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Chance64_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Cherrybomb426_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Cherrybomb426_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Cloudyecho_1 Start: 52, Stop: 381, Start Num: 16
Candidate Starts for Cloudyecho_1:
(13, 49), (Start: 16 @52 has 6 MA's), (19, 79), (20, 145), (22, 178), (23, 190), (28, 256), (31, 274), (33, 280), (35, 295), (37, 337),

Gene: Coleslaw_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Coleslaw_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Crespo_1 Start: 44, Stop: 388, Start Num: 10
Candidate Starts for Crespo_1:
(Start: 10 @44 has 41 MA's), (Start: 11 @47 has 21 MA's), (20, 149), (24, 218), (29, 269),

Gene: DMoney_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for DMoney_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: DNAIII_001 Start: 52, Stop: 396, Start Num: 10
Candidate Starts for DNAIII_001:
(Start: 10 @52 has 41 MA's), (Start: 11 @55 has 21 MA's), (20, 157), (24, 226), (29, 277),

Gene: Darionha_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Darionha_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: DingDing_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for DingDing_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: ECartman_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for ECartman_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: FlagStaff_1 Start: 52, Stop: 387, Start Num: 16
Candidate Starts for FlagStaff_1:
(Start: 16 @52 has 6 MA's), (19, 79), (24, 214), (25, 244),

Gene: Frosty24_1 Start: 43, Stop: 387, Start Num: 10

Candidate Starts for Frosty24_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Gideon_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Gideon_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: GodSpeed_1 Start: 52, Stop: 387, Start Num: 16
Candidate Starts for GodSpeed_1:
(Start: 16 @52 has 6 MA's), (19, 79), (24, 214), (25, 244),

Gene: GoldenAsh_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for GoldenAsh_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Gomashi_1 Start: 44, Stop: 388, Start Num: 10
Candidate Starts for Gomashi_1:
(Start: 10 @44 has 41 MA's), (Start: 11 @47 has 21 MA's), (20, 149), (24, 218), (29, 269),

Gene: Grizzly_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Grizzly_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Halo_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Halo_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Hope_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Hope_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Hotshotbaby7_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Hotshotbaby7_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Jane_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Jane_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Jeilious_1 Start: 42, Stop: 386, Start Num: 10
Candidate Starts for Jeilious_1:
(Start: 10 @42 has 41 MA's), (Start: 11 @45 has 21 MA's), (20, 147), (24, 216), (29, 267),

Gene: Jolene_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Jolene_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Jolie2_1 Start: 45, Stop: 404, Start Num: 11
Candidate Starts for Jolie2_1:
(Start: 11 @45 has 21 MA's), (27, 264), (31, 285), (38, 363),

Gene: Jonghyun_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Jonghyun_1:

(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: JorRay_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for JorRay_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Kareem_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Kareem_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Kasen3_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Kasen3_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Lemuria_1 Start: 45, Stop: 404, Start Num: 11
Candidate Starts for Lemuria_1:
(Start: 11 @45 has 21 MA's), (24, 225), (31, 285), (37, 360),

Gene: Liefie_1 Start: 42, Stop: 386, Start Num: 10
Candidate Starts for Liefie_1:
(Start: 10 @42 has 41 MA's), (Start: 11 @45 has 21 MA's), (20, 147), (24, 216), (29, 267), (35, 297),

Gene: LouisV14_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for LouisV14_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: MOOREtheMARYer_1 Start: 53, Stop: 379, Start Num: 16
Candidate Starts for MOOREtheMARYer_1:
(13, 50), (Start: 16 @53 has 6 MA's), (19, 80), (20, 143), (22, 176), (23, 188), (28, 254), (31, 272),

Gene: Maliketh_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Maliketh_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Marmie_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Marmie_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Mercurio_2 Start: 700, Stop: 1044, Start Num: 17
Candidate Starts for Mercurio_2:
(1, 271), (2, 343), (3, 349), (4, 355), (5, 415), (7, 514), (8, 523), (14, 691), (Start: 16 @697 has 6 MA's),
(Start: 17 @700 has 1 MA's), (23, 844), (24, 868), (25, 898), (26, 901), (37, 1000),

Gene: Mowgli_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Mowgli_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Neoh_1 Start: 44, Stop: 388, Start Num: 10
Candidate Starts for Neoh_1:
(Start: 10 @44 has 41 MA's), (Start: 11 @47 has 21 MA's), (20, 149), (24, 218), (29, 269),

Gene: OctaviousRex_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for OctaviousRex_1:

(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Olga_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Olga_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Pace1224_1 Start: 52, Stop: 387, Start Num: 16
Candidate Starts for Pace1224_1:
(Start: 16 @52 has 6 MA's), (19, 79), (24, 214), (25, 244),

Gene: Paito_1 Start: 47, Stop: 382, Start Num: 15
Candidate Starts for Paito_1:
(Start: 15 @47 has 2 MA's), (18, 62), (22, 173), (24, 209), (26, 242),

Gene: Peeb_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Peeb_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Periodt_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Periodt_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Phish_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Phish_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Phloodle_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Phloodle_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Phreak_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Phreak_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: PinkYoshi_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for PinkYoshi_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Pinnie_2 Start: 520, Stop: 846, Start Num: 16
Candidate Starts for Pinnie_2:
(6, 322), (Start: 16 @520 has 6 MA's), (19, 547), (20, 613), (22, 646), (23, 658), (28, 724), (31, 742), (33, 748),

Gene: Plagueis_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Plagueis_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Rabbs_1 Start: 44, Stop: 388, Start Num: 10
Candidate Starts for Rabbs_1:
(Start: 10 @44 has 41 MA's), (Start: 11 @47 has 21 MA's), (20, 149), (24, 218), (29, 269),

Gene: Rattrick_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Rattrick_1:

(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Remy19_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Remy19_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Renaissance_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Renaissance_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Richarlison_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Richarlison_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Ruriko_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Ruriko_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Schiebel_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Schiebel_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: ShaboiShabazz_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for ShaboiShabazz_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Sizemore_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Sizemore_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Sneeze_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Sneeze_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Stargaze_1 Start: 52, Stop: 372, Start Num: 16
Candidate Starts for Stargaze_1:
(Start: 16 @52 has 6 MA's), (20, 136), (23, 181), (24, 205), (29, 256), (36, 310),

Gene: Sweets_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Sweets_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Taheera_1 Start: 47, Stop: 391, Start Num: 11
Candidate Starts for Taheera_1:
(Start: 11 @47 has 21 MA's), (20, 149), (24, 218),

Gene: Terror_1 Start: 47, Stop: 391, Start Num: 11
Candidate Starts for Terror_1:
(Start: 11 @47 has 21 MA's), (20, 149), (24, 218),

Gene: TinaBug_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for TinaBug_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: TomBrady_1 Start: 44, Stop: 388, Start Num: 10
Candidate Starts for TomBrady_1:
(Start: 10 @44 has 41 MA's), (Start: 11 @47 has 21 MA's), (20, 149), (24, 218), (29, 269),

Gene: Wendigo_1 Start: 46, Stop: 387, Start Num: 11
Candidate Starts for Wendigo_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: YangYin_1 Start: 52, Stop: 372, Start Num: 16
Candidate Starts for YangYin_1:
(Start: 16 @52 has 6 MA's), (20, 136), (23, 181), (24, 205), (29, 256), (36, 310),

Gene: ZoMa_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for ZoMa_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),

Gene: Zombie_1 Start: 43, Stop: 387, Start Num: 10
Candidate Starts for Zombie_1:
(Start: 10 @43 has 41 MA's), (Start: 11 @46 has 21 MA's), (20, 148), (24, 217), (29, 268),