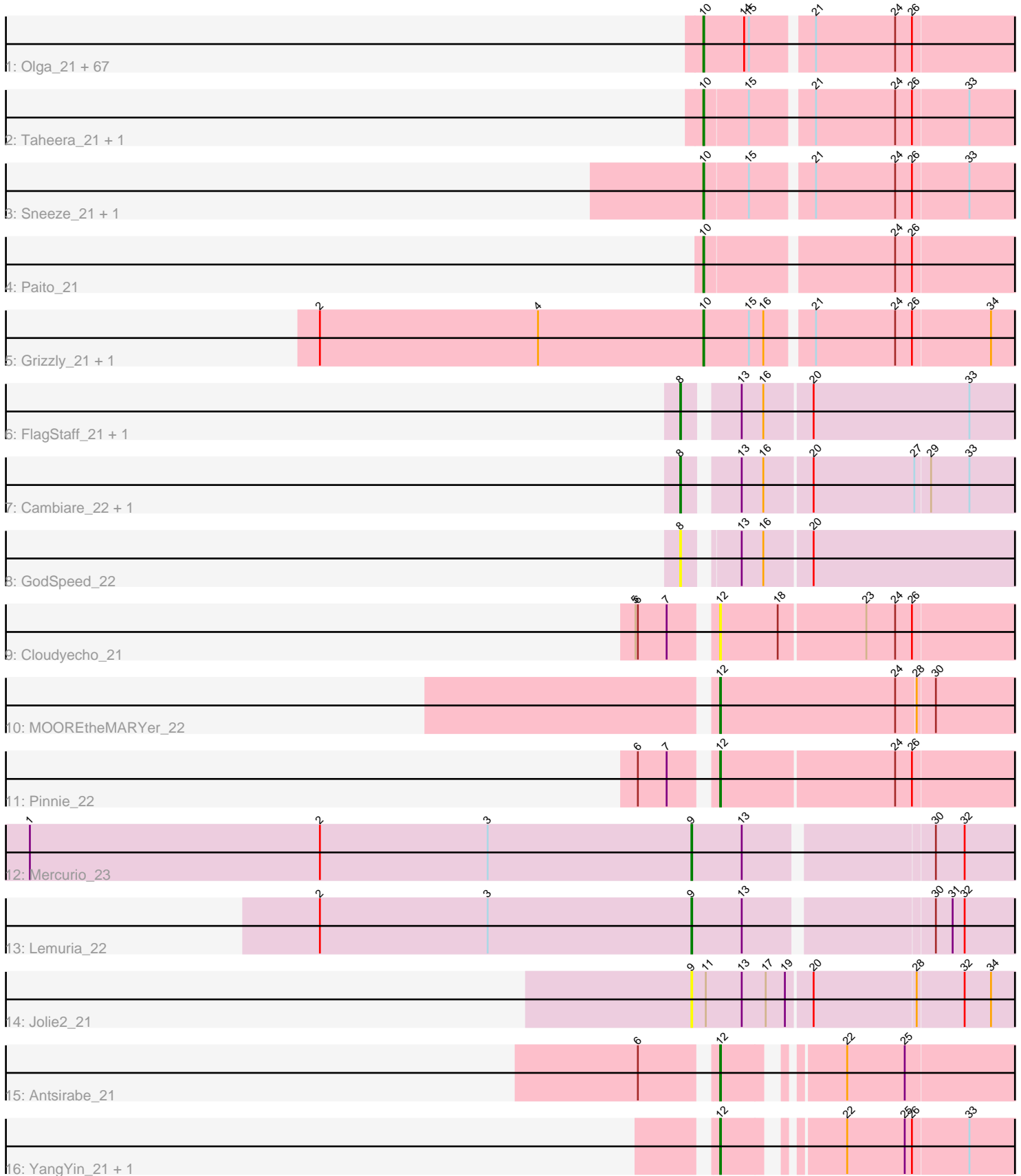


Pham 308430



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 308430 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308430 has 89 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Olga_21, Halo_21, DNAllI_0021, Jolene_21, BQuat_21, Primanti_21, BPs_21, Jeilious_21, BruceB_21, Angel_21, Darionha_21, Neoh_21, DingDing_21, Crespo_21, Cedasite_21, Sweets_21, ECartman_21, Plagueis_21, Gideon_21, Annihilator_21, AzulaCat_21, Jane_21, Zombie_21, Maliketh_21, Hope_21, Kareem_21, Peeb_21, MZKinsey_21, Frosty24_21, Phloodle_21, ShaboiShabazz_21, Cherrybomb426_21, Chance64_21, DMoney_21, OctaviousRex_21, LouisV14_21, Ruriko_21, Camri_21, Renaissance_21, Aroostook_21, Liefie_21, GoldenAsh_21, Mowgli_21, AizenPogi_21, Jonghyun_21, Gomashi_21, Kasen3_21, Marmie_21, Sizemore_21, PinkYoshi_21, Hotshotbaby7_21, JorRay_21, Phish_21, Phreak_21, Rattrick_21, Richarlison_21, Remy19_21, Periodt_21, CassieYates_21, CLED96_21, Avrafan_21, TomBrady_21, TinaBug_21, ZoMa_21, Coleslaw_21, Schiebel_21, ForeverHowLong_21, Wendigo_21
- Track 2 : Taheera_21, Terror_21
- Track 3 : Sneeze_21, Rabbs_21
- Track 4 : Paito_21
- Track 5 : Grizzly_21, Barkley26_21
- Track 6 : FlagStaff_21, Pace1224_21
- Track 7 : Cambiare_22, Avocado_21
- Track 8 : GodSpeed_22
- Track 9 : Cloudyecho_21
- Track 10 : MOOREtheMARYer_22
- Track 11 : Pinnie_22
- Track 12 : Mercurio_23
- Track 13 : Lemuria_22
- Track 14 : Jolie2_21
- Track 15 : Antsirabe_21
- Track 16 : YangYin_21, Stargaze_21

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 68 of the 77 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AizenPogi_21, Angel_21, Annihilator_21, Aroostook_21, Avrafan_21, AzulaCat_21, BPs_21, BQuat_21, Barkley26_21, BruceB_21, CLED96_21, Camri_21, CassieYates_21, Cedasite_21, Chance64_21, Cherrybomb426_21, Coleslaw_21, Crespo_21, DMoney_21, DNAIII_0021, Darionha_21, DingDing_21, ECartman_21, ForeverHowLong_21, Frosty24_21, Gideon_21, GoldenAsh_21, Gomashi_21, Grizzly_21, Halo_21, Hope_21, Hotshotbaby7_21, Jane_21, Jeilious_21, Jolene_21, Jonghyun_21, JorRay_21, Kareem_21, Kasen3_21, Liefie_21, LouisV14_21, MZKinsey_21, Maliketh_21, Marmie_21, Mowgli_21, Neoh_21, OctaviousRex_21, Olga_21, Paito_21, Peeb_21, Periodt_21, Phish_21, Phloodle_21, Phreak_21, PinkYoshi_21, Plagueis_21, Primanti_21, Rabbs_21, Rattrick_21, Remy19_21, Renaissance_21, Richarlison_21, Ruriko_21, Schiebel_21, ShaboiShabazz_21, Sizemore_21, Sneeze_21, Sweets_21, Taheera_21, Terror_21, TinaBug_21, TomBrady_21, Wendigo_21, ZoMa_21, Zombie_21,

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

-

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

- Antsirabe_21, Avocado_21, Cambiare_22, Cloudyecho_21, FlagStaff_21, GodSpeed_22, Jolie2_21, Lemuria_22, MOOREtheMARYer_22, Mercurio_23, Pace1224_21, Pinnie_22, Stargaze_21, YangYin_21,

Summary by start number:

Start 8:

- Found in 5 of 89 (5.6%) of genes in pham
- Manual Annotations of this start: 3 of 77
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Avocado_21 (G2), Cambiare_22 (G2), FlagStaff_21 (G2), GodSpeed_22 (G2), Pace1224_21 (G2),

Start 9:

- Found in 3 of 89 (3.4%) of genes in pham
- Manual Annotations of this start: 2 of 77
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jolie2_21 (G4), Lemuria_22 (G4), Mercurio_23 (G4),

Start 10:

- Found in 75 of 89 (84.3%) of genes in pham
- Manual Annotations of this start: 68 of 77
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AizenPogi_21 (G1), Angel_21 (G1), Annihilator_21 (G1), Aroostook_21 (G1), Avrafan_21 (G1), AzulaCat_21 (G1), BPs_21 (G1), BQuat_21 (G1), Barkley26_21 (G1), BruceB_21 (G1), CLED96_21 (G1), Camri_21 (G1), CassieYates_21 (G1), Cedasite_21 (G1), Chance64_21 (G1), Cherrybomb426_21 (G1), Coleslaw_21 (G1), Crespo_21 (G1), DMoney_21 (G1), DNAIII_0021 (G1), Darionha_21 (G1), DingDing_21 (G1), ECartman_21 (G1), ForeverHowLong_21 (G1), Frosty24_21 (G1), Gideon_21 (G1), GoldenAsh_21 (G1), Gomashi_21 (G1), Grizzly_21 (G1), Halo_21 (G1), Hope_21 (G1), Hotshotbaby7_21 (G1), Jane_21 (G1), Jeilious_21 (G), Jolene_21 (G1), Jonghyun_21 (G1), JorRay_21 (G1), Kareem_21 (G1), Kasen3_21 (G1), Liefie_21 (G1), LouisV14_21 (G1),

MZKinsey_21 (G1), Maliketh_21 (G1), Marmie_21 (G1), Mowgli_21 (G1), Neoh_21 (G), OctaviousRex_21 (G1), Olga_21 (G1), Paito_21 (G1), Peeb_21 (G1), Periodt_21 (G1), Phish_21 (G1), Phloodle_21 (G1), Phreak_21 (G1), PinkYoshi_21 (G1), Plagueis_21 (G1), Primanti_21 (G1), Rabbs_21 (G1), Rattrick_21 (G1), Remy19_21 (G1), Renaissance_21 (G1), Richarlison_21 (G1), Ruriko_21 (G1), Schiebel_21 (G1), ShaboiShabazz_21 (G1), Sizemore_21 (G1), Sneeze_21 (G1), Sweets_21 (G1), Taheera_21 (G1), Terror_21 (G1), TinaBug_21 (G1), TomBrady_21 (G1), Wendigo_21 (G1), ZoMa_21 (G1), Zombie_21 (G1),

Start 12:

- Found in 6 of 89 (6.7%) of genes in pham
- Manual Annotations of this start: 4 of 77
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antsirabe_21 (G5), Cloudyecho_21 (G3), MOOREtheMARYer_22 (G3), Pinnie_22 (G3), Stargaze_21 (G5), YangYin_21 (G5),

Summary by clusters:

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

Info for manual annotations of cluster G:

- Start number 10 was manually annotated 1 time for cluster G.

Info for manual annotations of cluster G1:

- Start number 10 was manually annotated 67 times for cluster G1.

Info for manual annotations of cluster G2:

- Start number 8 was manually annotated 3 times for cluster G2.

Info for manual annotations of cluster G3:

- Start number 12 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

- Start number 9 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

- Start number 12 was manually annotated 2 times for cluster G5.

Gene Information:

Gene: AizenPogi_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for AizenPogi_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Angel_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Angel_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Annihilator_21 Start: 19999, Stop: 20433, Start Num: 10

Candidate Starts for Annihilator_21:

(Start: 10 @19999 has 68 MA's), (14, 20050), (15, 20056), (21, 20125), (24, 20224), (26, 20245),

Gene: Antsirabe_21 Start: 20386, Stop: 20760, Start Num: 12

Candidate Starts for Antsirabe_21:

(6, 20305), (Start: 12 @20386 has 4 MA's), (22, 20503), (25, 20575),

Gene: Aroostook_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Aroostook_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Avocado_21 Start: 20322, Stop: 20762, Start Num: 8

Candidate Starts for Avocado_21:

(Start: 8 @20322 has 3 MA's), (13, 20379), (16, 20406), (20, 20463), (27, 20589), (29, 20607), (33, 20655),

Gene: Avrafan_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Avrafan_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: AzulaCat_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for AzulaCat_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: BPs_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for BPs_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: BQuat_21 Start: 19999, Stop: 20433, Start Num: 10

Candidate Starts for BQuat_21:

(Start: 10 @19999 has 68 MA's), (14, 20050), (15, 20056), (21, 20125), (24, 20224), (26, 20245),

Gene: Barkley26_21 Start: 20012, Stop: 20446, Start Num: 10

Candidate Starts for Barkley26_21:

(2, 19532), (4, 19805), (Start: 10 @20012 has 68 MA's), (15, 20069), (16, 20087), (21, 20138), (24, 20237), (26, 20258), (34, 20354),

Gene: BruceB_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for BruceB_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: CLED96_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for CLED96_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Cambiare_22 Start: 20787, Stop: 21227, Start Num: 8

Candidate Starts for Cambiare_22:

(Start: 8 @20787 has 3 MA's), (13, 20844), (16, 20871), (20, 20928), (27, 21054), (29, 21072), (33, 21120),

Gene: Camri_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Camri_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: CassieYates_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for CassieYates_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Cedasite_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Cedasite_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Chance64_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Chance64_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Cherrybomb426_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Cherrybomb426_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Cloudyecho_21 Start: 20244, Stop: 20645, Start Num: 12
Candidate Starts for Cloudyecho_21:
(5, 20160), (6, 20163), (7, 20199), (Start: 12 @20244 has 4 MA's), (18, 20316), (23, 20421), (24, 20457), (26, 20478),

Gene: Coleslaw_21 Start: 19999, Stop: 20433, Start Num: 10
Candidate Starts for Coleslaw_21:
(Start: 10 @19999 has 68 MA's), (14, 20050), (15, 20056), (21, 20125), (24, 20224), (26, 20245),

Gene: Crespo_21 Start: 20009, Stop: 20443, Start Num: 10
Candidate Starts for Crespo_21:
(Start: 10 @20009 has 68 MA's), (14, 20060), (15, 20066), (21, 20135), (24, 20234), (26, 20255),

Gene: DMoney_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for DMoney_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: DNAIII_0021 Start: 20017, Stop: 20451, Start Num: 10
Candidate Starts for DNAIII_0021:
(Start: 10 @20017 has 68 MA's), (14, 20068), (15, 20074), (21, 20143), (24, 20242), (26, 20263),

Gene: Darionha_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Darionha_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: DingDing_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for DingDing_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: ECartman_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for ECartman_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: FlagStaff_21 Start: 20199, Stop: 20639, Start Num: 8
Candidate Starts for FlagStaff_21:
(Start: 8 @20199 has 3 MA's), (13, 20256), (16, 20283), (20, 20340), (33, 20535),

Gene: ForeverHowLong_21 Start: 20003, Stop: 20437, Start Num: 10
Candidate Starts for ForeverHowLong_21:
(Start: 10 @20003 has 68 MA's), (14, 20054), (15, 20060), (21, 20129), (24, 20228), (26, 20249),

Gene: Frosty24_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Frosty24_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Gideon_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Gideon_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: GodSpeed_22 Start: 20232, Stop: 20675, Start Num: 8
Candidate Starts for GodSpeed_22:
(Start: 8 @20232 has 3 MA's), (13, 20286), (16, 20313), (20, 20370),

Gene: GoldenAsh_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for GoldenAsh_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Gomashi_21 Start: 20009, Stop: 20443, Start Num: 10
Candidate Starts for Gomashi_21:
(Start: 10 @20009 has 68 MA's), (14, 20060), (15, 20066), (21, 20135), (24, 20234), (26, 20255),

Gene: Grizzly_21 Start: 20012, Stop: 20446, Start Num: 10
Candidate Starts for Grizzly_21:
(2, 19532), (4, 19805), (Start: 10 @20012 has 68 MA's), (15, 20069), (16, 20087), (21, 20138), (24, 20237), (26, 20258), (34, 20354),

Gene: Halo_21 Start: 20003, Stop: 20437, Start Num: 10
Candidate Starts for Halo_21:
(Start: 10 @20003 has 68 MA's), (14, 20054), (15, 20060), (21, 20129), (24, 20228), (26, 20249),

Gene: Hope_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Hope_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Hotshotbaby7_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Hotshotbaby7_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Jane_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Jane_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Jeilious_21 Start: 20007, Stop: 20441, Start Num: 10
Candidate Starts for Jeilious_21:
(Start: 10 @20007 has 68 MA's), (14, 20058), (15, 20064), (21, 20133), (24, 20232), (26, 20253),

Gene: Jolene_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Jolene_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Jolie2_21 Start: 19327, Stop: 19776, Start Num: 9
Candidate Starts for Jolie2_21:
(Start: 9 @19327 has 2 MA's), (11, 19345), (13, 19390), (17, 19420), (19, 19444), (20, 19474), (28, 19600), (32, 19657), (34, 19690),

Gene: Jonghyun_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Jonghyun_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: JorRay_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for JorRay_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Kareem_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Kareem_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Kasen3_21 Start: 20009, Stop: 20443, Start Num: 10
Candidate Starts for Kasen3_21:
(Start: 10 @20009 has 68 MA's), (14, 20060), (15, 20066), (21, 20135), (24, 20234), (26, 20255),

Gene: Lemuria_22 Start: 20141, Stop: 20578, Start Num: 9
Candidate Starts for Lemuria_22:
(2, 19676), (3, 19886), (Start: 9 @20141 has 2 MA's), (13, 20204), (30, 20423), (31, 20444), (32, 20459),

Gene: Liefie_21 Start: 20007, Stop: 20441, Start Num: 10
Candidate Starts for Liefie_21:
(Start: 10 @20007 has 68 MA's), (14, 20058), (15, 20064), (21, 20133), (24, 20232), (26, 20253),

Gene: LouisV14_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for LouisV14_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: MOOREtheMARYer_22 Start: 20362, Stop: 20802, Start Num: 12
Candidate Starts for MOOREtheMARYer_22:
(Start: 12 @20362 has 4 MA's), (24, 20581), (28, 20605), (30, 20626),

Gene: MZKinsey_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for MZKinsey_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Maliketh_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Maliketh_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Marmie_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Marmie_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Mercurio_23 Start: 20757, Stop: 21194, Start Num: 9
Candidate Starts for Mercurio_23:
(1, 19929), (2, 20292), (3, 20502), (Start: 9 @20757 has 2 MA's), (13, 20820), (30, 21039), (32, 21075),

Gene: Mowgli_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Mowgli_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Neoh_21 Start: 20000, Stop: 20434, Start Num: 10

Candidate Starts for Neoh_21:

(Start: 10 @20000 has 68 MA's), (14, 20051), (15, 20057), (21, 20126), (24, 20225), (26, 20246),

Gene: OctaviousRex_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for OctaviousRex_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Olga_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Olga_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Pace1224_21 Start: 20199, Stop: 20639, Start Num: 8

Candidate Starts for Pace1224_21:

(Start: 8 @20199 has 3 MA's), (13, 20256), (16, 20283), (20, 20340), (33, 20535),

Gene: Paito_21 Start: 20209, Stop: 20643, Start Num: 10

Candidate Starts for Paito_21:

(Start: 10 @20209 has 68 MA's), (24, 20431), (26, 20452),

Gene: Peeb_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Peeb_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Periodt_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Periodt_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Phish_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Phish_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Phloodle_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Phloodle_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Phreak_21 Start: 20008, Stop: 20442, Start Num: 10

Candidate Starts for Phreak_21:

(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: PinkYoshi_21 Start: 19999, Stop: 20433, Start Num: 10

Candidate Starts for PinkYoshi_21:

(Start: 10 @19999 has 68 MA's), (14, 20050), (15, 20056), (21, 20125), (24, 20224), (26, 20245),

Gene: Pinnie_22 Start: 20768, Stop: 21181, Start Num: 12

Candidate Starts for Pinnie_22:

(6, 20687), (7, 20723), (Start: 12 @20768 has 4 MA's), (24, 20981), (26, 21002),

Gene: Plagueis_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Plagueis_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Primanti_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Primanti_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Rabbs_21 Start: 20095, Stop: 20526, Start Num: 10
Candidate Starts for Rabbs_21:
(Start: 10 @20095 has 68 MA's), (15, 20149), (21, 20218), (24, 20317), (26, 20338), (33, 20407),

Gene: Rattrick_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Rattrick_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Remy19_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Remy19_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Renaissance_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Renaissance_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Richarlison_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Richarlison_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Ruriko_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Ruriko_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Schiebel_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Schiebel_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: ShaboiShabazz_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for ShaboiShabazz_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Sizemore_21 Start: 20009, Stop: 20443, Start Num: 10
Candidate Starts for Sizemore_21:
(Start: 10 @20009 has 68 MA's), (14, 20060), (15, 20066), (21, 20135), (24, 20234), (26, 20255),

Gene: Sneeze_21 Start: 20094, Stop: 20525, Start Num: 10
Candidate Starts for Sneeze_21:
(Start: 10 @20094 has 68 MA's), (15, 20148), (21, 20217), (24, 20316), (26, 20337), (33, 20406),

Gene: Stargaze_21 Start: 20451, Stop: 20828, Start Num: 12
Candidate Starts for Stargaze_21:
(Start: 12 @20451 has 4 MA's), (22, 20568), (25, 20640), (26, 20649), (33, 20718),

Gene: Sweets_21 Start: 20003, Stop: 20437, Start Num: 10

Candidate Starts for Sweets_21:
(Start: 10 @20003 has 68 MA's), (14, 20054), (15, 20060), (21, 20129), (24, 20228), (26, 20249),

Gene: Taheera_21 Start: 20103, Stop: 20534, Start Num: 10
Candidate Starts for Taheera_21:
(Start: 10 @20103 has 68 MA's), (15, 20157), (21, 20226), (24, 20325), (26, 20346), (33, 20415),

Gene: Terror_21 Start: 20103, Stop: 20534, Start Num: 10
Candidate Starts for Terror_21:
(Start: 10 @20103 has 68 MA's), (15, 20157), (21, 20226), (24, 20325), (26, 20346), (33, 20415),

Gene: TinaBug_21 Start: 20003, Stop: 20437, Start Num: 10
Candidate Starts for TinaBug_21:
(Start: 10 @20003 has 68 MA's), (14, 20054), (15, 20060), (21, 20129), (24, 20228), (26, 20249),

Gene: TomBrady_21 Start: 20009, Stop: 20443, Start Num: 10
Candidate Starts for TomBrady_21:
(Start: 10 @20009 has 68 MA's), (14, 20060), (15, 20066), (21, 20135), (24, 20234), (26, 20255),

Gene: Wendigo_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Wendigo_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: YangYin_21 Start: 20475, Stop: 20852, Start Num: 12
Candidate Starts for YangYin_21:
(Start: 12 @20475 has 4 MA's), (22, 20592), (25, 20664), (26, 20673), (33, 20742),

Gene: ZoMa_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for ZoMa_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),

Gene: Zombie_21 Start: 20008, Stop: 20442, Start Num: 10
Candidate Starts for Zombie_21:
(Start: 10 @20008 has 68 MA's), (14, 20059), (15, 20065), (21, 20134), (24, 20233), (26, 20254),