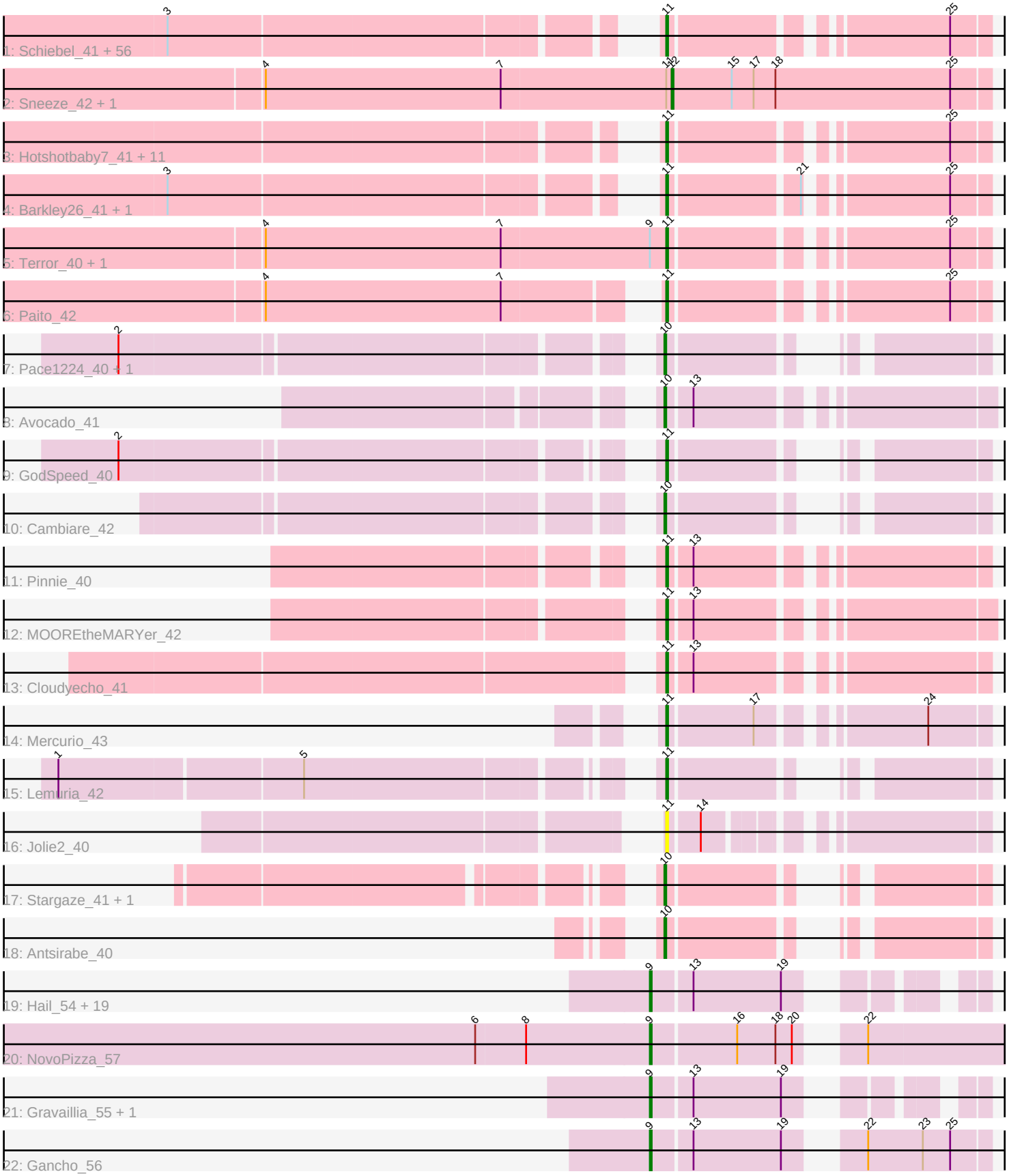
Pham 343802


1: Schiebel_41 + 56
2: Sneeze_42 + 1
3: Hotshotbaby7_41 + 11
4: Barkley26_41 + 1
5: Terror_40 + 1
6: Paito_42
7: Pace1224_40 + 1
8: Avocado_41
9: GodSpeed_40
10: Cambiare_42
11: Pinnie_40
12: MOOREtheMARYer_42
13: Cloudyecho_41
14: Mercurio_43
15: Lemuria_42
16: Jolie2_40
17: Stargaze_41 + 1
18: Antsirabe_40
19: Hail_54 + 19
20: NovoPizza_57
21: Gravaillia_55 + 1
22: Gancho_56

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 343802 Report

This analysis was run 11/14/26 on database version 672.

Pham number 343802 has 114 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Schiebel_41, ShaboiShabazz_41, Maliketh_41, Zombie_41, MZKinsey_41, Phish_41, Hope_41, Primanti_41, TinaBug_41, Avrafan_41, Wendigo_41, Plagueis_41, Renaissance_41, DingDing_41, Cedasite_41, BPs_41, Crespo_41, Kareem_41, Jeilious_41, Darionha_41, BruceB_41, Marmie_41, Gomashi_41, Ruriko_41, PinkYoshi_41, Camri_41, JorRay_41, Cherrybomb426_41, Olga_41, Jane_41, Annihilator_41, Phreak_41, Mowgli_41, Peeb_41, AzulaCat_41, ForeverHowLong_41, Frosty24_41, Terralys_40, Angel_41, TomBrady_41, Coleslaw_41, GoldenAsh_41, Gideon_41, OctaviousRex_41, ZoMa_41, DMoney_41, Richarlison_41, LouisV14_43, BQuat_41, Halo_41, CassieYates_41, Remy19_41, Neoh_41, Sweets_41, Sizemore_41, Kasen3_41, CLED96_41
• Track 2 : Sneeze_42, Rabbs_42
• Track 3 : Hotshotbaby7_41, Phloodle_41, Periodt_41, Chance64_41, Liefie_41, AizenPogi_41, Aroostook_41, Rattrick_41, Jolene_41, DNAIII_0040, Jonghyun_40, ECartman_41
• Track 4 : Barkley26_41, Grizzly_41
• Track 5 : Terror_40, Taheera_40
• Track 6 : Paito_42
• Track 7 : Pace1224_40, FlagStaff_40
• Track 8 : Avocado_41
• Track 9 : GodSpeed_40
• Track 10 : Cambiare_42
• Track 11 : Pinnie_40
• Track 12 : MOOREtheMARYer_42
• Track 13 : Cloudyecho_41
• Track 14 : Mercurio_43
• Track 15 : Lemuria_42
• Track 16 : Jolie2_40
• Track 17 : Stargaze_41, YangYin_41
• Track 18 : Antsirabe_40
• Track 19 : Hail_54, Webster2_57, Luke_56, LilHazelnut_57, Hadrien_56, Wishmaker_54, Giles_54, Forge_54, Ubuntu_57, BloominB_56, Ein37_57, Amymech_57, HH92_56, DeepSoil15_57, Daegal_59, Luna22_54, Kinbote_56, Evanesce_56, Dewey_54, Amochick_57
• Track 20 : NovoPizza_57
• Track 21 : Gravaillia_55, OBUpride_57
• Track 22 : Gancho_56

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

The start number called the most often in the published annotations is 11, it was called in 76 of the 108 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AizenPogi_41, Angel_41, Annihilator_41, Aroostook_41, Avrafan_41, AzulaCat_41, BPs_41, BQuat_41, Barkley26_41, BruceB_41, CLED96_41, Camri_41, CassieYates_41, Cedasite_41, Chance64_41, Cherrybomb426_41, Cloudyecho_41, Coleslaw_41, Crespo_41, DMoney_41, DNAIII_0040, Darionha_41, DingDing_41, ECartman_41, ForeverHowLong_41, Frosty24_41, Gideon_41, GodSpeed_40, GoldenAsh_41, Gomashi_41, Grizzly_41, Halo_41, Hope_41, Hotshotbaby7_41, Jane_41, Jeilious_41, Jolene_41, Jolie2_40, Jonghyun_40, JorRay_41, Kareem_41, Kasen3_41, Lemuria_42, Liefie_41, LouisV14_43, MOOREtheMARYer_42, MZKinsey_41, Maliketh_41, Marmie_41, Mercurio_43, Mowgli_41, Neoh_41, OctaviousRex_41, Olga_41, Paito_42, Peeb_41, Periodt_41, Phish_41, Phloodle_41, Phreak_41, PinkYoshi_41, Pinnie_40, Plagueis_41, Primanti_41, Rattrick_41, Remy19_41, Renaissance_41, Richarlison_41, Ruriko_41, Schiebel_41, ShaboiShabazz_41, Sizemore_41, Sweets_41, Taheera_40, Terralys_40, Terror_40, TinaBug_41, TomBrady_41, Wendigo_41, ZoMa_41, Zombie_41,

Genes that have the "Most Annotated" start but do not call it:
• Rabbs_42, Sneeze_42,

Genes that do not have the "Most Annotated" start:
• Amochick_57, Amymech_57, Antsirabe_40, Avocado_41, BloominB_56, Cambiare_42, Daegal_59, DeepSoil15_57, Dewey_54, Ein37_57, Evanesce_56, FlagStaff_40, Forge_54, Gancho_56, Giles_54, Gravaillia_55, HH92_56, Hadrien_56, Hail_54, Kinbote_56, LilHazelnut_57, Luke_56, Luna22_54, NovoPizza_57, OBUpride_57, Pace1224_40, Stargaze_41, Ubuntu_57, Webster2_57, Wishmaker_54, YangYin_41,

Summary by start number:

Start 9:
• Found in 26 of 114 (22.8%) of genes in pham
• Manual Annotations of this start: 24 of 108
• Called 92.3% of time when present
• Phage (with cluster) where this start called: Amochick_57 (Q), Amymech_57 (Q), BloominB_56 (Q), Daegal_59 (Q), DeepSoil15_57 (Q), Dewey_54 (Q), Ein37_57 (Q), Evanesce_56 (Q), Forge_54 (Q), Gancho_56 (Q), Giles_54 (Q), Gravaillia_55 (Q), HH92_56 (Q), Hadrien_56 (Q), Hail_54 (Q), Kinbote_56 (Q), LilHazelnut_57 (Q), Luke_56 (Q), Luna22_54 (Q), NovoPizza_57 (Q), OBUpride_57 (Q), Ubuntu_57 (Q), Webster2_57 (Q), Wishmaker_54 (Q),

Start 10:
• Found in 7 of 114 (6.1%) of genes in pham
• Manual Annotations of this start: 6 of 108
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Antsirabe_40 (G5), Avocado_41 (G2), Cambiare_42 (G2), FlagStaff_40 (G2), Pace1224_40 (G2), Stargaze_41 (G5), YangYin_41 (G5),

Start 11:
• Found in 83 of 114 (72.8%) of genes in pham
• Manual Annotations of this start: 76 of 108
• Called 97.6% of time when present
• Phage (with cluster) where this start called: AizenPogi_41 (G1), Angel_41 (G1), Annihilator_41 (G1), Aroostook_41 (G1), Avrafan_41 (G1), AzulaCat_41 (G1), BPs_41 (G1), BQuat_41 (G1), Barkley26_41 (G1), BruceB_41 (G1), CLED96_41 (G1), Camri_41 (G1), CassieYates_41 (G1), Cedasite_41 (G1), Chance64_41 (G1), Cherrybomb426_41 (G1), Cloudyecho_41 (G3), Coleslaw_41 (G1), Crespo_41 (G1), DMoney_41 (G1), DNAIII_0040 (G1), Darionha_41 (G1), DingDing_41 (G1), ECartman_41 (G1), ForeverHowLong_41 (G1), Frosty24_41 (G1), Gideon_41 (G1), GodSpeed_40 (G2), GoldenAsh_41 (G1), Gomashi_41 (G1), Grizzly_41 (G1), Halo_41 (G1), Hope_41 (G1), Hotshotbaby7_41 (G1), Jane_41 (G1), Jeilious_41 (G), Jolene_41 (G1), Jolie2_40 (G4), Jonghyun_40 (G1), JorRay_41 (G1), Kareem_41 (G1), Kasen3_41 (G1), Lemuria_42 (G4), Liefie_41 (G1), LouisV14_43 (G1), MOOREtheMARYer_42 (G3), MZKinsey_41 (G1), Maliketh_41 (G1), Marmie_41 (G1), Mercurio_43 (G4), Mowgli_41 (G1), Neoh_41 (G), OctaviousRex_41 (G1), Olga_41 (G1), Paito_42 (G1), Peeb_41 (G1), Periodt_41 (G1), Phish_41 (G1), Phloodle_41 (G1), Phreak_41 (G1), PinkYoshi_41 (G1), Pinnie_40 (G3), Plagueis_41 (G1), Primanti_41 (G1), Rattrick_41 (G1), Remy19_41 (G1), Renaissance_41 (G1), Richarlison_41 (G1), Ruriko_41 (G1), Schiebel_41 (G1), ShaboiShabazz_41 (G1), Sizemore_41 (G1), Sweets_41 (G1), Taheera_40 (G1), Terralys_40 (G1), Terror_40 (G1), TinaBug_41 (G1), TomBrady_41 (G1), Wendigo_41 (G1), ZoMa_41 (G1), Zombie_41 (G1),

Start 12:
• Found in 2 of 114 (1.8%) of genes in pham
• Manual Annotations of this start: 2 of 108
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rabbs_42 (G1), Sneeze_42 (G1),

Summary by clusters:

There are 7 clusters represented in this pham: G5, G4, G3, G2, G1, G, Q,

Info for manual annotations of cluster G:
•Start number 11 was manually annotated 2 times for cluster G.

Info for manual annotations of cluster G1:
•Start number 11 was manually annotated 68 times for cluster G1.
•Start number 12 was manually annotated 2 times for cluster G1.

Info for manual annotations of cluster G2:
•Start number 10 was manually annotated 3 times for cluster G2.
•Start number 11 was manually annotated 1 time for cluster G2.

Info for manual annotations of cluster G3:
•Start number 11 was manually annotated 3 times for cluster G3.

Info for manual annotations of cluster G4:
•Start number 11 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:
•Start number 10 was manually annotated 3 times for cluster G5.

Info for manual annotations of cluster Q:
•Start number 9 was manually annotated 24 times for cluster Q.

Gene Information:

Gene: AizenPogi_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for AizenPogi_41:
(Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Amochick_57 Start: 41343, Stop: 41483, Start Num: 9
Candidate Starts for Amochick_57:
(Start: 9 @41343 has 24 MA's), (13, 41364), (19, 41412),

Gene: Amymech_57 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Amymech_57:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: Angel_41 Start: 31743, Stop: 31895, Start Num: 11
Candidate Starts for Angel_41:
(3, 31509), (Start: 11 @31743 has 76 MA's), (25, 31875),

Gene: Annihilator_41 Start: 31749, Stop: 31901, Start Num: 11
Candidate Starts for Annihilator_41:
(3, 31515), (Start: 11 @31749 has 76 MA's), (25, 31881),

Gene: Antsirabe_40 Start: 32314, Stop: 32445, Start Num: 10
Candidate Starts for Antsirabe_40:
(Start: 10 @32314 has 6 MA's),

Gene: Aroostook_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Aroostook_41:
(Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Avocado_41 Start: 32998, Stop: 33153, Start Num: 10
Candidate Starts for Avocado_41:
(Start: 10 @32998 has 6 MA's), (13, 33010),

Gene: Avrafan_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Avrafan_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: AzulaCat_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for AzulaCat_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: BPs_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for BPs_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: BQuat_41 Start: 31749, Stop: 31901, Start Num: 11
Candidate Starts for BQuat_41:
(3, 31515), (Start: 11 @31749 has 76 MA's), (25, 31881),

Gene: Barkley26_41 Start: 31765, Stop: 31917, Start Num: 11
Candidate Starts for Barkley26_41:
(3, 31531), (Start: 11 @31765 has 76 MA's), (21, 31831), (25, 31897),

Gene: BloominB_56 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for BloominB_56:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: BruceB_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for BruceB_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: CLED96_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for CLED96_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Cambiare_42 Start: 33265, Stop: 33396, Start Num: 10
Candidate Starts for Cambiare_42:
(Start: 10 @33265 has 6 MA's),

Gene: Camri_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Camri_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: CassieYates_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for CassieYates_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Cedasite_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Cedasite_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Chance64_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Chance64_41:
(Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Cherrybomb426_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Cherrybomb426_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Cloudyecho_41 Start: 32701, Stop: 32853, Start Num: 11
Candidate Starts for Cloudyecho_41:
(Start: 11 @32701 has 76 MA's), (13, 32713),

Gene: Coleslaw_41 Start: 31749, Stop: 31901, Start Num: 11

Candidate Starts for Coleslaw_41:
(3, 31515), (Start: 11 @31749 has 76 MA's), (25, 31881),

Gene: Crespo_41 Start: 31759, Stop: 31911, Start Num: 11
Candidate Starts for Crespo_41:
(3, 31525), (Start: 11 @31759 has 76 MA's), (25, 31891),

Gene: DMoney_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for DMoney_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: DNAIII_0040 Start: 30392, Stop: 30544, Start Num: 11
Candidate Starts for DNAIII_0040:
(Start: 11 @30392 has 76 MA's), (25, 30524),

Gene: Daegal_59 Start: 41897, Stop: 42037, Start Num: 9
Candidate Starts for Daegal_59:
(Start: 9 @41897 has 24 MA's), (13, 41918), (19, 41966),

Gene: Darionha_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Darionha_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: DeepSoil15_57 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for DeepSoil15_57:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: Dewey_54 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Dewey_54:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: DingDing_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for DingDing_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: ECartman_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for ECartman_41:
(Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Ein37_57 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Ein37_57:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: Evanesce_56 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Evanesce_56:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: FlagStaff_40 Start: 32423, Stop: 32554, Start Num: 10
Candidate Starts for FlagStaff_40:
(2, 32162), (Start: 10 @32423 has 6 MA's),

Gene: ForeverHowLong_41 Start: 31753, Stop: 31905, Start Num: 11
Candidate Starts for ForeverHowLong_41:

(3, 31519), (Start: 11 @31753 has 76 MA's), (25, 31885),

Gene: Forge_54 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Forge_54:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: Frosty24_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Frosty24_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Gancho_56 Start: 41024, Stop: 41185, Start Num: 9
Candidate Starts for Gancho_56:
(Start: 9 @41024 has 24 MA's), (13, 41045), (19, 41093), (22, 41120), (23, 41150), (25, 41165),

Gene: Gideon_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Gideon_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Giles_54 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Giles_54:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: GodSpeed_40 Start: 32517, Stop: 32648, Start Num: 11
Candidate Starts for GodSpeed_40:
(2, 32259), (Start: 11 @32517 has 76 MA's),

Gene: GoldenAsh_41 Start: 31743, Stop: 31895, Start Num: 11
Candidate Starts for GoldenAsh_41:
(3, 31509), (Start: 11 @31743 has 76 MA's), (25, 31875),

Gene: Gomashi_41 Start: 31759, Stop: 31911, Start Num: 11
Candidate Starts for Gomashi_41:
(3, 31525), (Start: 11 @31759 has 76 MA's), (25, 31891),

Gene: Gravaillia_55 Start: 41321, Stop: 41461, Start Num: 9
Candidate Starts for Gravaillia_55:
(Start: 9 @41321 has 24 MA's), (13, 41342), (19, 41390),

Gene: Grizzly_41 Start: 31743, Stop: 31895, Start Num: 11
Candidate Starts for Grizzly_41:
(3, 31509), (Start: 11 @31743 has 76 MA's), (21, 31809), (25, 31875),

Gene: HH92_56 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for HH92_56:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: Hadrien_56 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Hadrien_56:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: Hail_54 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Hail_54:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: Halo_41 Start: 31753, Stop: 31905, Start Num: 11
Candidate Starts for Halo_41:
(3, 31519), (Start: 11 @31753 has 76 MA's), (25, 31885),

Gene: Hope_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Hope_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Hotshotbaby7_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Hotshotbaby7_41:
(Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Jane_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Jane_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Jeilious_41 Start: 31757, Stop: 31909, Start Num: 11
Candidate Starts for Jeilious_41:
(3, 31523), (Start: 11 @31757 has 76 MA's), (25, 31889),

Gene: Jolene_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Jolene_41:
(Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Jolie2_40 Start: 31370, Stop: 31513, Start Num: 11
Candidate Starts for Jolie2_40:
(Start: 11 @31370 has 76 MA's), (14, 31385),

Gene: Jonghyun_40 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Jonghyun_40:
(Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: JorRay_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for JorRay_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Kareem_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Kareem_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Kasen3_41 Start: 31744, Stop: 31896, Start Num: 11
Candidate Starts for Kasen3_41:
(3, 31510), (Start: 11 @31744 has 76 MA's), (25, 31876),

Gene: Kinbote_56 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Kinbote_56:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: Lemuria_42 Start: 32730, Stop: 32861, Start Num: 11
Candidate Starts for Lemuria_42:
(1, 32439), (5, 32568), (Start: 11 @32730 has 76 MA's),

Gene: Liefie_41 Start: 31756, Stop: 31908, Start Num: 11
Candidate Starts for Liefie_41:
(Start: 11 @31756 has 76 MA's), (25, 31888),

Gene: LilHazelnut_57 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for LilHazelnut_57:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: LouisV14_43 Start: 34023, Stop: 34175, Start Num: 11
Candidate Starts for LouisV14_43:
(3, 33789), (Start: 11 @34023 has 76 MA's), (25, 34155),

Gene: Luke_56 Start: 41268, Stop: 41408, Start Num: 9
Candidate Starts for Luke_56:
(Start: 9 @41268 has 24 MA's), (13, 41289), (19, 41337),

Gene: Luna22_54 Start: 41297, Stop: 41437, Start Num: 9
Candidate Starts for Luna22_54:
(Start: 9 @41297 has 24 MA's), (13, 41318), (19, 41366),

Gene: MOOREtheMARYer_42 Start: 32962, Stop: 33117, Start Num: 11
Candidate Starts for MOOREtheMARYer_42:
(Start: 11 @32962 has 76 MA's), (13, 32974),

Gene: MZKinsey_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for MZKinsey_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Maliketh_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Maliketh_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Marmie_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Marmie_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Mercurio_43 Start: 33230, Stop: 33382, Start Num: 11
Candidate Starts for Mercurio_43:
(Start: 11 @33230 has 76 MA's), (17, 33275), (24, 33350),

Gene: Mowgli_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Mowgli_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Neoh_41 Start: 31750, Stop: 31902, Start Num: 11
Candidate Starts for Neoh_41:
(3, 31516), (Start: 11 @31750 has 76 MA's), (25, 31882),

Gene: NovoPizza_57 Start: 42030, Stop: 42200, Start Num: 9
Candidate Starts for NovoPizza_57:
(6, 41949), (8, 41976), (Start: 9 @42030 has 24 MA's), (16, 42075), (18, 42096), (20, 42105), (22, 42126),

Gene: OBUpride_57 Start: 41309, Stop: 41449, Start Num: 9
Candidate Starts for OBUpride_57:
(Start: 9 @41309 has 24 MA's), (13, 41330), (19, 41378),

Gene: OctaviousRex_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for OctaviousRex_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Olga_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Olga_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Pace1224_40 Start: 32423, Stop: 32554, Start Num: 10
Candidate Starts for Pace1224_40:
(2, 32162), (Start: 10 @32423 has 6 MA's),

Gene: Paito_42 Start: 31996, Stop: 32148, Start Num: 11
Candidate Starts for Paito_42:
(4, 31801), (7, 31930), (Start: 11 @31996 has 76 MA's), (25, 32128),

Gene: Peeb_41 Start: 31743, Stop: 31895, Start Num: 11
Candidate Starts for Peeb_41:
(3, 31509), (Start: 11 @31743 has 76 MA's), (25, 31875),

Gene: Periodt_41 Start: 31749, Stop: 31901, Start Num: 11
Candidate Starts for Periodt_41:
(Start: 11 @31749 has 76 MA's), (25, 31881),

Gene: Phish_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Phish_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Phloodle_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Phloodle_41:
(Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Phreak_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Phreak_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: PinkYoshi_41 Start: 31749, Stop: 31901, Start Num: 11
Candidate Starts for PinkYoshi_41:
(3, 31515), (Start: 11 @31749 has 76 MA's), (25, 31881),

Gene: Pinnie_40 Start: 32670, Stop: 32822, Start Num: 11
Candidate Starts for Pinnie_40:
(Start: 11 @32670 has 76 MA's), (13, 32682),

Gene: Plagueis_41 Start: 31578, Stop: 31730, Start Num: 11
Candidate Starts for Plagueis_41:
(3, 31344), (Start: 11 @31578 has 76 MA's), (25, 31710),

Gene: Primanti_41 Start: 31758, Stop: 31910, Start Num: 11

Candidate Starts for Primanti_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Rabbs_42 Start: 31925, Stop: 32098, Start Num: 12
Candidate Starts for Rabbs_42:
(4, 31703), (7, 31832), (Start: 11 @31922 has 76 MA's), (Start: 12 @31925 has 2 MA's), (15, 31958), (17, 31970), (18, 31982), (25, 32078),

Gene: Rattrick_41 Start: 31749, Stop: 31901, Start Num: 11
Candidate Starts for Rattrick_41:
(Start: 11 @31749 has 76 MA's), (25, 31881),

Gene: Remy19_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Remy19_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Renaissance_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Renaissance_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Richarlison_41 Start: 31743, Stop: 31895, Start Num: 11
Candidate Starts for Richarlison_41:
(3, 31509), (Start: 11 @31743 has 76 MA's), (25, 31875),

Gene: Ruriko_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Ruriko_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Schiebel_41 Start: 31743, Stop: 31895, Start Num: 11
Candidate Starts for Schiebel_41:
(3, 31509), (Start: 11 @31743 has 76 MA's), (25, 31875),

Gene: ShaboiShabazz_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for ShaboiShabazz_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Sizemore_41 Start: 31744, Stop: 31896, Start Num: 11
Candidate Starts for Sizemore_41:
(3, 31510), (Start: 11 @31744 has 76 MA's), (25, 31876),

Gene: Sneeze_42 Start: 31924, Stop: 32097, Start Num: 12
Candidate Starts for Sneeze_42:
(4, 31702), (7, 31831), (Start: 11 @31921 has 76 MA's), (Start: 12 @31924 has 2 MA's), (15, 31957), (17, 31969), (18, 31981), (25, 32077),

Gene: Stargaze_41 Start: 32652, Stop: 32783, Start Num: 10
Candidate Starts for Stargaze_41:
(Start: 10 @32652 has 6 MA's),

Gene: Sweets_41 Start: 31753, Stop: 31905, Start Num: 11
Candidate Starts for Sweets_41:
(3, 31519), (Start: 11 @31753 has 76 MA's), (25, 31885),

Gene: Taheera_40 Start: 31449, Stop: 31601, Start Num: 11
Candidate Starts for Taheera_40:
(4, 31230), (7, 31359), (Start: 9 @31440 has 24 MA's), (Start: 11 @31449 has 76 MA's), (25, 31581),

Gene: Terralys_40 Start: 31692, Stop: 31844, Start Num: 11
Candidate Starts for Terralys_40:
(3, 31458), (Start: 11 @31692 has 76 MA's), (25, 31824),

Gene: Terror_40 Start: 31449, Stop: 31601, Start Num: 11
Candidate Starts for Terror_40:
(4, 31230), (7, 31359), (Start: 9 @31440 has 24 MA's), (Start: 11 @31449 has 76 MA's), (25, 31581),

Gene: TinaBug_41 Start: 31753, Stop: 31905, Start Num: 11
Candidate Starts for TinaBug_41:
(3, 31519), (Start: 11 @31753 has 76 MA's), (25, 31885),

Gene: TomBrady_41 Start: 31759, Stop: 31911, Start Num: 11
Candidate Starts for TomBrady_41:
(3, 31525), (Start: 11 @31759 has 76 MA's), (25, 31891),

Gene: Ubuntu_57 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Ubuntu_57:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: Webster2_57 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Webster2_57:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: Wendigo_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Wendigo_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Wishmaker_54 Start: 41313, Stop: 41453, Start Num: 9
Candidate Starts for Wishmaker_54:
(Start: 9 @41313 has 24 MA's), (13, 41334), (19, 41382),

Gene: YangYin_41 Start: 32678, Stop: 32809, Start Num: 10
Candidate Starts for YangYin_41:
(Start: 10 @32678 has 6 MA's),

Gene: ZoMa_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for ZoMa_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),

Gene: Zombie_41 Start: 31758, Stop: 31910, Start Num: 11
Candidate Starts for Zombie_41:
(3, 31524), (Start: 11 @31758 has 76 MA's), (25, 31890),