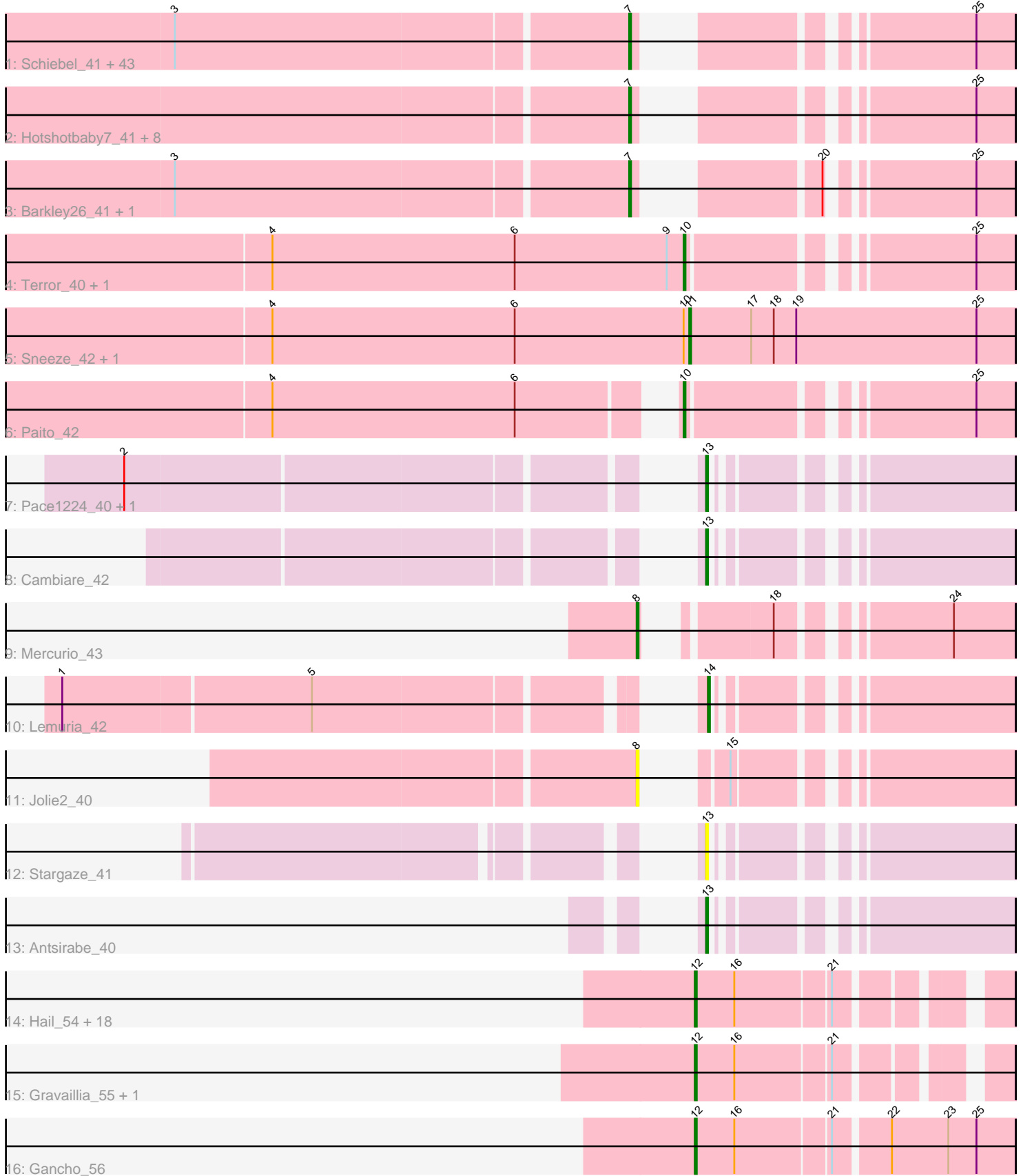


Pham 171375



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 171375 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171375 has 90 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Schiebel_41, Zombie_41, Phish_41, Hope_41, Avrafan_41, Plagueis_41, Olga_41, Cedasite_41, BPs_41, Crespo_41, Darionha_41, Kareem_41, BruceB_41, Marmie_41, Gomashi_41, PinkYoshi_41, Camri_41, JorRay_41, Cherrybomb426_41, Renaissance_41, Jane_41, Annihilator_41, Phreak_41, Mowgli_41, Peeb_41, Remy19_41, CassieYates_41, Frosty24_41, TomBrady_41, Coleslaw_41, GoldenAsh_41, Gideon_41, OctaviousRex_41, ZoMa_41, DMoney_41, LouisV14_43, BQuat_41, Halo_41, ShaboiShabazz_41, Angel_41, Sweets_41, Sizemore_41, Kasen3_41, CLÉD96_41
- Track 2 : Hotshotbaby7_41, Periodt_41, Chance64_41, Liefie_41, Aroostook_41, Jolene_41, DNAIII_0040, Jonghyun_40, ECartman_41
- Track 3 : Barkley26_41, Grizzly_41
- Track 4 : Terror_40, Taheera_40
- Track 5 : Sneeze_42, Rabbs_42
- Track 6 : Paito_42
- Track 7 : Pace1224_40, FlagStaff_40
- Track 8 : Cambiare_42
- Track 9 : Mercurio_43
- Track 10 : Lemuria_42
- Track 11 : Jolie2_40
- Track 12 : Stargaze_41
- Track 13 : Antsirabe_40
- Track 14 : Hail_54, Amochick_57, Webster2_57, Luke_56, LilHazelNut_57, Hadrien_56, Wishmaker_54, Giles_54, Forge_54, Ubuntu_57, Ein37_57, Amymech_57, HH92_56, DeepSoil15_57, Daegal_59, Luna22_54, Kinbote_56, Evanesce_56, Dewey_54
- Track 15 : Gravaillia_55, OBUpride_57
- Track 16 : 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 7, it was called in 53 of the 85 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Angel_41, Annihilator_41, Aroostook_41, Avrafan_41, BPs_41, BQuat_41, Barkley26_41, BruceB_41, CLED96_41, Camri_41, CassieYates_41, Cedasite_41, Chance64_41, Cherrybomb426_41, Coleslaw_41, Crespo_41, DMoney_41, DNAIII_0040, Darionha_41, ECartman_41, Frosty24_41, Gideon_41, GoldenAsh_41, Gomashi_41, Grizzly_41, Halo_41, Hope_41, Hotshotbaby7_41, Jane_41, Jolene_41, Jonghyun_40, JorRay_41, Kareem_41, Kasen3_41, Liefie_41, LouisV14_43, Marmie_41, Mowgli_41, OctaviousRex_41, Olga_41, Peeb_41, Periodt_41, Phish_41, Phreak_41, PinkYoshi_41, Plagueis_41, Remy19_41, Renaissance_41, Schiebel_41, ShaboiShabazz_41, Sizemore_41, Sweets_41, TomBrady_41, ZoMa_41, Zombie_41,

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

-

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

- Amochick_57, Amymech_57, Antsirabe_40, Cambiare_42, Daegal_59, DeepSoil15_57, Dewey_54, Ein37_57, Evanesce_56, FlagStaff_40, Forge_54, Gancho_56, Giles_54, Gravallia_55, HH92_56, Hadrien_56, Hail_54, Jolie2_40, Kinbote_56, Lemuria_42, LilHazelnut_57, Luke_56, Luna22_54, Mercurio_43, OBUpride_57, Pace1224_40, Paito_42, Rabbs_42, Sneeze_42, Stargaze_41, Taheera_40, Terror_40, Ubuntu_57, Webster2_57, Wishmaker_54,

Summary by start number:

Start 7:

- Found in 55 of 90 (61.1%) of genes in pham
- Manual Annotations of this start: 53 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Angel_41 (G1), Annihilator_41 (G1), Aroostook_41 (G1), Avrafan_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), Coleslaw_41 (G1), Crespo_41 (G1), DMoney_41 (G1), DNAIII_0040 (G1), Darionha_41 (G1), ECartman_41 (G1), Frosty24_41 (G1), Gideon_41 (G1), GoldenAsh_41 (G1), Gomashi_41 (G1), Grizzly_41 (G1), Halo_41 (G1), Hope_41 (G1), Hotshotbaby7_41 (G1), Jane_41 (G1), Jolene_41 (G1), Jonghyun_40 (G1), JorRay_41 (G1), Kareem_41 (G1), Kasen3_41 (G1), Liefie_41 (G1), LouisV14_43 (G1), Marmie_41 (G1), Mowgli_41 (G1), OctaviousRex_41 (G1), Olga_41 (G1), Peeb_41 (G1), Periodt_41 (G1), Phish_41 (G1), Phreak_41 (G1), PinkYoshi_41 (G1), Plagueis_41 (G1), Remy19_41 (G1), Renaissance_41 (G1), Schiebel_41 (G1), ShaboiShabazz_41 (G1), Sizemore_41 (G1), Sweets_41 (G1), TomBrady_41 (G1), ZoMa_41 (G1), Zombie_41 (G1),

Start 8:

- Found in 2 of 90 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jolie2_40 (G4), Mercurio_43 (G4),

Start 10:

- Found in 5 of 90 (5.6%) of genes in pham
- Manual Annotations of this start: 3 of 85
- Called 60.0% of time when present

- Phage (with cluster) where this start called: Paito_42 (G1), Taheera_40 (G1), Terror_40 (G1),

Start 11:

- Found in 2 of 90 (2.2%) of genes in pham
- Manual Annotations of this start: 2 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rabbs_42 (G1), Sneeze_42 (G1),

Start 12:

- Found in 22 of 90 (24.4%) of genes in pham
- Manual Annotations of this start: 22 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amochick_57 (Q), Amymech_57 (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), OBUpride_57 (Q), Ubuntu_57 (Q), Webster2_57 (Q), Wishmaker_54 (Q),

Start 13:

- Found in 5 of 90 (5.6%) of genes in pham
- Manual Annotations of this start: 3 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antsirabe_40 (G5), Cambiare_42 (G2), FlagStaff_40 (G2), Pace1224_40 (G2), Stargaze_41 (G5),

Start 14:

- Found in 1 of 90 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 85
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lemuria_42 (G4),

Summary by clusters:

There are 5 clusters represented in this pham: Q, G5, G4, G2, G1,

Info for manual annotations of cluster G1:

- Start number 7 was manually annotated 53 times for cluster G1.
- Start number 10 was manually annotated 3 times for cluster G1.
- Start number 11 was manually annotated 2 times for cluster G1.

Info for manual annotations of cluster G2:

- Start number 13 was manually annotated 2 times for cluster G2.

Info for manual annotations of cluster G4:

- Start number 8 was manually annotated 1 time for cluster G4.
- Start number 14 was manually annotated 1 time for cluster G4.

Info for manual annotations of cluster G5:

- Start number 13 was manually annotated 1 time for cluster G5.

Info for manual annotations of cluster Q:

- Start number 12 was manually annotated 22 times for cluster Q.

Gene Information:

Gene: Amochick_57 Start: 41343, Stop: 41483, Start Num: 12

Candidate Starts for Amochick_57:

(Start: 12 @41343 has 22 MA's), (16, 41364), (21, 41412),

Gene: Amymech_57 Start: 41313, Stop: 41453, Start Num: 12

Candidate Starts for Amymech_57:

(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: Angel_41 Start: 31743, Stop: 31895, Start Num: 7

Candidate Starts for Angel_41:

(3, 31509), (Start: 7 @31743 has 53 MA's), (25, 31875),

Gene: Annihilator_41 Start: 31749, Stop: 31901, Start Num: 7

Candidate Starts for Annihilator_41:

(3, 31515), (Start: 7 @31749 has 53 MA's), (25, 31881),

Gene: Antsirabe_40 Start: 32314, Stop: 32445, Start Num: 13

Candidate Starts for Antsirabe_40:

(Start: 13 @32314 has 3 MA's),

Gene: Aroostook_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for Aroostook_41:

(Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Avrafan_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for Avrafan_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: BPs_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for BPs_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: BQuat_41 Start: 31749, Stop: 31901, Start Num: 7

Candidate Starts for BQuat_41:

(3, 31515), (Start: 7 @31749 has 53 MA's), (25, 31881),

Gene: Barkley26_41 Start: 31765, Stop: 31917, Start Num: 7

Candidate Starts for Barkley26_41:

(3, 31531), (Start: 7 @31765 has 53 MA's), (20, 31831), (25, 31897),

Gene: BruceB_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for BruceB_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: CLED96_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for CLED96_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Cambiare_42 Start: 33265, Stop: 33396, Start Num: 13
Candidate Starts for Cambiare_42:
(Start: 13 @33265 has 3 MA's),

Gene: Camri_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Camri_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: CassieYates_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for CassieYates_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Cedasite_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Cedasite_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Chance64_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Chance64_41:
(Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Cherrybomb426_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Cherrybomb426_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Coleslaw_41 Start: 31749, Stop: 31901, Start Num: 7
Candidate Starts for Coleslaw_41:
(3, 31515), (Start: 7 @31749 has 53 MA's), (25, 31881),

Gene: Crespo_41 Start: 31759, Stop: 31911, Start Num: 7
Candidate Starts for Crespo_41:
(3, 31525), (Start: 7 @31759 has 53 MA's), (25, 31891),

Gene: DMoney_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for DMoney_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: DNAlll_0040 Start: 30392, Stop: 30544, Start Num: 7
Candidate Starts for DNAlll_0040:
(Start: 7 @30392 has 53 MA's), (25, 30524),

Gene: Daegal_59 Start: 41897, Stop: 42037, Start Num: 12
Candidate Starts for Daegal_59:
(Start: 12 @41897 has 22 MA's), (16, 41918), (21, 41966),

Gene: Darionha_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Darionha_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: DeepSoil15_57 Start: 41313, Stop: 41453, Start Num: 12
Candidate Starts for DeepSoil15_57:
(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: Dewey_54 Start: 41313, Stop: 41453, Start Num: 12
Candidate Starts for Dewey_54:
(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: ECartman_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for ECartman_41:
(Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Ein37_57 Start: 41313, Stop: 41453, Start Num: 12
Candidate Starts for Ein37_57:
(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: Evanesce_56 Start: 41313, Stop: 41453, Start Num: 12
Candidate Starts for Evanesce_56:
(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: FlagStaff_40 Start: 32423, Stop: 32554, Start Num: 13
Candidate Starts for FlagStaff_40:
(2, 32162), (Start: 13 @32423 has 3 MA's),

Gene: Forge_54 Start: 41313, Stop: 41453, Start Num: 12
Candidate Starts for Forge_54:
(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: Frosty24_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Frosty24_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Gancho_56 Start: 41024, Stop: 41185, Start Num: 12
Candidate Starts for Gancho_56:
(Start: 12 @41024 has 22 MA's), (16, 41045), (21, 41093), (22, 41120), (23, 41150), (25, 41165),

Gene: Gideon_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Gideon_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Giles_54 Start: 41313, Stop: 41453, Start Num: 12
Candidate Starts for Giles_54:
(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: GoldenAsh_41 Start: 31743, Stop: 31895, Start Num: 7
Candidate Starts for GoldenAsh_41:
(3, 31509), (Start: 7 @31743 has 53 MA's), (25, 31875),

Gene: Gomashi_41 Start: 31759, Stop: 31911, Start Num: 7
Candidate Starts for Gomashi_41:
(3, 31525), (Start: 7 @31759 has 53 MA's), (25, 31891),

Gene: Gravaillia_55 Start: 41321, Stop: 41461, Start Num: 12
Candidate Starts for Gravaillia_55:
(Start: 12 @41321 has 22 MA's), (16, 41342), (21, 41390),

Gene: Grizzly_41 Start: 31743, Stop: 31895, Start Num: 7

Candidate Starts for Grizzly_41:
(3, 31509), (Start: 7 @31743 has 53 MA's), (20, 31809), (25, 31875),

Gene: HH92_56 Start: 41313, Stop: 41453, Start Num: 12
Candidate Starts for HH92_56:
(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: Hadrien_56 Start: 41313, Stop: 41453, Start Num: 12
Candidate Starts for Hadrien_56:
(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: Hail_54 Start: 41313, Stop: 41453, Start Num: 12
Candidate Starts for Hail_54:
(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: Halo_41 Start: 31753, Stop: 31905, Start Num: 7
Candidate Starts for Halo_41:
(3, 31519), (Start: 7 @31753 has 53 MA's), (25, 31885),

Gene: Hope_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Hope_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Hotshotbaby7_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Hotshotbaby7_41:
(Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Jane_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Jane_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Jolene_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Jolene_41:
(Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Jolie2_40 Start: 31370, Stop: 31513, Start Num: 8
Candidate Starts for Jolie2_40:
(Start: 8 @31370 has 1 MA's), (15, 31385),

Gene: Jonghyun_40 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Jonghyun_40:
(Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: JorRay_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for JorRay_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Kareem_41 Start: 31758, Stop: 31910, Start Num: 7
Candidate Starts for Kareem_41:
(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Kasen3_41 Start: 31744, Stop: 31896, Start Num: 7
Candidate Starts for Kasen3_41:

(3, 31510), (Start: 7 @31744 has 53 MA's), (25, 31876),

Gene: Kinbote_56 Start: 41313, Stop: 41453, Start Num: 12

Candidate Starts for Kinbote_56:

(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: Lemuria_42 Start: 32730, Stop: 32861, Start Num: 14

Candidate Starts for Lemuria_42:

(1, 32439), (5, 32568), (Start: 14 @32730 has 1 MA's),

Gene: Liefie_41 Start: 31756, Stop: 31908, Start Num: 7

Candidate Starts for Liefie_41:

(Start: 7 @31756 has 53 MA's), (25, 31888),

Gene: LilHazelnut_57 Start: 41313, Stop: 41453, Start Num: 12

Candidate Starts for LilHazelnut_57:

(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: LouisV14_43 Start: 34023, Stop: 34175, Start Num: 7

Candidate Starts for LouisV14_43:

(3, 33789), (Start: 7 @34023 has 53 MA's), (25, 34155),

Gene: Luke_56 Start: 41268, Stop: 41408, Start Num: 12

Candidate Starts for Luke_56:

(Start: 12 @41268 has 22 MA's), (16, 41289), (21, 41337),

Gene: Luna22_54 Start: 41297, Stop: 41437, Start Num: 12

Candidate Starts for Luna22_54:

(Start: 12 @41297 has 22 MA's), (16, 41318), (21, 41366),

Gene: Marmie_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for Marmie_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Mercurio_43 Start: 33230, Stop: 33382, Start Num: 8

Candidate Starts for Mercurio_43:

(Start: 8 @33230 has 1 MA's), (18, 33275), (24, 33350),

Gene: Mowgli_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for Mowgli_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: OBUpride_57 Start: 41309, Stop: 41449, Start Num: 12

Candidate Starts for OBUpride_57:

(Start: 12 @41309 has 22 MA's), (16, 41330), (21, 41378),

Gene: OctaviousRex_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for OctaviousRex_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Olga_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for Olga_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Pace1224_40 Start: 32423, Stop: 32554, Start Num: 13

Candidate Starts for Pace1224_40:

(2, 32162), (Start: 13 @32423 has 3 MA's),

Gene: Paito_42 Start: 31996, Stop: 32148, Start Num: 10

Candidate Starts for Paito_42:

(4, 31801), (6, 31930), (Start: 10 @31996 has 3 MA's), (25, 32128),

Gene: Peeb_41 Start: 31743, Stop: 31895, Start Num: 7

Candidate Starts for Peeb_41:

(3, 31509), (Start: 7 @31743 has 53 MA's), (25, 31875),

Gene: Periodt_41 Start: 31749, Stop: 31901, Start Num: 7

Candidate Starts for Periodt_41:

(Start: 7 @31749 has 53 MA's), (25, 31881),

Gene: Phish_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for Phish_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Phreak_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for Phreak_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: PinkYoshi_41 Start: 31749, Stop: 31901, Start Num: 7

Candidate Starts for PinkYoshi_41:

(3, 31515), (Start: 7 @31749 has 53 MA's), (25, 31881),

Gene: Plagueis_41 Start: 31578, Stop: 31730, Start Num: 7

Candidate Starts for Plagueis_41:

(3, 31344), (Start: 7 @31578 has 53 MA's), (25, 31710),

Gene: Rabbs_42 Start: 31925, Stop: 32098, Start Num: 11

Candidate Starts for Rabbs_42:

(4, 31703), (6, 31832), (Start: 10 @31922 has 3 MA's), (Start: 11 @31925 has 2 MA's), (17, 31958), (18, 31970), (19, 31982), (25, 32078),

Gene: Remy19_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for Remy19_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Renaissance_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for Renaissance_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Schiebel_41 Start: 31743, Stop: 31895, Start Num: 7

Candidate Starts for Schiebel_41:

(3, 31509), (Start: 7 @31743 has 53 MA's), (25, 31875),

Gene: ShaboiShabazz_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for ShaboiShabazz_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Sizemore_41 Start: 31744, Stop: 31896, Start Num: 7

Candidate Starts for Sizemore_41:

(3, 31510), (Start: 7 @31744 has 53 MA's), (25, 31876),

Gene: Sneeze_42 Start: 31924, Stop: 32097, Start Num: 11

Candidate Starts for Sneeze_42:

(4, 31702), (6, 31831), (Start: 10 @31921 has 3 MA's), (Start: 11 @31924 has 2 MA's), (17, 31957), (18, 31969), (19, 31981), (25, 32077),

Gene: Stargaze_41 Start: 32652, Stop: 32783, Start Num: 13

Candidate Starts for Stargaze_41:

(Start: 13 @32652 has 3 MA's),

Gene: Sweets_41 Start: 31753, Stop: 31905, Start Num: 7

Candidate Starts for Sweets_41:

(3, 31519), (Start: 7 @31753 has 53 MA's), (25, 31885),

Gene: Taheera_40 Start: 31449, Stop: 31601, Start Num: 10

Candidate Starts for Taheera_40:

(4, 31230), (6, 31359), (9, 31440), (Start: 10 @31449 has 3 MA's), (25, 31581),

Gene: Terror_40 Start: 31449, Stop: 31601, Start Num: 10

Candidate Starts for Terror_40:

(4, 31230), (6, 31359), (9, 31440), (Start: 10 @31449 has 3 MA's), (25, 31581),

Gene: TomBrady_41 Start: 31759, Stop: 31911, Start Num: 7

Candidate Starts for TomBrady_41:

(3, 31525), (Start: 7 @31759 has 53 MA's), (25, 31891),

Gene: Ubuntu_57 Start: 41313, Stop: 41453, Start Num: 12

Candidate Starts for Ubuntu_57:

(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: Webster2_57 Start: 41313, Stop: 41453, Start Num: 12

Candidate Starts for Webster2_57:

(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: Wishmaker_54 Start: 41313, Stop: 41453, Start Num: 12

Candidate Starts for Wishmaker_54:

(Start: 12 @41313 has 22 MA's), (16, 41334), (21, 41382),

Gene: ZoMa_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for ZoMa_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),

Gene: Zombie_41 Start: 31758, Stop: 31910, Start Num: 7

Candidate Starts for Zombie_41:

(3, 31524), (Start: 7 @31758 has 53 MA's), (25, 31890),