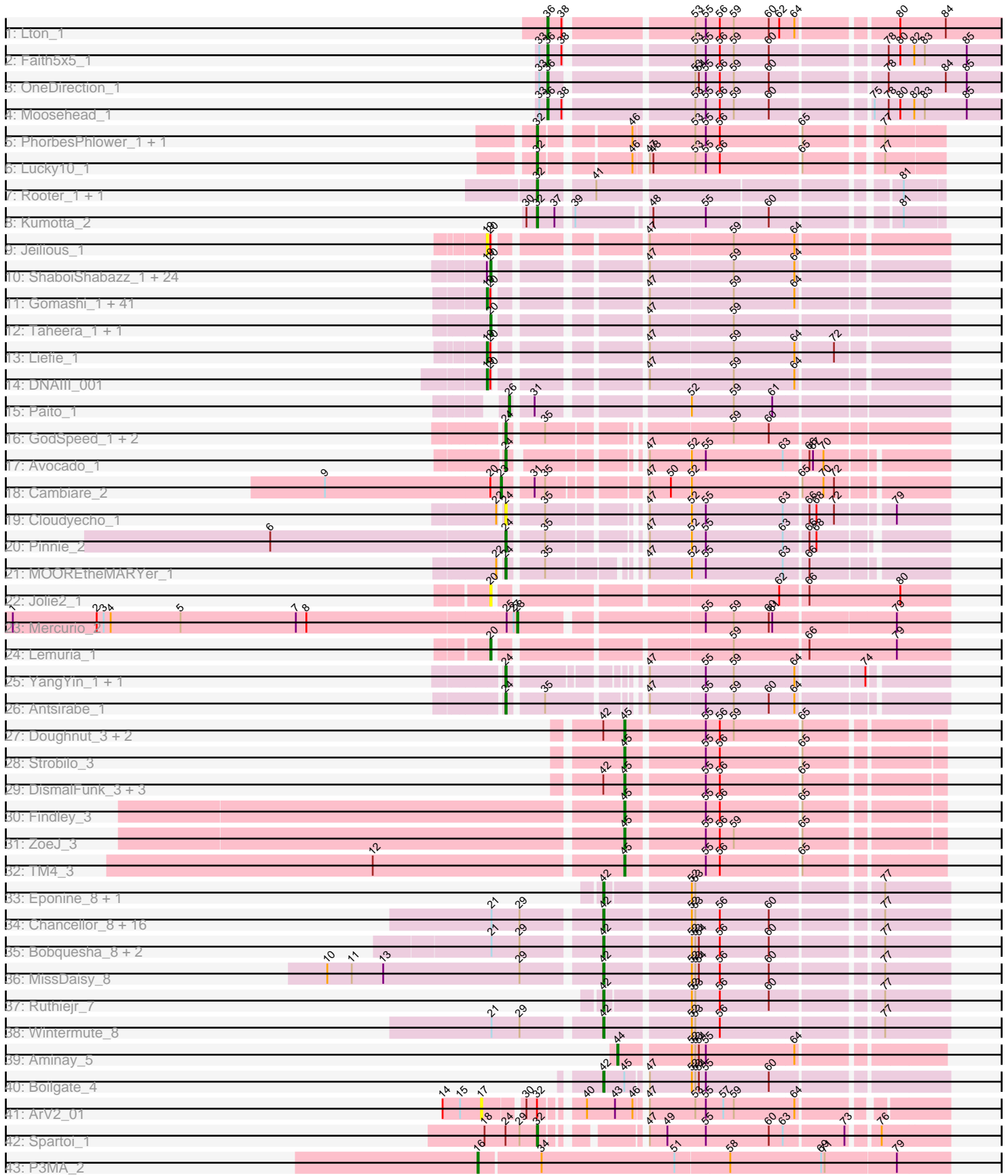


Pham 294522



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 294522 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294522 has 138 members, 21 are drafts.

Phages represented in each track:

- Track 1 : Lton_1
- Track 2 : Faith5x5_1
- Track 3 : OneDirection_1
- Track 4 : Moosehead_1
- Track 5 : PhorbesPhlower_1, Morkie_1
- Track 6 : Lucky10_1
- Track 7 : Rooter_1, Shoya_1
- Track 8 : Kumotta_2
- Track 9 : Jeilious_1
- Track 10 : ShaboiShabazz_1, Peeb_1, Sweets_1, Maliketh_1, Darionha_1, Cherrybomb426_1, Sizemore_1, Mowgli_1, Ruriko_1, TinaBug_1, GoldenAsh_1, Schiebel_1, Hotshotbaby7_1, Phish_1, AizenPogi_1, Grizzly_1, DingDing_1, Rattrick_1, PinkYoshi_1, Kasen3_1, MZKinsey_1, Plagueis_1, Wendigo_1, DMoney_1, Olga_1
- Track 11 : Gomashi_1, Phloodle_1, AzulaCat_1, Marmie_1, Crespo_1, OctaviousRex_1, Aroostook_1, Rabbs_1, Barkley26_1, LouisV14_1, BruceB_1, ECartman_1, Hope_1, Halo_1, Phreak_1, Gideon_1, Jolene_1, Frosty24_1, Avrafan_1, Jane_1, JorRay_1, TomBrady_1, ZoMa_1, BPs_1, CLED96_1, Jonghyun_1, Zombie_1, Camri_1, Annihilator_1, Renaissance_1, Neoh_1, Kareem_1, Remy19_1, Cedasite_1, Periodt_1, CassieYates_1, Angel_1, BQuat_1, Richarlison_1, Sneeze_1, Chance64_1, Coleslaw_1
- Track 12 : Taheera_1, Terror_1
- Track 13 : Liefie_1
- Track 14 : DNAIII_001
- Track 15 : Paito_1
- Track 16 : GodSpeed_1, FlagStaff_1, Pace1224_1
- Track 17 : Avocado_1
- Track 18 : Cambiare_2
- Track 19 : Cloudyecho_1
- Track 20 : Pinnie_2
- Track 21 : MOOREtheMARYer_1
- Track 22 : Jolie2_1
- Track 23 : Mercurio_2
- Track 24 : Lemuria_1
- Track 25 : YangYin_1, Stargaze_1
- Track 26 : Antsirabe_1
- Track 27 : Doughnut_3, BoostSeason_3, Mufasa_3

- Track 28 : Strobilo_3
- Track 29 : DismalFunk_3, Milly_3, DismalStressor_3, Marcoliusprime_3
- Track 30 : Findley_3
- Track 31 : ZoeJ_3
- Track 32 : TM4_3
- Track 33 : Eponine_8, Juliette_8
- Track 34 : Chancellor_8, Malthus_8, Cheetobro_8, DanSyl44_8, Y10_08, Kraw_8, Mitti_8, Qhanda_8, Taquito_6, Lebo14_8, Y2_08, OmniCritical_8, Fionnbharth_8, Slarp_8, JF1_8, SamScheppers_6, YasnayaPolyana_8
- Track 35 : Bobquesha_8, Reptar3000_8, Patt_8
- Track 36 : MissDaisy_8
- Track 37 : Ruthiejr_7
- Track 38 : Wintermute_8
- Track 39 : Aminay_5
- Track 40 : Boilgate_4
- Track 41 : ArV2_01
- Track 42 : Spartoi_1
- Track 43 : P3MA_2

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

The start number called the most often in the published annotations is 19, it was called in 41 of the 117 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, MZKinsey_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:

- Aminay_5, Antsirabe_1, ArV2_01, Avocado_1, Bobquesha_8, Boilgate_4, BoostSeason_3, Cambiare_2, Chancellor_8, Cheetobro_8, Cloudyecho_1, DanSyl44_8, DismalFunk_3, DismalStressor_3, Doughnut_3, Eponine_8, Faith5x5_1, Findley_3, Fionnbharth_8, FlagStaff_1, GodSpeed_1, JF1_8, Jolie2_1, Juliette_8, Kraw_8, Kumotta_2, Lebo14_8, Lemuria_1, Lton_1, Lucky10_1, MOOREtheMARYer_1, Malthus_8, Marcoliusprime_3, Mercurio_2, Milly_3, MissDaisy_8, Mitti_8, Moosehead_1, Morkie_1, Mufasa_3, OmniCritical_8, OneDirection_1, P3MA_2, Pace1224_1, Paito_1, Patt_8, PhorbesPhlower_1, Pinnie_2, Qhanda_8, Reptar3000_8, Rooter_1, Ruthiejr_7, SamScheppers_6, Shoya_1, Slarp_8, Spartoi_1, Stargaze_1, Strobilo_3, TM4_3, Taheera_1, Taquito_6,

Terror_1, Wintermute_8, Y10_08, Y2_08, YangYin_1, YasnayaPolyana_8, ZoeJ_3,

Summary by start number:

Start 16:

- Found in 1 of 138 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: P3MA_2 (singleton),

Start 17:

- Found in 1 of 138 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArV2_01 (singleton),

Start 19:

- Found in 70 of 138 (50.7%) of genes in pham
- Manual Annotations of this start: 41 of 117
- Called 64.3% 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), DNAll_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 20:

- Found in 75 of 138 (54.3%) of genes in pham
- Manual Annotations of this start: 21 of 117
- Called 38.7% 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), MZKinsey_1 (G1), 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 23:

- Found in 1 of 138 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cambiare_2 (G2),

Start 24:

- Found in 11 of 138 (8.0%) of genes in pham
- Manual Annotations of this start: 6 of 117
- 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), MOOREtheMARRYer_1 (G3), Pace1224_1 (G2), Pinnie_2 (G3), Stargaze_1 (G5), YangYin_1 (G5),

Start 26:

- Found in 1 of 138 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Paito_1 (G1),

Start 28:

- Found in 1 of 138 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mercurio_2 (G4),

Start 32:

- Found in 8 of 138 (5.8%) of genes in pham
- Manual Annotations of this start: 6 of 117
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Kumotta_2 (FB), Lucky10_1 (DH), Morkie_1 (DH), PhorbesPhlower_1 (DH), Rooter_1 (FB), Shoya_1 (FB), Spartoi_1 (singleton),

Start 36:

- Found in 4 of 138 (2.9%) of genes in pham
- Manual Annotations of this start: 4 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Faith5x5_1 (CZ6), Lton_1 (CZ), Moosehead_1 (CZ6), OneDirection_1 (CZ6),

Start 42:

- Found in 33 of 138 (23.9%) of genes in pham
- Manual Annotations of this start: 23 of 117
- Called 78.8% of time when present
- Phage (with cluster) where this start called: Bobquesha_8 (K4), Boilgate_4 (K8), Chancellor_8 (K4), Cheetobro_8 (K4), DanSyl44_8 (K4), Eponine_8 (K4), Fionnbharth_8 (K4), JF1_8 (K4), Juliette_8 (K4), Kraw_8 (K4), Lebo14_8 (K4), Malthus_8 (K4), MissDaisy_8 (K4), Mitti_8 (K4), OmniCritical_8 (K4), Patt_8 (K4), Qhanda_8 (K4), Reptar3000_8 (K4), Ruthiejr_7 (K4), SamScheppers_6 (K4), Slarp_8 (K4), Taquito_6 (K4), Wintermute_8 (K4), Y10_08 (K4), Y2_08 (K4), YasnayaPolyana_8 (K4),

Start 44:

- Found in 1 of 138 (0.7%) of genes in pham
- Manual Annotations of this start: 1 of 117
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay_5 (K7),

Start 45:

- Found in 12 of 138 (8.7%) of genes in pham
- Manual Annotations of this start: 11 of 117
- Called 91.7% of time when present

- Phage (with cluster) where this start called: BoostSeason_3 (K2), DismalFunk_3 (K2), DismalStressor_3 (K2), Doughnut_3 (K2), Findley_3 (K2), Marcoliusprime_3 (K2), Milly_3 (K2), Mufasa_3 (K2), Strobilo_3 (K2), TM4_3 (K2), ZoeJ_3 (K2),

Summary by clusters:

There are 15 clusters represented in this pham: singleton, K8, G3, G2, G, CZ, CZ6, G5, K2, FB, G4, K7, DH, K4, G1,

Info for manual annotations of cluster CZ:

- Start number 36 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ6:

- Start number 36 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster DH:

- Start number 32 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster FB:

- Start number 32 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster G1:

- Start number 19 was manually annotated 41 times for cluster G1.
- Start number 20 was manually annotated 20 times for cluster G1.
- Start number 26 was manually annotated 1 time for cluster G1.

Info for manual annotations of cluster G2:

- Start number 23 was manually annotated 1 time for cluster G2.
- Start number 24 was manually annotated 2 times for cluster G2.

Info for manual annotations of cluster G3:

- Start number 24 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

- Start number 20 was manually annotated 1 time for cluster G4.
- Start number 28 was manually annotated 1 time for cluster G4.

Info for manual annotations of cluster G5:

- Start number 24 was manually annotated 2 times for cluster G5.

Info for manual annotations of cluster K2:

- Start number 45 was manually annotated 11 times for cluster K2.

Info for manual annotations of cluster K4:

- Start number 42 was manually annotated 22 times for cluster K4.

Info for manual annotations of cluster K7:

- Start number 44 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 42 was manually annotated 1 time for cluster K8.

Gene Information:

Gene: AizenPogi_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for AizenPogi_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Aminay_5 Start: 1070, Stop: 1327, Start Num: 44

Candidate Starts for Aminay_5:

(Start: 44 @1070 has 1 MA's), (52, 1127), (53, 1130), (54, 1133), (55, 1139), (64, 1214),

Gene: Angel_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Angel_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Annihilator_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Annihilator_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Antsirabe_1 Start: 53, Stop: 382, Start Num: 24

Candidate Starts for Antsirabe_1:

(Start: 24 @53 has 6 MA's), (35, 80), (47, 146), (55, 191), (59, 215), (60, 245), (64, 266),

Gene: ArV2_01 Start: 36, Stop: 380, Start Num: 17

Candidate Starts for ArV2_01:

(14, 3), (15, 18), (17, 36), (30, 66), (Start: 32 @75 has 6 MA's), (40, 102), (43, 126), (46, 141), (47, 147), (53, 186), (55, 195), (57, 210), (59, 219), (64, 270),

Gene: Aroostook_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Aroostook_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Avocado_1 Start: 54, Stop: 380, Start Num: 24

Candidate Starts for Avocado_1:

(Start: 24 @54 has 6 MA's), (47, 144), (52, 177), (55, 189), (63, 255), (66, 273), (67, 276), (70, 285),

Gene: Avrafan_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Avrafan_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: AzulaCat_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for AzulaCat_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: BPs_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for BPs_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: BQuat_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for BQuat_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Barkley26_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Barkley26_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Bobquesha_8 Start: 2153, Stop: 2425, Start Num: 42

Candidate Starts for Bobquesha_8:

(21, 2066), (29, 2090), (Start: 42 @2153 has 23 MA's), (52, 2222), (53, 2225), (54, 2228), (56, 2246), (60, 2288), (77, 2372),

Gene: Boilgate_4 Start: 1309, Stop: 1578, Start Num: 42

Candidate Starts for Boilgate_4:

(Start: 42 @1309 has 23 MA's), (Start: 45 @1327 has 11 MA's), (47, 1339), (52, 1375), (53, 1378), (54, 1381), (55, 1387), (60, 1441),

Gene: BoostSeason_3 Start: 426, Stop: 674, Start Num: 45

Candidate Starts for BoostSeason_3:

(Start: 42 @408 has 23 MA's), (Start: 45 @426 has 11 MA's), (55, 489), (56, 501), (59, 513), (65, 567),

Gene: BruceB_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for BruceB_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: CLED96_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for CLED96_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Cambiare_2 Start: 534, Stop: 869, Start Num: 23

Candidate Starts for Cambiare_2:

(9, 384), (Start: 20 @525 has 21 MA's), (Start: 23 @534 has 1 MA's), (31, 555), (35, 564), (47, 633), (50, 651), (52, 666), (65, 756), (70, 774), (72, 783),

Gene: Camri_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Camri_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: CassieYates_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for CassieYates_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Cedasite_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Cedasite_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Chance64_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Chance64_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Chancellor_8 Start: 2234, Stop: 2506, Start Num: 42

Candidate Starts for Chancellor_8:

(21, 2147), (29, 2171), (Start: 42 @2234 has 23 MA's), (52, 2303), (53, 2306), (56, 2327), (60, 2369), (77, 2453),

Gene: Cheetobro_8 Start: 2234, Stop: 2506, Start Num: 42

Candidate Starts for Cheetobro_8:

(21, 2147), (29, 2171), (Start: 42 @2234 has 23 MA's), (52, 2303), (53, 2306), (56, 2327), (60, 2369), (77, 2453),

Gene: Cherrybomb426_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Cherrybomb426_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Cloudyecho_1 Start: 52, Stop: 381, Start Num: 24

Candidate Starts for Cloudyecho_1:

(22, 49), (Start: 24 @52 has 6 MA's), (35, 79), (47, 145), (52, 178), (55, 190), (63, 256), (66, 274), (68, 280), (72, 295), (79, 337),

Gene: Coleslaw_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Coleslaw_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Crespo_1 Start: 44, Stop: 388, Start Num: 19

Candidate Starts for Crespo_1:

(Start: 19 @44 has 41 MA's), (Start: 20 @47 has 21 MA's), (47, 149), (59, 218), (64, 269),

Gene: DMoney_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for DMoney_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: DNAIII_001 Start: 52, Stop: 396, Start Num: 19

Candidate Starts for DNAIII_001:

(Start: 19 @52 has 41 MA's), (Start: 20 @55 has 21 MA's), (47, 157), (59, 226), (64, 277),

Gene: DanSyl44_8 Start: 2234, Stop: 2506, Start Num: 42

Candidate Starts for DanSyl44_8:

(21, 2147), (29, 2171), (Start: 42 @2234 has 23 MA's), (52, 2303), (53, 2306), (56, 2327), (60, 2369), (77, 2453),

Gene: Darionha_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Darionha_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: DingDing_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for DingDing_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: DismalFunk_3 Start: 426, Stop: 674, Start Num: 45

Candidate Starts for DismalFunk_3:

(Start: 42 @408 has 23 MA's), (Start: 45 @426 has 11 MA's), (55, 489), (56, 501), (65, 567),

Gene: DismalStressor_3 Start: 426, Stop: 674, Start Num: 45

Candidate Starts for DismalStressor_3:

(Start: 42 @408 has 23 MA's), (Start: 45 @426 has 11 MA's), (55, 489), (56, 501), (65, 567),

Gene: Doughnut_3 Start: 426, Stop: 674, Start Num: 45

Candidate Starts for Doughnut_3:

(Start: 42 @408 has 23 MA's), (Start: 45 @426 has 11 MA's), (55, 489), (56, 501), (59, 513), (65, 567),

Gene: ECartman_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for ECartman_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Eponine_8 Start: 2229, Stop: 2498, Start Num: 42

Candidate Starts for Eponine_8:

(Start: 42 @2229 has 23 MA's), (52, 2295), (53, 2298), (77, 2445),

Gene: Faith5x5_1 Start: 103, Stop: 465, Start Num: 36

Candidate Starts for Faith5x5_1:

(33, 97), (Start: 36 @103 has 4 MA's), (38, 115), (53, 214), (55, 223), (56, 235), (59, 247), (60, 277), (78, 364), (80, 373), (82, 385), (83, 394), (85, 430),

Gene: Findley_3 Start: 426, Stop: 674, Start Num: 45

Candidate Starts for Findley_3:

(Start: 45 @426 has 11 MA's), (55, 489), (56, 501), (65, 567),

Gene: Fionnbharth_8 Start: 2221, Stop: 2493, Start Num: 42

Candidate Starts for Fionnbharth_8:

(21, 2134), (29, 2158), (Start: 42 @2221 has 23 MA's), (52, 2290), (53, 2293), (56, 2314), (60, 2356), (77, 2440),

Gene: FlagStaff_1 Start: 52, Stop: 387, Start Num: 24

Candidate Starts for FlagStaff_1:

(Start: 24 @52 has 6 MA's), (35, 79), (59, 214), (60, 244),

Gene: Frosty24_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Frosty24_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Gideon_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Gideon_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: GodSpeed_1 Start: 52, Stop: 387, Start Num: 24

Candidate Starts for GodSpeed_1:

(Start: 24 @52 has 6 MA's), (35, 79), (59, 214), (60, 244),

Gene: GoldenAsh_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for GoldenAsh_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Gomashi_1 Start: 44, Stop: 388, Start Num: 19

Candidate Starts for Gomashi_1:

(Start: 19 @44 has 41 MA's), (Start: 20 @47 has 21 MA's), (47, 149), (59, 218), (64, 269),

Gene: Grizzly_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Grizzly_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Halo_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Halo_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Hope_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Hope_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Hotshotbaby7_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Hotshotbaby7_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: JF1_8 Start: 2221, Stop: 2493, Start Num: 42

Candidate Starts for JF1_8:

(21, 2134), (29, 2158), (Start: 42 @2221 has 23 MA's), (52, 2290), (53, 2293), (56, 2314), (60, 2356), (77, 2440),

Gene: Jane_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Jane_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Jeilious_1 Start: 42, Stop: 386, Start Num: 19

Candidate Starts for Jeilious_1:

(Start: 19 @42 has 41 MA's), (Start: 20 @45 has 21 MA's), (47, 147), (59, 216), (64, 267),

Gene: Jolene_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Jolene_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Jolie2_1 Start: 45, Stop: 404, Start Num: 20

Candidate Starts for Jolie2_1:

(Start: 20 @45 has 21 MA's), (62, 264), (66, 285), (80, 363),

Gene: Jonghyun_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Jonghyun_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: JorRay_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for JorRay_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Juliette_8 Start: 2229, Stop: 2498, Start Num: 42

Candidate Starts for Juliette_8:

(Start: 42 @2229 has 23 MA's), (52, 2295), (53, 2298), (77, 2445),

Gene: Kareem_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Kareem_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Kasen3_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Kasen3_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Kraw_8 Start: 2221, Stop: 2493, Start Num: 42

Candidate Starts for Kraw_8:

(21, 2134), (29, 2158), (Start: 42 @2221 has 23 MA's), (52, 2290), (53, 2293), (56, 2314), (60, 2356), (77, 2440),

Gene: Kumotta_2 Start: 743, Stop: 1042, Start Num: 32

Candidate Starts for Kumotta_2:

(30, 734), (Start: 32 @743 has 6 MA's), (37, 758), (39, 767), (48, 821), (55, 866), (60, 917), (81, 1010),

Gene: Lebo14_8 Start: 2234, Stop: 2506, Start Num: 42

Candidate Starts for Lebo14_8:

(21, 2147), (29, 2171), (Start: 42 @2234 has 23 MA's), (52, 2303), (53, 2306), (56, 2327), (60, 2369), (77, 2453),

Gene: Lemuria_1 Start: 45, Stop: 404, Start Num: 20

Candidate Starts for Lemuria_1:

(Start: 20 @45 has 21 MA's), (59, 225), (66, 285), (79, 360),

Gene: Liefie_1 Start: 42, Stop: 386, Start Num: 19

Candidate Starts for Liefie_1:

(Start: 19 @42 has 41 MA's), (Start: 20 @45 has 21 MA's), (47, 147), (59, 216), (64, 267), (72, 297),

Gene: LouisV14_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for LouisV14_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Lton_1 Start: 107, Stop: 469, Start Num: 36

Candidate Starts for Lton_1:

(Start: 36 @107 has 4 MA's), (38, 119), (53, 218), (55, 227), (56, 239), (59, 251), (60, 281), (62, 290), (64, 302), (80, 377), (84, 416),

Gene: Lucky10_1 Start: 45, Stop: 347, Start Num: 32

Candidate Starts for Lucky10_1:

(Start: 32 @45 has 6 MA's), (46, 111), (47, 117), (48, 120), (53, 156), (55, 165), (56, 177), (65, 243), (77, 300),

Gene: MOOREtheMARYer_1 Start: 53, Stop: 379, Start Num: 24

Candidate Starts for MOOREtheMARYer_1:

(22, 50), (Start: 24 @53 has 6 MA's), (35, 80), (47, 143), (52, 176), (55, 188), (63, 254), (66, 272),

Gene: MZKinsey_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for MZKinsey_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Maliketh_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Maliketh_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Malthus_8 Start: 2221, Stop: 2493, Start Num: 42

Candidate Starts for Malthus_8:

(21, 2134), (29, 2158), (Start: 42 @2221 has 23 MA's), (52, 2290), (53, 2293), (56, 2314), (60, 2356), (77, 2440),

Gene: Marcoliusprime_3 Start: 426, Stop: 674, Start Num: 45

Candidate Starts for Marcoliusprime_3:

(Start: 42 @408 has 23 MA's), (Start: 45 @426 has 11 MA's), (55, 489), (56, 501), (65, 567),

Gene: Marmie_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Marmie_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Mercurio_2 Start: 700, Stop: 1044, Start Num: 28

Candidate Starts for Mercurio_2:

(1, 271), (2, 343), (3, 349), (4, 355), (5, 415), (7, 514), (8, 523), (25, 691), (27, 697), (Start: 28 @700 has 1 MA's), (55, 844), (59, 868), (60, 898), (61, 901), (79, 1000),

Gene: Milly_3 Start: 426, Stop: 674, Start Num: 45

Candidate Starts for Milly_3:

(Start: 42 @408 has 23 MA's), (Start: 45 @426 has 11 MA's), (55, 489), (56, 501), (65, 567),

Gene: MissDaisy_8 Start: 2177, Stop: 2449, Start Num: 42

Candidate Starts for MissDaisy_8:

(10, 1949), (11, 1970), (13, 1997), (29, 2114), (Start: 42 @2177 has 23 MA's), (52, 2246), (53, 2249), (54, 2252), (56, 2270), (60, 2312), (77, 2396),

Gene: Mitti_8 Start: 2234, Stop: 2506, Start Num: 42

Candidate Starts for Mitti_8:

(21, 2147), (29, 2171), (Start: 42 @2234 has 23 MA's), (52, 2303), (53, 2306), (56, 2327), (60, 2369), (77, 2453),

Gene: Moosehead_1 Start: 103, Stop: 465, Start Num: 36

Candidate Starts for Moosehead_1:

(33, 97), (Start: 36 @103 has 4 MA's), (38, 115), (53, 214), (55, 223), (56, 235), (59, 247), (60, 277), (75, 352), (78, 364), (80, 373), (82, 385), (83, 394), (85, 430),

Gene: Morkie_1 Start: 44, Stop: 346, Start Num: 32

Candidate Starts for Morkie_1:

(Start: 32 @44 has 6 MA's), (46, 110), (53, 155), (55, 164), (56, 176), (65, 242), (77, 299),

Gene: Mowgli_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Mowgli_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Mufasa_3 Start: 426, Stop: 674, Start Num: 45

Candidate Starts for Mufasa_3:

(Start: 42 @408 has 23 MA's), (Start: 45 @426 has 11 MA's), (55, 489), (56, 501), (59, 513), (65, 567),

Gene: Neoh_1 Start: 44, Stop: 388, Start Num: 19

Candidate Starts for Neoh_1:

(Start: 19 @44 has 41 MA's), (Start: 20 @47 has 21 MA's), (47, 149), (59, 218), (64, 269),

Gene: OctaviousRex_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for OctaviousRex_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Olga_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Olga_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: OmniCritical_8 Start: 2221, Stop: 2493, Start Num: 42

Candidate Starts for OmniCritical_8:

(21, 2134), (29, 2158), (Start: 42 @2221 has 23 MA's), (52, 2290), (53, 2293), (56, 2314), (60, 2356), (77, 2440),

Gene: OneDirection_1 Start: 104, Stop: 466, Start Num: 36

Candidate Starts for OneDirection_1:

(33, 98), (Start: 36 @104 has 4 MA's), (53, 215), (54, 218), (55, 224), (56, 236), (59, 248), (60, 278), (78, 365), (84, 413), (85, 431),

Gene: P3MA_2 Start: 587, Stop: 982, Start Num: 16

Candidate Starts for P3MA_2:

(Start: 16 @587 has 1 MA's), (34, 638), (51, 752), (58, 797), (69, 875), (71, 878), (79, 938),

Gene: Pace1224_1 Start: 52, Stop: 387, Start Num: 24

Candidate Starts for Pace1224_1:

(Start: 24 @52 has 6 MA's), (35, 79), (59, 214), (60, 244),

Gene: Paito_1 Start: 47, Stop: 382, Start Num: 26

Candidate Starts for Paito_1:

(Start: 26 @47 has 1 MA's), (31, 62), (52, 173), (59, 209), (61, 242),

Gene: Patt_8 Start: 2153, Stop: 2425, Start Num: 42

Candidate Starts for Patt_8:

(21, 2066), (29, 2090), (Start: 42 @2153 has 23 MA's), (52, 2222), (53, 2225), (54, 2228), (56, 2246), (60, 2288), (77, 2372),

Gene: Peeb_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Peeb_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Periodt_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Periodt_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Phish_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Phish_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Phloodle_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Phloodle_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: PhorbesPhlower_1 Start: 44, Stop: 346, Start Num: 32

Candidate Starts for PhorbesPhlower_1:

(Start: 32 @44 has 6 MA's), (46, 110), (53, 155), (55, 164), (56, 176), (65, 242), (77, 299),

Gene: Phreak_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Phreak_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: PinkYoshi_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for PinkYoshi_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Pinnie_2 Start: 520, Stop: 846, Start Num: 24

Candidate Starts for Pinnie_2:

(6, 322), (Start: 24 @520 has 6 MA's), (35, 547), (47, 613), (52, 646), (55, 658), (63, 724), (66, 742), (68, 748),

Gene: Plagueis_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Plagueis_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Qhanda_8 Start: 2234, Stop: 2506, Start Num: 42

Candidate Starts for Qhanda_8:

(21, 2147), (29, 2171), (Start: 42 @2234 has 23 MA's), (52, 2303), (53, 2306), (56, 2327), (60, 2369), (77, 2453),

Gene: Rabbs_1 Start: 44, Stop: 388, Start Num: 19

Candidate Starts for Rabbs_1:

(Start: 19 @44 has 41 MA's), (Start: 20 @47 has 21 MA's), (47, 149), (59, 218), (64, 269),

Gene: Rattrick_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Rattrick_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Remy19_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Remy19_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Renaissance_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Renaissance_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Reptar3000_8 Start: 2152, Stop: 2424, Start Num: 42

Candidate Starts for Reptar3000_8:

(21, 2065), (29, 2089), (Start: 42 @2152 has 23 MA's), (52, 2221), (53, 2224), (54, 2227), (56, 2245), (60, 2287), (77, 2371),

Gene: Richarlison_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Richarlison_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Rooter_1 Start: 59, Stop: 364, Start Num: 32

Candidate Starts for Rooter_1:

(Start: 32 @59 has 6 MA's), (41, 101), (81, 332),

Gene: Ruriko_1 Start: 46, Stop: 387, Start Num: 20

Candidate Starts for Ruriko_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Ruthiejr_7 Start: 1960, Stop: 2229, Start Num: 42

Candidate Starts for Ruthiejr_7:

(Start: 42 @1960 has 23 MA's), (52, 2026), (53, 2029), (56, 2050), (60, 2092), (77, 2176),

Gene: SamScheppers_6 Start: 1831, Stop: 2103, Start Num: 42
Candidate Starts for SamScheppers_6:
(21, 1744), (29, 1768), (Start: 42 @1831 has 23 MA's), (52, 1900), (53, 1903), (56, 1924), (60, 1966),
(77, 2050),

Gene: Schiebel_1 Start: 46, Stop: 387, Start Num: 20
Candidate Starts for Schiebel_1:
(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: ShaboiShabazz_1 Start: 46, Stop: 387, Start Num: 20
Candidate Starts for ShaboiShabazz_1:
(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Shoya_1 Start: 59, Stop: 364, Start Num: 32
Candidate Starts for Shoya_1:
(Start: 32 @59 has 6 MA's), (41, 101), (81, 332),

Gene: Sizemore_1 Start: 46, Stop: 387, Start Num: 20
Candidate Starts for Sizemore_1:
(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Slarp_8 Start: 2234, Stop: 2506, Start Num: 42
Candidate Starts for Slarp_8:
(21, 2147), (29, 2171), (Start: 42 @2234 has 23 MA's), (52, 2303), (53, 2306), (56, 2327), (60, 2369),
(77, 2453),

Gene: Sneeze_1 Start: 43, Stop: 387, Start Num: 19
Candidate Starts for Sneeze_1:
(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Spartoi_1 Start: 95, Stop: 397, Start Num: 32
Candidate Starts for Spartoi_1:
(18, 50), (Start: 24 @68 has 6 MA's), (29, 80), (Start: 32 @95 has 6 MA's), (47, 158), (49, 173), (55,
206), (60, 260), (63, 272), (73, 320), (76, 341),

Gene: Stargaze_1 Start: 52, Stop: 372, Start Num: 24
Candidate Starts for Stargaze_1:
(Start: 24 @52 has 6 MA's), (47, 136), (55, 181), (59, 205), (64, 256), (74, 310),

Gene: Strobilo_3 Start: 426, Stop: 674, Start Num: 45
Candidate Starts for Strobilo_3:
(Start: 45 @426 has 11 MA's), (55, 489), (56, 501), (65, 567),

Gene: Sweets_1 Start: 46, Stop: 387, Start Num: 20
Candidate Starts for Sweets_1:
(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: TM4_3 Start: 438, Stop: 689, Start Num: 45
Candidate Starts for TM4_3:
(12, 231), (Start: 45 @438 has 11 MA's), (55, 501), (56, 513), (65, 579),

Gene: Taheera_1 Start: 47, Stop: 391, Start Num: 20

Candidate Starts for Taheera_1:
(Start: 20 @47 has 21 MA's), (47, 149), (59, 218),

Gene: Taquito_6 Start: 1832, Stop: 2104, Start Num: 42
Candidate Starts for Taquito_6:
(21, 1745), (29, 1769), (Start: 42 @1832 has 23 MA's), (52, 1901), (53, 1904), (56, 1925), (60, 1967),
(77, 2051),

Gene: Terror_1 Start: 47, Stop: 391, Start Num: 20
Candidate Starts for Terror_1:
(Start: 20 @47 has 21 MA's), (47, 149), (59, 218),

Gene: TinaBug_1 Start: 46, Stop: 387, Start Num: 20
Candidate Starts for TinaBug_1:
(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: TomBrady_1 Start: 44, Stop: 388, Start Num: 19
Candidate Starts for TomBrady_1:
(Start: 19 @44 has 41 MA's), (Start: 20 @47 has 21 MA's), (47, 149), (59, 218), (64, 269),

Gene: Wendigo_1 Start: 46, Stop: 387, Start Num: 20
Candidate Starts for Wendigo_1:
(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: Wintermute_8 Start: 2220, Stop: 2492, Start Num: 42
Candidate Starts for Wintermute_8:
(21, 2133), (29, 2157), (Start: 42 @2220 has 23 MA's), (52, 2289), (53, 2292), (56, 2313), (77, 2439),

Gene: Y10_08 Start: 2221, Stop: 2493, Start Num: 42
Candidate Starts for Y10_08:
(21, 2134), (29, 2158), (Start: 42 @2221 has 23 MA's), (52, 2290), (53, 2293), (56, 2314), (60, 2356),
(77, 2440),

Gene: Y2_08 Start: 2221, Stop: 2493, Start Num: 42
Candidate Starts for Y2_08:
(21, 2134), (29, 2158), (Start: 42 @2221 has 23 MA's), (52, 2290), (53, 2293), (56, 2314), (60, 2356),
(77, 2440),

Gene: YangYin_1 Start: 52, Stop: 372, Start Num: 24
Candidate Starts for YangYin_1:
(Start: 24 @52 has 6 MA's), (47, 136), (55, 181), (59, 205), (64, 256), (74, 310),

Gene: YasnayaPolyana_8 Start: 2221, Stop: 2493, Start Num: 42
Candidate Starts for YasnayaPolyana_8:
(21, 2134), (29, 2158), (Start: 42 @2221 has 23 MA's), (52, 2290), (53, 2293), (56, 2314), (60, 2356),
(77, 2440),

Gene: ZoMa_1 Start: 43, Stop: 387, Start Num: 19
Candidate Starts for ZoMa_1:
(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),

Gene: ZoeJ_3 Start: 426, Stop: 674, Start Num: 45
Candidate Starts for ZoeJ_3:

(Start: 45 @426 has 11 MA's), (55, 489), (56, 501), (59, 513), (65, 567),

Gene: Zombie_1 Start: 43, Stop: 387, Start Num: 19

Candidate Starts for Zombie_1:

(Start: 19 @43 has 41 MA's), (Start: 20 @46 has 21 MA's), (47, 148), (59, 217), (64, 268),