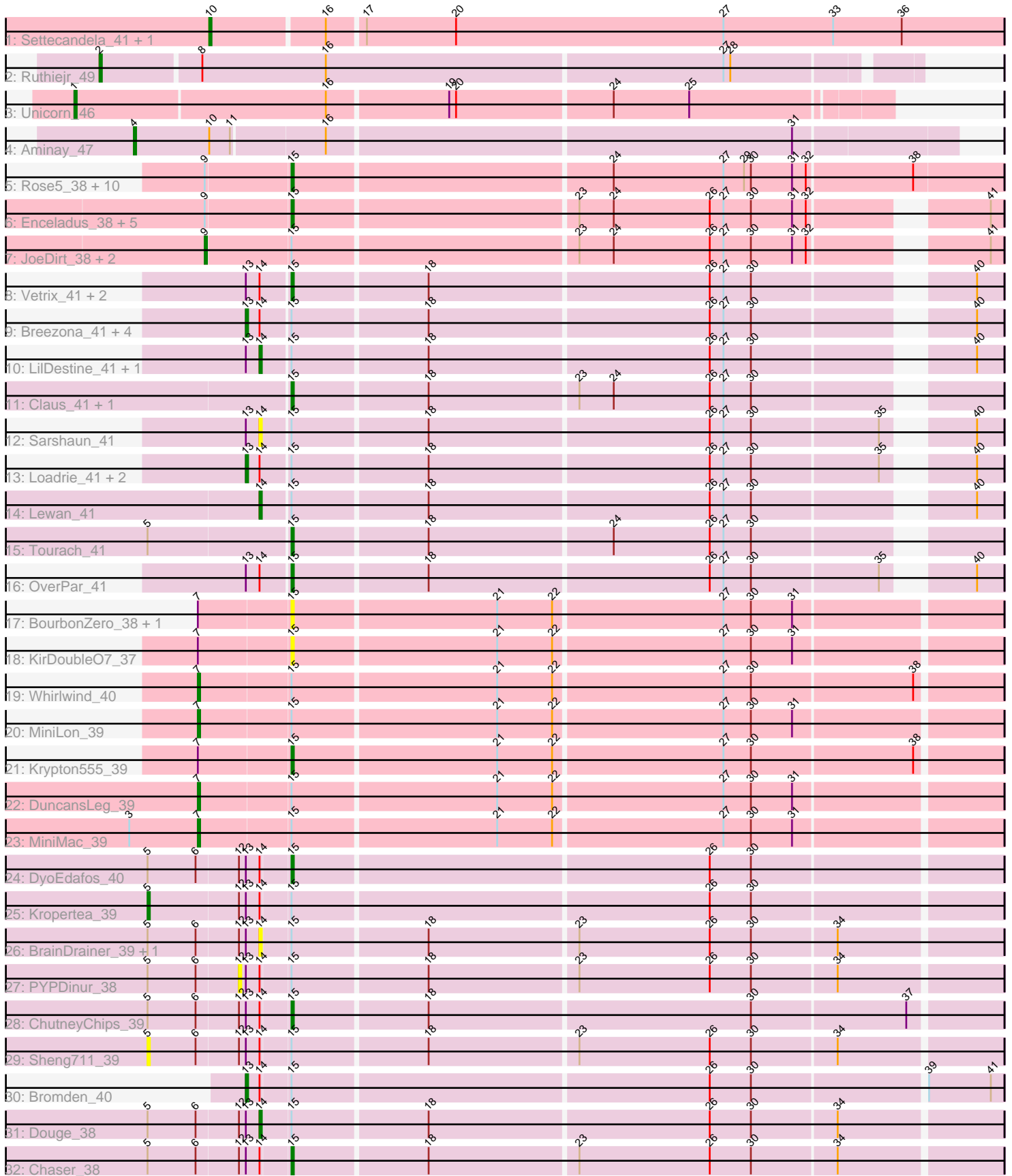


Pham 308631



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 308631 Report

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

Pham number 308631 has 62 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Settecandela_41, Phrappuccino_41
- Track 2 : Ruthiejr_49
- Track 3 : Unicorn_46
- Track 4 : Aminay_47
- Track 5 : Rose5_38, Wyatt2_39, Silverleaf_38, Calm_39, Acquire49_39, MAckerman_39, Halena_38, Tyson_38, AvadaKedavra_39, CicholasNage_39, Zaria_39
- Track 6 : Enceladus_38, OhShagHennessy_38, Wamburgexpress_39, Appletree2_38, Poochiewood_38, DirkDirk_38
- Track 7 : JoeDirt_38, LeBron_39, UPIE_39
- Track 8 : Vetrix_41, Underpass_41, DrSeegs_41
- Track 9 : Breezona_41, Nicholasp3_41, Faith1_41, Rumpelstiltskin_41, Winky_41
- Track 10 : LilDestine_41, MkaliMitinis3_41
- Track 11 : Claus_41, Baoshan_40
- Track 12 : Sarshaun_41
- Track 13 : Loadrie_41, Wigglewiggles_41, Kahlid_41
- Track 14 : Lewan_41
- Track 15 : Tourach_41
- Track 16 : OverPar_41
- Track 17 : BourbonZero_38, Ellson_39
- Track 18 : KirDoubleO7_37
- Track 19 : Whirlwind_40
- Track 20 : MiniLon_39
- Track 21 : Krypton555_39
- Track 22 : DuncansLeg_39
- Track 23 : MiniMac_39
- Track 24 : DyoEdafos_40
- Track 25 : Kropertea_39
- Track 26 : BrainDrainer_39, Douzhi_38
- Track 27 : PYPDinur_38
- Track 28 : ChutneyChips_39
- Track 29 : Sheng711_39
- Track 30 : Bromden_40
- Track 31 : Douge_38
- Track 32 : Chaser_38

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

The start number called the most often in the published annotations is 15, it was called in 27 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_39, Appletree2_38, AvadaKedavra_39, Baoshan_40, BourbonZero_38, Calm_39, Chaser_38, ChutneyChips_39, CicholasNage_39, Claus_41, DirkDirk_38, DrSeegs_41, DyoEdafos_40, Ellson_39, Enceladus_38, Halena_38, KirDoubleO7_37, Krypton555_39, MAckerman_39, OhShagHennessy_38, OverPar_41, Poochiewood_38, Rose5_38, Silverleaf_38, Tourach_41, Tyson_38, Underpass_41, Vetric_41, Wamburgrxpress_39, Wyatt2_39, Zaria_39,

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

- BrainDrainer_39, Breezona_41, Bromden_40, Douge_38, Douzhi_38, DuncansLeg_39, Faith1_41, JoeDirt_38, Kahlid_41, Kropertea_39, LeBron_39, Lewan_41, LilDestine_41, Loadrie_41, MiniLon_39, MiniMac_39, MkaliMitinis3_41, Nicholasp3_41, PYPDinur_38, Rumpelstiltskin_41, Sarshaun_41, Sheng711_39, UPIE_39, Whirlwind_40, Wigglewiggle_41, Winky_41,

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

- Aminay_47, Phrappuccino_41, Ruthiejr_49, Settecandela_41, Unicorn_46,

Summary by start number:

Start 1:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Unicorn_46 (K6),

Start 2:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ruthiejr_49 (K4),

Start 4:

- Found in 1 of 62 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay_47 (K7),

Start 5:

- Found in 10 of 62 (16.1%) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Kropertea_39 (L4), Sheng711_39 (L4),

Start 7:

- Found in 8 of 62 (12.9%) of genes in pham
- Manual Annotations of this start: 4 of 53

- Called 50.0% of time when present
- Phage (with cluster) where this start called: DuncansLeg_39 (L3), MiniLon_39 (L3), MiniMac_39 (L3), Whirlwind_40 (L3),

Start 9:

- Found in 20 of 62 (32.3%) of genes in pham
- Manual Annotations of this start: 3 of 53
- Called 15.0% of time when present
- Phage (with cluster) where this start called: JoeDirt_38 (L1), LeBron_39 (L1), UPIE_39 (L1),

Start 10:

- Found in 3 of 62 (4.8%) of genes in pham
- Manual Annotations of this start: 2 of 53
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Phrappuccino_41 (AA), Settecandela_41 (AA),

Start 12:

- Found in 9 of 62 (14.5%) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: PYPDinur_38 (L4),

Start 13:

- Found in 25 of 62 (40.3%) of genes in pham
- Manual Annotations of this start: 9 of 53
- Called 36.0% of time when present
- Phage (with cluster) where this start called: Breezona_41 (L2), Bromden_40 (L4), Faith1_41 (L2), Kahlid_41 (L2), Loadrie_41 (L2), Nicholasp3_41 (L2), Rumpelstiltskin_41 (L2), Wigglewiggles_41 (L2), Winky_41 (L2),

Start 14:

- Found in 26 of 62 (41.9%) of genes in pham
- Manual Annotations of this start: 4 of 53
- Called 26.9% of time when present
- Phage (with cluster) where this start called: BrainDrainer_39 (L4), Douge_38 (L4), Douzhi_38 (L4), Lewan_41 (L2), LilDestine_41 (L2), MkaliMitinis3_41 (L2), Sarshaun_41 (L2),

Start 15:

- Found in 57 of 62 (91.9%) of genes in pham
- Manual Annotations of this start: 27 of 53
- Called 54.4% of time when present
- Phage (with cluster) where this start called: Acquire49_39 (L1), Appletree2_38 (L1), AvadaKedavra_39 (L1), Baoshan_40 (L2), BourbonZero_38 (L3), Calm_39 (L1), Chaser_38 (L4), ChutneyChips_39 (L4), CicholasNage_39 (L1), Claus_41 (L2), DirkDirk_38 (L1), DrSeegs_41 (L2), DyoEdafos_40 (L4), Ellson_39 (L3), Enceladus_38 (L1), Halena_38 (L1), KirDoubleO7_37 (L3), Krypton555_39 (L3), MAckerman_39 (L1), OhShagHennessy_38 (L1), OverPar_41 (L2), Poochiewood_38 (L1), Rose5_38 (L1), Silverleaf_38 (L1), Tourach_41 (L2), Tyson_38 (L1), Underpass_41 (L2), Vetrix_41 (L2), Wamburgrxpress_39 (L1), Wyatt2_39 (L1), Zaria_39 (L1),

Summary by clusters:

There are 8 clusters represented in this pham: AA, K4, L4, L2, L3, L1, K7, K6,

Info for manual annotations of cluster AA:

- Start number 10 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster K4:

- Start number 2 was manually annotated 1 time for cluster K4.

Info for manual annotations of cluster K6:

- Start number 1 was manually annotated 1 time for cluster K6.

Info for manual annotations of cluster K7:

- Start number 4 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster L1:

- Start number 9 was manually annotated 3 times for cluster L1.
- Start number 15 was manually annotated 16 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 13 was manually annotated 8 times for cluster L2.
- Start number 14 was manually annotated 3 times for cluster L2.
- Start number 15 was manually annotated 7 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 7 was manually annotated 4 times for cluster L3.
- Start number 15 was manually annotated 1 time for cluster L3.

Info for manual annotations of cluster L4:

- Start number 5 was manually annotated 1 time for cluster L4.
- Start number 13 was manually annotated 1 time for cluster L4.
- Start number 14 was manually annotated 1 time for cluster L4.
- Start number 15 was manually annotated 3 times for cluster L4.

Gene Information:

Gene: Acquire49_39 Start: 33043, Stop: 33345, Start Num: 15

Candidate Starts for Acquire49_39:

(Start: 9 @33007 has 3 MA's), (Start: 15 @33043 has 27 MA's), (24, 33178), (27, 33226), (29, 33235), (30, 33238), (31, 33256), (32, 33262), (38, 33307),

Gene: Aminay_47 Start: 36566, Stop: 36913, Start Num: 4

Candidate Starts for Aminay_47:

(Start: 4 @36566 has 1 MA's), (Start: 10 @36599 has 2 MA's), (11, 36608), (16, 36647), (31, 36845),

Gene: Appletree2_38 Start: 32985, Stop: 33272, Start Num: 15

Candidate Starts for Appletree2_38:

(Start: 9 @32949 has 3 MA's), (Start: 15 @32985 has 27 MA's), (23, 33105), (24, 33120), (26, 33162), (27, 33168), (30, 33180), (31, 33198), (32, 33204), (41, 33267),

Gene: AvadaKedavra_39 Start: 33052, Stop: 33354, Start Num: 15

Candidate Starts for AvadaKedavra_39:

(Start: 9 @33016 has 3 MA's), (Start: 15 @33052 has 27 MA's), (24, 33187), (27, 33235), (29, 33244), (30, 33247), (31, 33265), (32, 33271), (38, 33316),

Gene: Baoshan_40 Start: 34271, Stop: 34558, Start Num: 15

Candidate Starts for Baoshan_40:

(Start: 15 @34271 has 27 MA's), (18, 34328), (23, 34391), (24, 34406), (26, 34448), (27, 34454), (30, 34466),

Gene: BourbonZero_38 Start: 34636, Stop: 34935, Start Num: 15

Candidate Starts for BourbonZero_38:

(Start: 7 @34597 has 4 MA's), (Start: 15 @34636 has 27 MA's), (21, 34723), (22, 34747), (27, 34819), (30, 34831), (31, 34849),

Gene: BrainDrainer_39 Start: 33307, Stop: 33618, Start Num: 14

Candidate Starts for BrainDrainer_39:

(Start: 5 @33259 has 1 MA's), (6, 33280), (12, 33298), (Start: 13 @33301 has 9 MA's), (Start: 14 @33307 has 4 MA's), (Start: 15 @33319 has 27 MA's), (18, 33376), (23, 33439), (26, 33496), (30, 33514), (34, 33550),

Gene: Breezona_41 Start: 34392, Stop: 34697, Start Num: 13

Candidate Starts for Breezona_41:

(Start: 13 @34392 has 9 MA's), (Start: 14 @34398 has 4 MA's), (Start: 15 @34410 has 27 MA's), (18, 34467), (26, 34587), (27, 34593), (30, 34605), (40, 34686),

Gene: Bromden_40 Start: 33855, Stop: 34172, Start Num: 13

Candidate Starts for Bromden_40:

(Start: 13 @33855 has 9 MA's), (Start: 14 @33861 has 4 MA's), (Start: 15 @33873 has 27 MA's), (26, 34050), (30, 34068), (39, 34140), (41, 34167),

Gene: Calm_39 Start: 33058, Stop: 33360, Start Num: 15

Candidate Starts for Calm_39:

(Start: 9 @33022 has 3 MA's), (Start: 15 @33058 has 27 MA's), (24, 33193), (27, 33241), (29, 33250), (30, 33253), (31, 33271), (32, 33277), (38, 33322),

Gene: Chaser_38 Start: 33136, Stop: 33435, Start Num: 15

Candidate Starts for Chaser_38:

(Start: 5 @33076 has 1 MA's), (6, 33097), (12, 33115), (Start: 13 @33118 has 9 MA's), (Start: 14 @33124 has 4 MA's), (Start: 15 @33136 has 27 MA's), (18, 33193), (23, 33256), (26, 33313), (30, 33331), (34, 33367),

Gene: ChutneyChips_39 Start: 33316, Stop: 33615, Start Num: 15

Candidate Starts for ChutneyChips_39:

(Start: 5 @33256 has 1 MA's), (6, 33277), (12, 33295), (Start: 13 @33298 has 9 MA's), (Start: 14 @33304 has 4 MA's), (Start: 15 @33316 has 27 MA's), (18, 33373), (30, 33511), (37, 33577),

Gene: CicholasNage_39 Start: 33079, Stop: 33381, Start Num: 15

Candidate Starts for CicholasNage_39:

(Start: 9 @33043 has 3 MA's), (Start: 15 @33079 has 27 MA's), (24, 33214), (27, 33262), (29, 33271), (30, 33274), (31, 33292), (32, 33298), (38, 33343),

Gene: Claus_41 Start: 34429, Stop: 34716, Start Num: 15

Candidate Starts for Claus_41:

(Start: 15 @34429 has 27 MA's), (18, 34486), (23, 34549), (24, 34564), (26, 34606), (27, 34612), (30, 34624),

Gene: DirkDirk_38 Start: 33045, Stop: 33332, Start Num: 15

Candidate Starts for DirkDirk_38:

(Start: 9 @33009 has 3 MA's), (Start: 15 @33045 has 27 MA's), (23, 33165), (24, 33180), (26, 33222), (27, 33228), (30, 33240), (31, 33258), (32, 33264), (41, 33327),

Gene: Douge_38 Start: 33062, Stop: 33373, Start Num: 14

Candidate Starts for Douge_38:

(Start: 5 @33014 has 1 MA's), (6, 33035), (12, 33053), (Start: 13 @33056 has 9 MA's), (Start: 14 @33062 has 4 MA's), (Start: 15 @33074 has 27 MA's), (18, 33131), (26, 33251), (30, 33269), (34, 33305),

Gene: Douzhi_38 Start: 33168, Stop: 33479, Start Num: 14

Candidate Starts for Douzhi_38:

(Start: 5 @33120 has 1 MA's), (6, 33141), (12, 33159), (Start: 13 @33162 has 9 MA's), (Start: 14 @33168 has 4 MA's), (Start: 15 @33180 has 27 MA's), (18, 33237), (23, 33300), (26, 33357), (30, 33375), (34, 33411),

Gene: DrSeegs_41 Start: 34410, Stop: 34697, Start Num: 15

Candidate Starts for DrSeegs_41:

(Start: 13 @34392 has 9 MA's), (Start: 14 @34398 has 4 MA's), (Start: 15 @34410 has 27 MA's), (18, 34467), (26, 34587), (27, 34593), (30, 34605), (40, 34686),

Gene: DuncansLeg_39 Start: 34634, Stop: 34972, Start Num: 7

Candidate Starts for DuncansLeg_39:

(Start: 7 @34634 has 4 MA's), (Start: 15 @34673 has 27 MA's), (21, 34760), (22, 34784), (27, 34856), (30, 34868), (31, 34886),

Gene: DyoEdafos_40 Start: 33408, Stop: 33707, Start Num: 15

Candidate Starts for DyoEdafos_40:

(Start: 5 @33348 has 1 MA's), (6, 33369), (12, 33387), (Start: 13 @33390 has 9 MA's), (Start: 14 @33396 has 4 MA's), (Start: 15 @33408 has 27 MA's), (26, 33585), (30, 33603),

Gene: Ellson_39 Start: 34649, Stop: 34948, Start Num: 15

Candidate Starts for Ellson_39:

(Start: 7 @34610 has 4 MA's), (Start: 15 @34649 has 27 MA's), (21, 34736), (22, 34760), (27, 34832), (30, 34844), (31, 34862),

Gene: Enceladus_38 Start: 33028, Stop: 33315, Start Num: 15

Candidate Starts for Enceladus_38:

(Start: 9 @32992 has 3 MA's), (Start: 15 @33028 has 27 MA's), (23, 33148), (24, 33163), (26, 33205), (27, 33211), (30, 33223), (31, 33241), (32, 33247), (41, 33310),

Gene: Faith1_41 Start: 34392, Stop: 34697, Start Num: 13

Candidate Starts for Faith1_41:

(Start: 13 @34392 has 9 MA's), (Start: 14 @34398 has 4 MA's), (Start: 15 @34410 has 27 MA's), (18, 34467), (26, 34587), (27, 34593), (30, 34605), (40, 34686),

Gene: Halena_38 Start: 33054, Stop: 33356, Start Num: 15

Candidate Starts for Halena_38:

(Start: 9 @33018 has 3 MA's), (Start: 15 @33054 has 27 MA's), (24, 33189), (27, 33237), (29, 33246), (30, 33249), (31, 33267), (32, 33273), (38, 33318),

Gene: JoeDirt_38 Start: 32990, Stop: 33313, Start Num: 9

Candidate Starts for JoeDirt_38:

(Start: 9 @32990 has 3 MA's), (Start: 15 @33026 has 27 MA's), (23, 33146), (24, 33161), (26, 33203), (27, 33209), (30, 33221), (31, 33239), (32, 33245), (41, 33308),

Gene: Kahlid_41 Start: 34398, Stop: 34703, Start Num: 13

Candidate Starts for Kahlid_41:

(Start: 13 @34398 has 9 MA's), (Start: 14 @34404 has 4 MA's), (Start: 15 @34416 has 27 MA's), (18, 34473), (26, 34593), (27, 34599), (30, 34611), (35, 34665), (40, 34692),

Gene: KirDoubleO7_37 Start: 34677, Stop: 34976, Start Num: 15

Candidate Starts for KirDoubleO7_37:

(Start: 7 @34638 has 4 MA's), (Start: 15 @34677 has 27 MA's), (21, 34764), (22, 34788), (27, 34860), (30, 34872), (31, 34890),

Gene: Kropertea_39 Start: 33171, Stop: 33530, Start Num: 5

Candidate Starts for Kropertea_39:

(Start: 5 @33171 has 1 MA's), (12, 33210), (Start: 13 @33213 has 9 MA's), (Start: 14 @33219 has 4 MA's), (Start: 15 @33231 has 27 MA's), (26, 33408), (30, 33426),

Gene: Krypton555_39 Start: 34572, Stop: 34871, Start Num: 15

Candidate Starts for Krypton555_39:

(Start: 7 @34533 has 4 MA's), (Start: 15 @34572 has 27 MA's), (21, 34659), (22, 34683), (27, 34755), (30, 34767), (38, 34836),

Gene: LeBron_39 Start: 33034, Stop: 33357, Start Num: 9

Candidate Starts for LeBron_39:

(Start: 9 @33034 has 3 MA's), (Start: 15 @33070 has 27 MA's), (23, 33190), (24, 33205), (26, 33247), (27, 33253), (30, 33265), (31, 33283), (32, 33289), (41, 33352),

Gene: Lewan_41 Start: 34391, Stop: 34690, Start Num: 14

Candidate Starts for Lewan_41:

(Start: 14 @34391 has 4 MA's), (Start: 15 @34403 has 27 MA's), (18, 34460), (26, 34580), (27, 34586), (30, 34598), (40, 34679),

Gene: LilDestine_41 Start: 34396, Stop: 34695, Start Num: 14

Candidate Starts for LilDestine_41:

(Start: 13 @34390 has 9 MA's), (Start: 14 @34396 has 4 MA's), (Start: 15 @34408 has 27 MA's), (18, 34465), (26, 34585), (27, 34591), (30, 34603), (40, 34684),

Gene: Loadrie_41 Start: 34424, Stop: 34729, Start Num: 13

Candidate Starts for Loadrie_41:

(Start: 13 @34424 has 9 MA's), (Start: 14 @34430 has 4 MA's), (Start: 15 @34442 has 27 MA's), (18, 34499), (26, 34619), (27, 34625), (30, 34637), (35, 34691), (40, 34718),

Gene: MAckerman_39 Start: 33048, Stop: 33350, Start Num: 15

Candidate Starts for MAckerman_39:

(Start: 9 @33012 has 3 MA's), (Start: 15 @33048 has 27 MA's), (24, 33183), (27, 33231), (29, 33240), (30, 33243), (31, 33261), (32, 33267), (38, 33312),

Gene: MiniLon_39 Start: 34425, Stop: 34763, Start Num: 7

Candidate Starts for MiniLon_39:

(Start: 7 @34425 has 4 MA's), (Start: 15 @34464 has 27 MA's), (21, 34551), (22, 34575), (27, 34647), (30, 34659), (31, 34677),

Gene: MiniMac_39 Start: 34422, Stop: 34760, Start Num: 7

Candidate Starts for MiniMac_39:

(3, 34392), (Start: 7 @34422 has 4 MA's), (Start: 15 @34461 has 27 MA's), (21, 34548), (22, 34572), (27, 34644), (30, 34656), (31, 34674),

Gene: MkaliMitinis3_41 Start: 34400, Stop: 34699, Start Num: 14

Candidate Starts for MkaliMitinis3_41:

(Start: 13 @34394 has 9 MA's), (Start: 14 @34400 has 4 MA's), (Start: 15 @34412 has 27 MA's), (18, 34469), (26, 34589), (27, 34595), (30, 34607), (40, 34688),

Gene: Nicholasp3_41 Start: 34393, Stop: 34698, Start Num: 13

Candidate Starts for Nicholasp3_41:

(Start: 13 @34393 has 9 MA's), (Start: 14 @34399 has 4 MA's), (Start: 15 @34411 has 27 MA's), (18, 34468), (26, 34588), (27, 34594), (30, 34606), (40, 34687),

Gene: OhShagHennessy_38 Start: 33016, Stop: 33303, Start Num: 15

Candidate Starts for OhShagHennessy_38:

(Start: 9 @32980 has 3 MA's), (Start: 15 @33016 has 27 MA's), (23, 33136), (24, 33151), (26, 33193), (27, 33199), (30, 33211), (31, 33229), (32, 33235), (41, 33298),

Gene: OverPar_41 Start: 34442, Stop: 34729, Start Num: 15

Candidate Starts for OverPar_41:

(Start: 13 @34424 has 9 MA's), (Start: 14 @34430 has 4 MA's), (Start: 15 @34442 has 27 MA's), (18, 34499), (26, 34619), (27, 34625), (30, 34637), (35, 34691), (40, 34718),

Gene: PYPDinur_38 Start: 33159, Stop: 33479, Start Num: 12

Candidate Starts for PYPDinur_38:

(Start: 5 @33120 has 1 MA's), (6, 33141), (12, 33159), (Start: 13 @33162 has 9 MA's), (Start: 14 @33168 has 4 MA's), (Start: 15 @33180 has 27 MA's), (18, 33237), (23, 33300), (26, 33357), (30, 33375), (34, 33411),

Gene: Phrappuccino_41 Start: 23047, Stop: 23388, Start Num: 10

Candidate Starts for Phrappuccino_41:

(Start: 10 @23047 has 2 MA's), (16, 23095), (17, 23110), (20, 23149), (27, 23266), (33, 23314), (36, 23344),

Gene: Pochiewood_38 Start: 33044, Stop: 33331, Start Num: 15

Candidate Starts for Pochiewood_38:

(Start: 9 @33008 has 3 MA's), (Start: 15 @33044 has 27 MA's), (23, 33164), (24, 33179), (26, 33221), (27, 33227), (30, 33239), (31, 33257), (32, 33263), (41, 33326),

Gene: Rose5_38 Start: 33043, Stop: 33345, Start Num: 15

Candidate Starts for Rose5_38:

(Start: 9 @33007 has 3 MA's), (Start: 15 @33043 has 27 MA's), (24, 33178), (27, 33226), (29, 33235), (30, 33238), (31, 33256), (32, 33262), (38, 33307),

Gene: Rumpelstiltskin_41 Start: 34659, Stop: 34964, Start Num: 13

Candidate Starts for Rumpelstiltskin_41:

(Start: 13 @34659 has 9 MA's), (Start: 14 @34665 has 4 MA's), (Start: 15 @34677 has 27 MA's), (18, 34734), (26, 34854), (27, 34860), (30, 34872), (40, 34953),

Gene: Ruthiejr_49 Start: 36035, Stop: 36379, Start Num: 2

Candidate Starts for Ruthiejr_49:

(Start: 2 @36035 has 1 MA's), (8, 36077), (16, 36131), (27, 36302), (28, 36305),

Gene: Sarshaun_41 Start: 34432, Stop: 34731, Start Num: 14

Candidate Starts for Sarshaun_41:

(Start: 13 @34426 has 9 MA's), (Start: 14 @34432 has 4 MA's), (Start: 15 @34444 has 27 MA's), (18, 34501), (26, 34621), (27, 34627), (30, 34639), (35, 34693), (40, 34720),

Gene: Settecandela_41 Start: 23047, Stop: 23388, Start Num: 10

Candidate Starts for Settecandela_41:

(Start: 10 @23047 has 2 MA's), (16, 23095), (17, 23110), (20, 23149), (27, 23266), (33, 23314), (36, 23344),

Gene: Sheng711_39 Start: 33120, Stop: 33479, Start Num: 5

Candidate Starts for Sheng711_39:

(Start: 5 @33120 has 1 MA's), (6, 33141), (12, 33159), (Start: 13 @33162 has 9 MA's), (Start: 14 @33168 has 4 MA's), (Start: 15 @33180 has 27 MA's), (18, 33237), (23, 33300), (26, 33357), (30, 33375), (34, 33411),

Gene: Silverleaf_38 Start: 33043, Stop: 33345, Start Num: 15

Candidate Starts for Silverleaf_38:

(Start: 9 @33007 has 3 MA's), (Start: 15 @33043 has 27 MA's), (24, 33178), (27, 33226), (29, 33235), (30, 33238), (31, 33256), (32, 33262), (38, 33307),

Gene: Tourach_41 Start: 34425, Stop: 34712, Start Num: 15

Candidate Starts for Tourach_41:

(Start: 5 @34365 has 1 MA's), (Start: 15 @34425 has 27 MA's), (18, 34482), (24, 34560), (26, 34602), (27, 34608), (30, 34620),

Gene: Tyson_38 Start: 33044, Stop: 33346, Start Num: 15

Candidate Starts for Tyson_38:

(Start: 9 @33008 has 3 MA's), (Start: 15 @33044 has 27 MA's), (24, 33179), (27, 33227), (29, 33236), (30, 33239), (31, 33257), (32, 33263), (38, 33308),

Gene: UPIE_39 Start: 33006, Stop: 33329, Start Num: 9

Candidate Starts for UPIE_39:

(Start: 9 @33006 has 3 MA's), (Start: 15 @33042 has 27 MA's), (23, 33162), (24, 33177), (26, 33219), (27, 33225), (30, 33237), (31, 33255), (32, 33261), (41, 33324),

Gene: Underpass_41 Start: 34411, Stop: 34698, Start Num: 15

Candidate Starts for Underpass_41:

(Start: 13 @34393 has 9 MA's), (Start: 14 @34399 has 4 MA's), (Start: 15 @34411 has 27 MA's), (18, 34468), (26, 34588), (27, 34594), (30, 34606), (40, 34687),

Gene: Unicorn_46 Start: 35029, Stop: 35373, Start Num: 1

Candidate Starts for Unicorn_46:

(Start: 1 @35029 has 1 MA's), (16, 35137), (19, 35188), (20, 35191), (24, 35257), (25, 35290),

Gene: Vetric_41 Start: 34417, Stop: 34704, Start Num: 15

Candidate Starts for Vetric_41:

(Start: 13 @34399 has 9 MA's), (Start: 14 @34405 has 4 MA's), (Start: 15 @34417 has 27 MA's), (18, 34474), (26, 34594), (27, 34600), (30, 34612), (40, 34693),

Gene: Wamburgexpress_39 Start: 33057, Stop: 33344, Start Num: 15

Candidate Starts for Wamburgexpress_39:

(Start: 9 @33021 has 3 MA's), (Start: 15 @33057 has 27 MA's), (23, 33177), (24, 33192), (26, 33234), (27, 33240), (30, 33252), (31, 33270), (32, 33276), (41, 33339),

Gene: Whirlwind_40 Start: 34375, Stop: 34713, Start Num: 7

Candidate Starts for Whirlwind_40:

(Start: 7 @34375 has 4 MA's), (Start: 15 @34414 has 27 MA's), (21, 34501), (22, 34525), (27, 34597), (30, 34609), (38, 34678),

Gene: Wigglewobble_41 Start: 34425, Stop: 34730, Start Num: 13

Candidate Starts for Wigglewobble_41:

(Start: 13 @34425 has 9 MA's), (Start: 14 @34431 has 4 MA's), (Start: 15 @34443 has 27 MA's), (18, 34500), (26, 34620), (27, 34626), (30, 34638), (35, 34692), (40, 34719),

Gene: Winky_41 Start: 34392, Stop: 34697, Start Num: 13

Candidate Starts for Winky_41:

(Start: 13 @34392 has 9 MA's), (Start: 14 @34398 has 4 MA's), (Start: 15 @34410 has 27 MA's), (18, 34467), (26, 34587), (27, 34593), (30, 34605), (40, 34686),

Gene: Wyatt2_39 Start: 33043, Stop: 33345, Start Num: 15

Candidate Starts for Wyatt2_39:

(Start: 9 @33007 has 3 MA's), (Start: 15 @33043 has 27 MA's), (24, 33178), (27, 33226), (29, 33235), (30, 33238), (31, 33256), (32, 33262), (38, 33307),

Gene: Zaria_39 Start: 33058, Stop: 33360, Start Num: 15

Candidate Starts for Zaria_39:

(Start: 9 @33022 has 3 MA's), (Start: 15 @33058 has 27 MA's), (24, 33193), (27, 33241), (29, 33250), (30, 33253), (31, 33271), (32, 33277), (38, 33322),