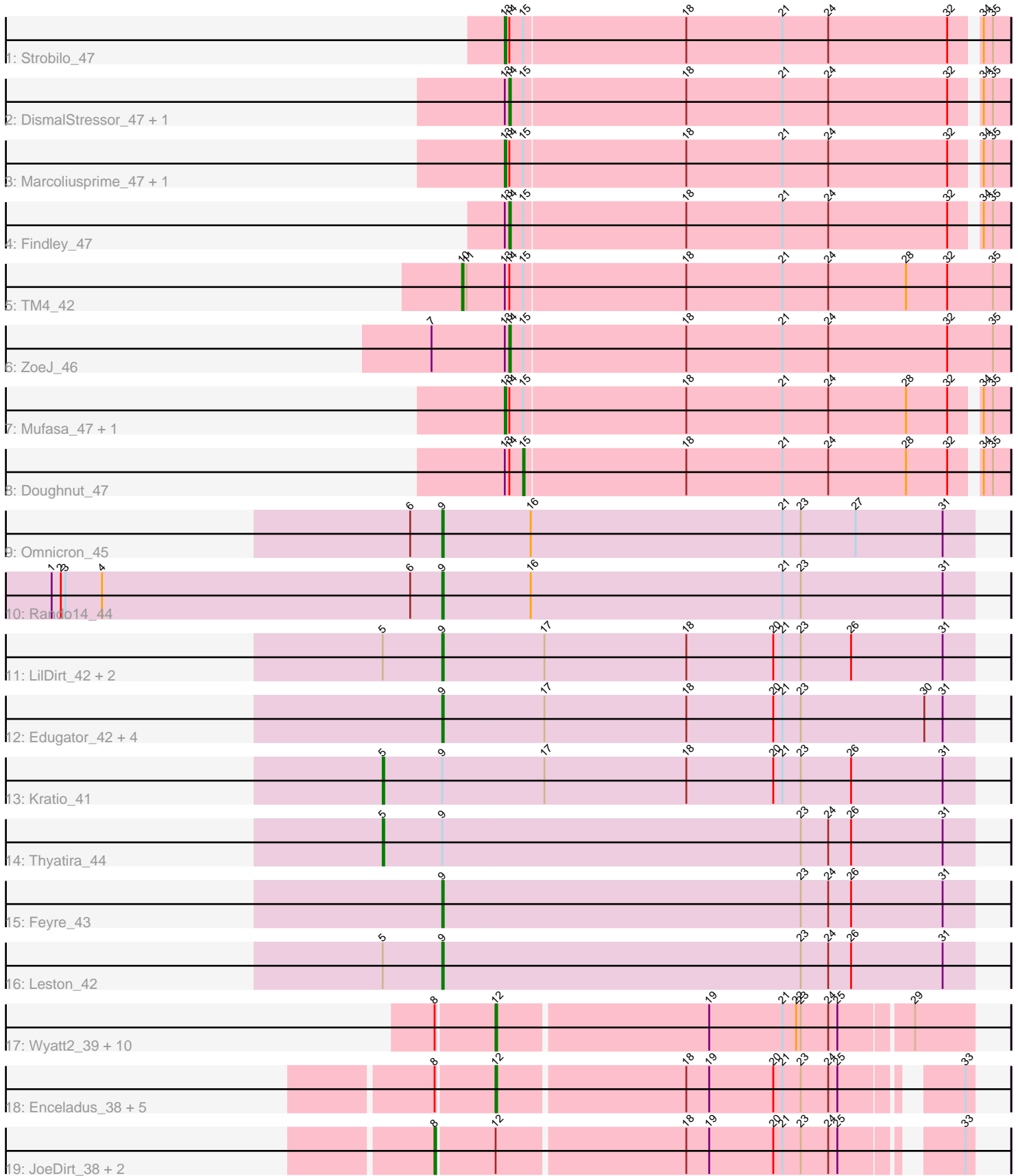


Pham 305116



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 305116 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305116 has 45 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Strobilo_47
- Track 2 : DismalStressor_47, Milly_47
- Track 3 : Marcoliusprime_47, DismalFunk_47
- Track 4 : Findley_47
- Track 5 : TM4_42
- Track 6 : ZoeJ_46
- Track 7 : Mufasa_47, BoostSeason_47
- Track 8 : Doughnut_47
- Track 9 : Omnicron_45
- Track 10 : Rando14_44
- Track 11 : LilDirt_42, Agent47_43, BananenDer11_43
- Track 12 : Edugator_42, Psycho_43, AlleyCat_43, Larva_43, Dadosky_43
- Track 13 : Kratio_41
- Track 14 : Thyatira_44
- Track 15 : Feyre_43
- Track 16 : Leston_42
- Track 17 : Wyatt2_39, Rose5_38, Calm_39, MAckerman_39, Acquire49_39, Tyson_38, Halena_38, CicholasNage_39, Zaria_39, AvadaKedavra_39, Silverleaf_38
- Track 18 : Enceladus_38, OhShagHennessy_38, Wamburgxpress_39, Appletree2_38, Poochiewood_38, DirkDirk_38
- Track 19 : JoeDirt_38, UPIE_39, LeBron_39

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

The start number called the most often in the published annotations is 12, it was called in 16 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acquire49_39, Appletree2_38, AvadaKedavra_39, Calm_39, CicholasNage_39, DirkDirk_38, Enceladus_38, Halena_38, MAckerman_39, OhShagHennessy_38, Poochiewood_38, Rose5_38, Silverleaf_38, Tyson_38, Wamburgxpress_39, Wyatt2_39, Zaria_39,

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

- JoeDirt_38, LeBron_39, UPIE_39,

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

- Agent47_43, AlleyCat_43, BananenDer11_43, BoostSeason_47, Dadosky_43, DismalFunk_47, DismalStressor_47, Doughnut_47, Edugator_42, Feyre_43, Findley_47, Kratio_41, Larva_43, Leston_42, LilDirt_42, Marcoliusprime_47, Milly_47, Mufasa_47, Omnicron_45, Psycho_43, Rando14_44, Strobilo_47, TM4_42, Thyatira_44, ZoeJ_46,

Summary by start number:

Start 5:

- Found in 6 of 45 (13.3%) of genes in pham
- Manual Annotations of this start: 2 of 44
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Kratio_41 (K5), Thyatira_44 (K5),

Start 8:

- Found in 20 of 45 (44.4%) of genes in pham
- Manual Annotations of this start: 3 of 44
- Called 15.0% of time when present
- Phage (with cluster) where this start called: JoeDirt_38 (L1), LeBron_39 (L1), UPIE_39 (L1),

Start 9:

- Found in 14 of 45 (31.1%) of genes in pham
- Manual Annotations of this start: 12 of 44
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Agent47_43 (K5), AlleyCat_43 (K5), BananenDer11_43 (K5), Dadosky_43 (K5), Edugator_42 (K5), Feyre_43 (K5), Larva_43 (K5), Leston_42 (K5), LilDirt_42 (K5), Omnicron_45 (K5), Psycho_43 (K5), Rando14_44 (K5),

Start 10:

- Found in 1 of 45 (2.2%) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TM4_42 (K2),

Start 12:

- Found in 20 of 45 (44.4%) of genes in pham
- Manual Annotations of this start: 16 of 44
- Called 85.0% of time when present
- Phage (with cluster) where this start called: Acquire49_39 (L1), Appletree2_38 (L1), AvadaKedavra_39 (L1), Calm_39 (L1), CicholasNage_39 (L1), DirkDirk_38 (L1), Enceladus_38 (L1), Halena_38 (L1), MAckerman_39 (L1), OhShagHennessy_38 (L1), Poochiewood_38 (L1), Rose5_38 (L1), Silverleaf_38 (L1), Tyson_38 (L1), Wamburgxpress_39 (L1), Wyatt2_39 (L1), Zaria_39 (L1),

Start 13:

- Found in 11 of 45 (24.4%) of genes in pham
- Manual Annotations of this start: 5 of 44
- Called 45.5% of time when present

- Phage (with cluster) where this start called: BoostSeason_47 (K2), DismalFunk_47 (K2), Marcoliusprime_47 (K2), Mufasa_47 (K2), Strobilo_47 (K2),

Start 14:

- Found in 11 of 45 (24.4%) of genes in pham
- Manual Annotations of this start: 4 of 44
- Called 36.4% of time when present
- Phage (with cluster) where this start called: DismalStressor_47 (K2), Findley_47 (K2), Milly_47 (K2), ZoeJ_46 (K2),

Start 15:

- Found in 11 of 45 (24.4%) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Doughnut_47 (K2),

Summary by clusters:

There are 3 clusters represented in this pham: K2, K5, L1,

Info for manual annotations of cluster K2:

- Start number 10 was manually annotated 1 time for cluster K2.
- Start number 13 was manually annotated 5 times for cluster K2.
- Start number 14 was manually annotated 4 times for cluster K2.
- Start number 15 was manually annotated 1 time for cluster K2.

Info for manual annotations of cluster K5:

- Start number 5 was manually annotated 2 times for cluster K5.
- Start number 9 was manually annotated 12 times for cluster K5.

Info for manual annotations of cluster L1:

- Start number 8 was manually annotated 3 times for cluster L1.
- Start number 12 was manually annotated 16 times for cluster L1.

Gene Information:

Gene: Acquire49_39 Start: 33043, Stop: 33345, Start Num: 12

Candidate Starts for Acquire49_39:

(Start: 8 @33007 has 3 MA's), (Start: 12 @33043 has 16 MA's), (19, 33178), (21, 33226), (22, 33235), (23, 33238), (24, 33256), (25, 33262), (29, 33307),

Gene: Agent47_43 Start: 34663, Stop: 35010, Start Num: 9

Candidate Starts for Agent47_43:

(Start: 5 @34624 has 2 MA's), (Start: 9 @34663 has 12 MA's), (17, 34729), (18, 34822), (20, 34879), (21, 34885), (23, 34897), (26, 34930), (31, 34990),

Gene: AlleyCat_43 Start: 34517, Stop: 34864, Start Num: 9

Candidate Starts for AlleyCat_43:

(Start: 9 @34517 has 12 MA's), (17, 34583), (18, 34676), (20, 34733), (21, 34739), (23, 34751), (30, 34832), (31, 34844),

Gene: Appletree2_38 Start: 32985, Stop: 33272, Start Num: 12

Candidate Starts for Appletree2_38:

(Start: 8 @32949 has 3 MA's), (Start: 12 @32985 has 16 MA's), (18, 33105), (19, 33120), (20, 33162), (21, 33168), (23, 33180), (24, 33198), (25, 33204), (33, 33267),

Gene: AvadaKedavra_39 Start: 33052, Stop: 33354, Start Num: 12

Candidate Starts for AvadaKedavra_39:

(Start: 8 @33016 has 3 MA's), (Start: 12 @33052 has 16 MA's), (19, 33187), (21, 33235), (22, 33244), (23, 33247), (24, 33265), (25, 33271), (29, 33316),

Gene: BananenDer11_43 Start: 34624, Stop: 34971, Start Num: 9

Candidate Starts for BananenDer11_43:

(Start: 5 @34585 has 2 MA's), (Start: 9 @34624 has 12 MA's), (17, 34690), (18, 34783), (20, 34840), (21, 34846), (23, 34858), (26, 34891), (31, 34951),

Gene: BoostSeason_47 Start: 36788, Stop: 37108, Start Num: 13

Candidate Starts for BoostSeason_47:

(Start: 13 @36788 has 5 MA's), (Start: 14 @36791 has 4 MA's), (Start: 15 @36800 has 1 MA's), (18, 36905), (21, 36968), (24, 36998), (28, 37049), (32, 37076), (34, 37091), (35, 37097),

Gene: Calm_39 Start: 33058, Stop: 33360, Start Num: 12

Candidate Starts for Calm_39:

(Start: 8 @33022 has 3 MA's), (Start: 12 @33058 has 16 MA's), (19, 33193), (21, 33241), (22, 33250), (23, 33253), (24, 33271), (25, 33277), (29, 33322),

Gene: CicholasNage_39 Start: 33079, Stop: 33381, Start Num: 12

Candidate Starts for CicholasNage_39:

(Start: 8 @33043 has 3 MA's), (Start: 12 @33079 has 16 MA's), (19, 33214), (21, 33262), (22, 33271), (23, 33274), (24, 33292), (25, 33298), (29, 33343),

Gene: Dadosky_43 Start: 34519, Stop: 34866, Start Num: 9

Candidate Starts for Dadosky_43:

(Start: 9 @34519 has 12 MA's), (17, 34585), (18, 34678), (20, 34735), (21, 34741), (23, 34753), (30, 34834), (31, 34846),

Gene: DirkDirk_38 Start: 33045, Stop: 33332, Start Num: 12

Candidate Starts for DirkDirk_38:

(Start: 8 @33009 has 3 MA's), (Start: 12 @33045 has 16 MA's), (18, 33165), (19, 33180), (20, 33222), (21, 33228), (23, 33240), (24, 33258), (25, 33264), (33, 33327),

Gene: DismalFunk_47 Start: 37222, Stop: 37542, Start Num: 13

Candidate Starts for DismalFunk_47:

(Start: 13 @37222 has 5 MA's), (Start: 14 @37225 has 4 MA's), (Start: 15 @37234 has 1 MA's), (18, 37339), (21, 37402), (24, 37432), (32, 37510), (34, 37525), (35, 37531),

Gene: DismalStressor_47 Start: 37225, Stop: 37542, Start Num: 14

Candidate Starts for DismalStressor_47:

(Start: 13 @37222 has 5 MA's), (Start: 14 @37225 has 4 MA's), (Start: 15 @37234 has 1 MA's), (18, 37339), (21, 37402), (24, 37432), (32, 37510), (34, 37525), (35, 37531),

Gene: Doughnut_47 Start: 36847, Stop: 37155, Start Num: 15

Candidate Starts for Doughnut_47:

(Start: 13 @36835 has 5 MA's), (Start: 14 @36838 has 4 MA's), (Start: 15 @36847 has 1 MA's), (18, 36952), (21, 37015), (24, 37045), (28, 37096), (32, 37123), (34, 37138), (35, 37144),

Gene: Edugator_42 Start: 34944, Stop: 35291, Start Num: 9

Candidate Starts for Edugator_42:

(Start: 9 @34944 has 12 MA's), (17, 35010), (18, 35103), (20, 35160), (21, 35166), (23, 35178), (30, 35259), (31, 35271),

Gene: Enceladus_38 Start: 33028, Stop: 33315, Start Num: 12

Candidate Starts for Enceladus_38:

(Start: 8 @32992 has 3 MA's), (Start: 12 @33028 has 16 MA's), (18, 33148), (19, 33163), (20, 33205), (21, 33211), (23, 33223), (24, 33241), (25, 33247), (33, 33310),

Gene: Feyre_43 Start: 35869, Stop: 36216, Start Num: 9

Candidate Starts for Feyre_43:

(Start: 9 @35869 has 12 MA's), (23, 36103), (24, 36121), (26, 36136), (31, 36196),

Gene: Findley_47 Start: 37218, Stop: 37535, Start Num: 14

Candidate Starts for Findley_47:

(Start: 13 @37215 has 5 MA's), (Start: 14 @37218 has 4 MA's), (Start: 15 @37227 has 1 MA's), (18, 37332), (21, 37395), (24, 37425), (32, 37503), (34, 37518), (35, 37524),

Gene: Halena_38 Start: 33054, Stop: 33356, Start Num: 12

Candidate Starts for Halena_38:

(Start: 8 @33018 has 3 MA's), (Start: 12 @33054 has 16 MA's), (19, 33189), (21, 33237), (22, 33246), (23, 33249), (24, 33267), (25, 33273), (29, 33318),

Gene: JoeDirt_38 Start: 32990, Stop: 33313, Start Num: 8

Candidate Starts for JoeDirt_38:

(Start: 8 @32990 has 3 MA's), (Start: 12 @33026 has 16 MA's), (18, 33146), (19, 33161), (20, 33203), (21, 33209), (23, 33221), (24, 33239), (25, 33245), (33, 33308),

Gene: Kratio_41 Start: 34179, Stop: 34565, Start Num: 5

Candidate Starts for Kratio_41:

(Start: 5 @34179 has 2 MA's), (Start: 9 @34218 has 12 MA's), (17, 34284), (18, 34377), (20, 34434), (21, 34440), (23, 34452), (26, 34485), (31, 34545),

Gene: Larva_43 Start: 34386, Stop: 34733, Start Num: 9

Candidate Starts for Larva_43:

(Start: 9 @34386 has 12 MA's), (17, 34452), (18, 34545), (20, 34602), (21, 34608), (23, 34620), (30, 34701), (31, 34713),

Gene: LeBron_39 Start: 33034, Stop: 33357, Start Num: 8

Candidate Starts for LeBron_39:

(Start: 8 @33034 has 3 MA's), (Start: 12 @33070 has 16 MA's), (18, 33190), (19, 33205), (20, 33247), (21, 33253), (23, 33265), (24, 33283), (25, 33289), (33, 33352),

Gene: Leston_42 Start: 34584, Stop: 34931, Start Num: 9

Candidate Starts for Leston_42:

(Start: 5 @34545 has 2 MA's), (Start: 9 @34584 has 12 MA's), (23, 34818), (24, 34836), (26, 34851), (31, 34911),

Gene: LilDirt_42 Start: 34425, Stop: 34772, Start Num: 9

Candidate Starts for LilDirt_42:

(Start: 5 @34386 has 2 MA's), (Start: 9 @34425 has 12 MA's), (17, 34491), (18, 34584), (20, 34641), (21, 34647), (23, 34659), (26, 34692), (31, 34752),

Gene: MAckerman_39 Start: 33048, Stop: 33350, Start Num: 12

Candidate Starts for MAckerman_39:

(Start: 8 @33012 has 3 MA's), (Start: 12 @33048 has 16 MA's), (19, 33183), (21, 33231), (22, 33240), (23, 33243), (24, 33261), (25, 33267), (29, 33312),

Gene: Marcoliusprime_47 Start: 37222, Stop: 37542, Start Num: 13

Candidate Starts for Marcoliusprime_47:

(Start: 13 @37222 has 5 MA's), (Start: 14 @37225 has 4 MA's), (Start: 15 @37234 has 1 MA's), (18, 37339), (21, 37402), (24, 37432), (32, 37510), (34, 37525), (35, 37531),

Gene: Milly_47 Start: 37198, Stop: 37515, Start Num: 14

Candidate Starts for Milly_47:

(Start: 13 @37195 has 5 MA's), (Start: 14 @37198 has 4 MA's), (Start: 15 @37207 has 1 MA's), (18, 37312), (21, 37375), (24, 37405), (32, 37483), (34, 37498), (35, 37504),

Gene: Mufasa_47 Start: 36779, Stop: 37099, Start Num: 13

Candidate Starts for Mufasa_47:

(Start: 13 @36779 has 5 MA's), (Start: 14 @36782 has 4 MA's), (Start: 15 @36791 has 1 MA's), (18, 36896), (21, 36959), (24, 36989), (28, 37040), (32, 37067), (34, 37082), (35, 37088),

Gene: OhShagHennessy_38 Start: 33016, Stop: 33303, Start Num: 12

Candidate Starts for OhShagHennessy_38:

(Start: 8 @32980 has 3 MA's), (Start: 12 @33016 has 16 MA's), (18, 33136), (19, 33151), (20, 33193), (21, 33199), (23, 33211), (24, 33229), (25, 33235), (33, 33298),

Gene: Omnicron_45 Start: 34067, Stop: 34414, Start Num: 9

Candidate Starts for Omnicron_45:

(6, 34046), (Start: 9 @34067 has 12 MA's), (16, 34124), (21, 34289), (23, 34301), (27, 34337), (31, 34394),

Gene: Poochiewood_38 Start: 33044, Stop: 33331, Start Num: 12

Candidate Starts for Poochiewood_38:

(Start: 8 @33008 has 3 MA's), (Start: 12 @33044 has 16 MA's), (18, 33164), (19, 33179), (20, 33221), (21, 33227), (23, 33239), (24, 33257), (25, 33263), (33, 33326),

Gene: Psycho_43 Start: 34516, Stop: 34863, Start Num: 9

Candidate Starts for Psycho_43:

(Start: 9 @34516 has 12 MA's), (17, 34582), (18, 34675), (20, 34732), (21, 34738), (23, 34750), (30, 34831), (31, 34843),

Gene: Rando14_44 Start: 33637, Stop: 33984, Start Num: 9

Candidate Starts for Rando14_44:

(1, 33382), (2, 33388), (3, 33391), (4, 33415), (6, 33616), (Start: 9 @33637 has 12 MA's), (16, 33694), (21, 33859), (23, 33871), (31, 33964),

Gene: Rose5_38 Start: 33043, Stop: 33345, Start Num: 12

Candidate Starts for Rose5_38:

(Start: 8 @33007 has 3 MA's), (Start: 12 @33043 has 16 MA's), (19, 33178), (21, 33226), (22, 33235), (23, 33238), (24, 33256), (25, 33262), (29, 33307),

Gene: Silverleaf_38 Start: 33043, Stop: 33345, Start Num: 12

Candidate Starts for Silverleaf_38:

(Start: 8 @33007 has 3 MA's), (Start: 12 @33043 has 16 MA's), (19, 33178), (21, 33226), (22, 33235), (23, 33238), (24, 33256), (25, 33262), (29, 33307),

Gene: Strobilo_47 Start: 37197, Stop: 37517, Start Num: 13

Candidate Starts for Strobilo_47:

(Start: 13 @37197 has 5 MA's), (Start: 14 @37200 has 4 MA's), (Start: 15 @37209 has 1 MA's), (18, 37314), (21, 37377), (24, 37407), (32, 37485), (34, 37500), (35, 37506),

Gene: TM4_42 Start: 31544, Stop: 31900, Start Num: 10

Candidate Starts for TM4_42:

(Start: 10 @31544 has 1 MA's), (11, 31547), (Start: 13 @31571 has 5 MA's), (Start: 14 @31574 has 4 MA's), (Start: 15 @31583 has 1 MA's), (18, 31688), (21, 31751), (24, 31781), (28, 31832), (32, 31859), (35, 31889),

Gene: Thyatira_44 Start: 36765, Stop: 37151, Start Num: 5

Candidate Starts for Thyatira_44:

(Start: 5 @36765 has 2 MA's), (Start: 9 @36804 has 12 MA's), (23, 37038), (24, 37056), (26, 37071), (31, 37131),

Gene: Tyson_38 Start: 33044, Stop: 33346, Start Num: 12

Candidate Starts for Tyson_38:

(Start: 8 @33008 has 3 MA's), (Start: 12 @33044 has 16 MA's), (19, 33179), (21, 33227), (22, 33236), (23, 33239), (24, 33257), (25, 33263), (29, 33308),

Gene: UPIE_39 Start: 33006, Stop: 33329, Start Num: 8

Candidate Starts for UPIE_39:

(Start: 8 @33006 has 3 MA's), (Start: 12 @33042 has 16 MA's), (18, 33162), (19, 33177), (20, 33219), (21, 33225), (23, 33237), (24, 33255), (25, 33261), (33, 33324),

Gene: Wamburgexpress_39 Start: 33057, Stop: 33344, Start Num: 12

Candidate Starts for Wamburgexpress_39:

(Start: 8 @33021 has 3 MA's), (Start: 12 @33057 has 16 MA's), (18, 33177), (19, 33192), (20, 33234), (21, 33240), (23, 33252), (24, 33270), (25, 33276), (33, 33339),

Gene: Wyatt2_39 Start: 33043, Stop: 33345, Start Num: 12

Candidate Starts for Wyatt2_39:

(Start: 8 @33007 has 3 MA's), (Start: 12 @33043 has 16 MA's), (19, 33178), (21, 33226), (22, 33235), (23, 33238), (24, 33256), (25, 33262), (29, 33307),

Gene: Zaria_39 Start: 33058, Stop: 33360, Start Num: 12

Candidate Starts for Zaria_39:

(Start: 8 @33022 has 3 MA's), (Start: 12 @33058 has 16 MA's), (19, 33193), (21, 33241), (22, 33250), (23, 33253), (24, 33271), (25, 33277), (29, 33322),

Gene: ZoeJ_46 Start: 36666, Stop: 36992, Start Num: 14

Candidate Starts for ZoeJ_46:

(7, 36615), (Start: 13 @36663 has 5 MA's), (Start: 14 @36666 has 4 MA's), (Start: 15 @36675 has 1 MA's), (18, 36780), (21, 36843), (24, 36873), (32, 36951), (35, 36981),