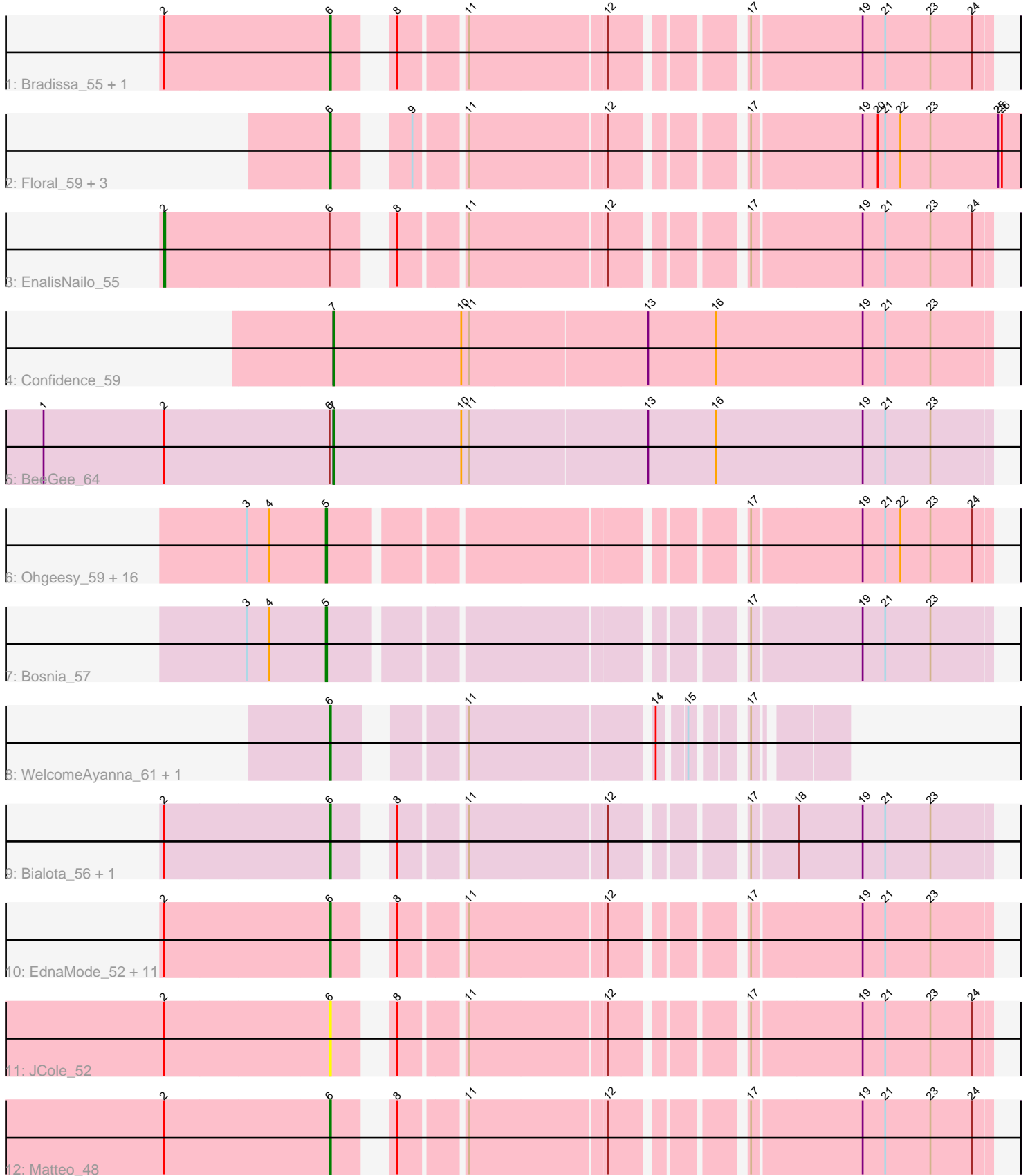


Pham 294850



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 294850 Report

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

Pham number 294850 has 45 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Bradissa_55, Lilas_57
- Track 2 : Floral_59, Marteena_57, EMSquaredA_58, Pollux_61
- Track 3 : EnalisNailo_55
- Track 4 : Confidence_59
- Track 5 : BeeGee_64
- Track 6 : Ohgeesy_59, Whiteclaw_56, Ebert_60, Mocha12_56, Clap_56, Cynthia_56, Jalleen_56, Haley23_56, Nettuno_52, Lamberg_52, GemG_56, Gizermo_56, TuertoX_56, Savage_56, Sahara_55, Sproutie_56, Bjanes7_53
- Track 7 : Bosnia_57
- Track 8 : WelcomeAyanna_61, ThankyouJordi_61
- Track 9 : Bialota_56, Zirinka_55
- Track 10 : EdnaMode_52, Antonio_58, Pickett_51, Neobush_58, Zameen_58, Trumpet_58, Kita_59, Susceptit_58, Polly_55, Eudoria_58, Manasvini_59, Tayonia_58
- Track 11 : JCole_52
- Track 12 : Matteo_48

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

The start number called the most often in the published annotations is 6, it was called in 23 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antonio_58, Bialota_56, Bradissa_55, EMSquaredA_58, EdnaMode_52, Eudoria_58, Floral_59, JCole_52, Kita_59, Lilas_57, Manasvini_59, Marteena_57, Matteo_48, Neobush_58, Pickett_51, Pollux_61, Polly_55, Susceptit_58, Tayonia_58, ThankyouJordi_61, Trumpet_58, WelcomeAyanna_61, Zameen_58, Zirinka_55,

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

- BeeGee_64, EnalisNailo_55,

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

- Bjanes7_53, Bosnia_57, Clap_56, Confidence_59, Cynthia_56, Ebert_60, GemG_56, Gizermo_56, Haley23_56, Jalleen_56, Lamberg_52, Mocha12_56, Nettuno_52, Ohgeesy_59, Sahara_55, Savage_56, Sproutie_56, TuertoX_56,

Whiteclaw_56,

Summary by start number:

Start 2:

- Found in 20 of 45 (44.4%) of genes in pham
- Manual Annotations of this start: 1 of 43
- Called 5.0% of time when present
- Phage (with cluster) where this start called: EnalisNailo_55 (CY1),

Start 5:

- Found in 18 of 45 (40.0%) of genes in pham
- Manual Annotations of this start: 17 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bjaner7_53 (CZ2), Bosnia_57 (CZ1), Clap_56 (CZ2), Cynthia_56 (CZ2), Ebert_60 (CZ2), GemG_56 (CZ2), Gizermo_56 (CZ2), Haley23_56 (CZ2), Jalleen_56 (CZ2), Lamberg_52 (CZ2), Mocha12_56 (CZ2), Nettuno_52 (CZ2), Ohgeesy_59 (CZ), Sahara_55 (CZ2), Savage_56 (CZ2), Sproutie_56 (CZ2), TuertoX_56 (CZ2), Whiteclaw_56 (CZ2),

Start 6:

- Found in 26 of 45 (57.8%) of genes in pham
- Manual Annotations of this start: 23 of 43
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Antonio_58 (CZ1), Bialota_56 (CZ1), Bradissa_55 (CY1), EMSquaredA_58 (CY1), EdnaMode_52 (CZ2), Eudoria_58 (CZ1), Floral_59 (CY1), JCole_52 (CZ2), Kita_59 (CZ1), Lilas_57 (CY1), Manasvini_59 (CZ1), Marteena_57 (CY1), Matteo_48 (CZ2), Neobush_58 (CZ1), Pickett_51 (CZ2), Pollux_61 (CY1), Polly_55 (CZ1), Suscepit_58 (CZ1), Tayonia_58 (CZ1), ThankyouJordi_61 (CZ1), Trumpet_58 (CZ1), WelcomeAyanna_61 (CZ1), Zameen_58 (CZ1), Zirinka_55 (CZ1),

Start 7:

- Found in 2 of 45 (4.4%) of genes in pham
- Manual Annotations of this start: 2 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BeeGee_64 (CY5), Confidence_59 (CY1),

Summary by clusters:

There are 5 clusters represented in this pham: CZ2, CZ, CY1, CZ1, CY5,

Info for manual annotations of cluster CY1:

- Start number 2 was manually annotated 1 time for cluster CY1.
- Start number 6 was manually annotated 6 times for cluster CY1.
- Start number 7 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CY5:

- Start number 7 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CZ:

- Start number 5 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 5 was manually annotated 1 time for cluster CZ1.
- Start number 6 was manually annotated 14 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 5 was manually annotated 15 times for cluster CZ2.
- Start number 6 was manually annotated 3 times for cluster CZ2.

Gene Information:

Gene: Antonio_58 Start: 40857, Stop: 41306, Start Num: 6

Candidate Starts for Antonio_58:

(Start: 2 @40728 has 1 MA's), (Start: 6 @40857 has 23 MA's), (8, 40887), (11, 40932), (12, 41037), (17, 41121), (19, 41205), (21, 41223), (23, 41259),

Gene: BeeGee_64 Start: 42757, Stop: 43275, Start Num: 7

Candidate Starts for BeeGee_64:

(1, 42529), (Start: 2 @42625 has 1 MA's), (Start: 6 @42754 has 23 MA's), (Start: 7 @42757 has 2 MA's), (10, 42859), (11, 42865), (13, 43003), (16, 43057), (19, 43174), (21, 43192), (23, 43228),

Gene: Bialota_56 Start: 41489, Stop: 41938, Start Num: 6

Candidate Starts for Bialota_56:

(Start: 2 @41360 has 1 MA's), (Start: 6 @41489 has 23 MA's), (8, 41519), (11, 41564), (12, 41669), (17, 41753), (18, 41786), (19, 41837), (21, 41855), (23, 41891),

Gene: Bjanes7_53 Start: 37218, Stop: 37685, Start Num: 5

Candidate Starts for Bjanes7_53:

(3, 37155), (4, 37173), (Start: 5 @37218 has 17 MA's), (17, 37500), (19, 37584), (21, 37602), (22, 37614), (23, 37638), (24, 37671),

Gene: Bosnia_57 Start: 43184, Stop: 43651, Start Num: 5

Candidate Starts for Bosnia_57:

(3, 43121), (4, 43139), (Start: 5 @43184 has 17 MA's), (17, 43466), (19, 43550), (21, 43568), (23, 43604),

Gene: Bradissa_55 Start: 41937, Stop: 42386, Start Num: 6

Candidate Starts for Bradissa_55:

(Start: 2 @41808 has 1 MA's), (Start: 6 @41937 has 23 MA's), (8, 41967), (11, 42012), (12, 42117), (17, 42201), (19, 42285), (21, 42303), (23, 42339), (24, 42372),

Gene: Clap_56 Start: 37397, Stop: 37864, Start Num: 5

Candidate Starts for Clap_56:

(3, 37334), (4, 37352), (Start: 5 @37397 has 17 MA's), (17, 37679), (19, 37763), (21, 37781), (22, 37793), (23, 37817), (24, 37850),

Gene: Confidence_59 Start: 40470, Stop: 40988, Start Num: 7

Candidate Starts for Confidence_59:

(Start: 7 @40470 has 2 MA's), (10, 40572), (11, 40578), (13, 40716), (16, 40770), (19, 40887), (21, 40905), (23, 40941),

Gene: Cynthia_56 Start: 37395, Stop: 37862, Start Num: 5

Candidate Starts for Cynthia_56:

(3, 37332), (4, 37350), (Start: 5 @37395 has 17 MA's), (17, 37677), (19, 37761), (21, 37779), (22, 37791), (23, 37815), (24, 37848),

Gene: EMSquaredA_58 Start: 41507, Stop: 41980, Start Num: 6

Candidate Starts for EMSquaredA_58:

(Start: 6 @41507 has 23 MA's), (9, 41549), (11, 41582), (12, 41687), (17, 41771), (19, 41855), (20, 41867), (21, 41873), (22, 41885), (23, 41909), (25, 41963), (26, 41966),

Gene: Ebert_60 Start: 37829, Stop: 38296, Start Num: 5

Candidate Starts for Ebert_60:

(3, 37766), (4, 37784), (Start: 5 @37829 has 17 MA's), (17, 38111), (19, 38195), (21, 38213), (22, 38225), (23, 38249), (24, 38282),

Gene: EdnaMode_52 Start: 36678, Stop: 37127, Start Num: 6

Candidate Starts for EdnaMode_52:

(Start: 2 @36549 has 1 MA's), (Start: 6 @36678 has 23 MA's), (8, 36708), (11, 36753), (12, 36858), (17, 36942), (19, 37026), (21, 37044), (23, 37080),

Gene: EnalisNailo_55 Start: 41354, Stop: 41932, Start Num: 2

Candidate Starts for EnalisNailo_55:

(Start: 2 @41354 has 1 MA's), (Start: 6 @41483 has 23 MA's), (8, 41513), (11, 41558), (12, 41663), (17, 41747), (19, 41831), (21, 41849), (23, 41885), (24, 41918),

Gene: Eudoria_58 Start: 40857, Stop: 41306, Start Num: 6

Candidate Starts for Eudoria_58:

(Start: 2 @40728 has 1 MA's), (Start: 6 @40857 has 23 MA's), (8, 40887), (11, 40932), (12, 41037), (17, 41121), (19, 41205), (21, 41223), (23, 41259),

Gene: Floral_59 Start: 43392, Stop: 43865, Start Num: 6

Candidate Starts for Floral_59:

(Start: 6 @43392 has 23 MA's), (9, 43434), (11, 43467), (12, 43572), (17, 43656), (19, 43740), (20, 43752), (21, 43758), (22, 43770), (23, 43794), (25, 43848), (26, 43851),

Gene: GemG_56 Start: 37401, Stop: 37868, Start Num: 5

Candidate Starts for GemG_56:

(3, 37338), (4, 37356), (Start: 5 @37401 has 17 MA's), (17, 37683), (19, 37767), (21, 37785), (22, 37797), (23, 37821), (24, 37854),

Gene: Gizermo_56 Start: 37397, Stop: 37864, Start Num: 5

Candidate Starts for Gizermo_56:

(3, 37334), (4, 37352), (Start: 5 @37397 has 17 MA's), (17, 37679), (19, 37763), (21, 37781), (22, 37793), (23, 37817), (24, 37850),

Gene: Haley23_56 Start: 37397, Stop: 37864, Start Num: 5

Candidate Starts for Haley23_56:

(3, 37334), (4, 37352), (Start: 5 @37397 has 17 MA's), (17, 37679), (19, 37763), (21, 37781), (22, 37793), (23, 37817), (24, 37850),

Gene: JCole_52 Start: 35697, Stop: 36146, Start Num: 6

Candidate Starts for JCole_52:

(Start: 2 @35568 has 1 MA's), (Start: 6 @35697 has 23 MA's), (8, 35727), (11, 35772), (12, 35877), (17, 35961), (19, 36045), (21, 36063), (23, 36099), (24, 36132),

Gene: Jalleen_56 Start: 37036, Stop: 37503, Start Num: 5

Candidate Starts for Jalleen_56:

(3, 36973), (4, 36991), (Start: 5 @37036 has 17 MA's), (17, 37318), (19, 37402), (21, 37420), (22, 37432), (23, 37456), (24, 37489),

Gene: Kita_59 Start: 40866, Stop: 41315, Start Num: 6

Candidate Starts for Kita_59:

(Start: 2 @40737 has 1 MA's), (Start: 6 @40866 has 23 MA's), (8, 40896), (11, 40941), (12, 41046), (17, 41130), (19, 41214), (21, 41232), (23, 41268),

Gene: Lamberg_52 Start: 35906, Stop: 36373, Start Num: 5

Candidate Starts for Lamberg_52:

(3, 35843), (4, 35861), (Start: 5 @35906 has 17 MA's), (17, 36188), (19, 36272), (21, 36290), (22, 36302), (23, 36326), (24, 36359),

Gene: Lilas_57 Start: 43236, Stop: 43685, Start Num: 6

Candidate Starts for Lilas_57:

(Start: 2 @43107 has 1 MA's), (Start: 6 @43236 has 23 MA's), (8, 43266), (11, 43311), (12, 43416), (17, 43500), (19, 43584), (21, 43602), (23, 43638), (24, 43671),

Gene: Manasvini_59 Start: 40881, Stop: 41330, Start Num: 6

Candidate Starts for Manasvini_59:

(Start: 2 @40752 has 1 MA's), (Start: 6 @40881 has 23 MA's), (8, 40911), (11, 40956), (12, 41061), (17, 41145), (19, 41229), (21, 41247), (23, 41283),

Gene: Marteena_57 Start: 41507, Stop: 41980, Start Num: 6

Candidate Starts for Marteena_57:

(Start: 6 @41507 has 23 MA's), (9, 41549), (11, 41582), (12, 41687), (17, 41771), (19, 41855), (20, 41867), (21, 41873), (22, 41885), (23, 41909), (25, 41963), (26, 41966),

Gene: Matteo_48 Start: 34496, Stop: 34945, Start Num: 6

Candidate Starts for Matteo_48:

(Start: 2 @34367 has 1 MA's), (Start: 6 @34496 has 23 MA's), (8, 34526), (11, 34571), (12, 34676), (17, 34760), (19, 34844), (21, 34862), (23, 34898), (24, 34931),

Gene: Mocha12_56 Start: 37397, Stop: 37864, Start Num: 5

Candidate Starts for Mocha12_56:

(3, 37334), (4, 37352), (Start: 5 @37397 has 17 MA's), (17, 37679), (19, 37763), (21, 37781), (22, 37793), (23, 37817), (24, 37850),

Gene: Neobush_58 Start: 40851, Stop: 41300, Start Num: 6

Candidate Starts for Neobush_58:

(Start: 2 @40722 has 1 MA's), (Start: 6 @40851 has 23 MA's), (8, 40881), (11, 40926), (12, 41031), (17, 41115), (19, 41199), (21, 41217), (23, 41253),

Gene: Nettuno_52 Start: 35906, Stop: 36373, Start Num: 5

Candidate Starts for Nettuno_52:

(3, 35843), (4, 35861), (Start: 5 @35906 has 17 MA's), (17, 36188), (19, 36272), (21, 36290), (22, 36302), (23, 36326), (24, 36359),

Gene: Ohgeesy_59 Start: 41879, Stop: 42346, Start Num: 5

Candidate Starts for Ohgeesy_59:

(3, 41816), (4, 41834), (Start: 5 @41879 has 17 MA's), (17, 42161), (19, 42245), (21, 42263), (22, 42275), (23, 42299), (24, 42332),

Gene: Pickett_51 Start: 35154, Stop: 35603, Start Num: 6

Candidate Starts for Pickett_51:

(Start: 2 @35025 has 1 MA's), (Start: 6 @35154 has 23 MA's), (8, 35184), (11, 35229), (12, 35334), (17, 35418), (19, 35502), (21, 35520), (23, 35556),

Gene: Pollux_61 Start: 43392, Stop: 43865, Start Num: 6

Candidate Starts for Pollux_61:

(Start: 6 @43392 has 23 MA's), (9, 43434), (11, 43467), (12, 43572), (17, 43656), (19, 43740), (20, 43752), (21, 43758), (22, 43770), (23, 43794), (25, 43848), (26, 43851),

Gene: Polly_55 Start: 40300, Stop: 40749, Start Num: 6

Candidate Starts for Polly_55:

(Start: 2 @40171 has 1 MA's), (Start: 6 @40300 has 23 MA's), (8, 40330), (11, 40375), (12, 40480), (17, 40564), (19, 40648), (21, 40666), (23, 40702),

Gene: Sahara_55 Start: 37144, Stop: 37611, Start Num: 5

Candidate Starts for Sahara_55:

(3, 37081), (4, 37099), (Start: 5 @37144 has 17 MA's), (17, 37426), (19, 37510), (21, 37528), (22, 37540), (23, 37564), (24, 37597),

Gene: Savage_56 Start: 37397, Stop: 37864, Start Num: 5

Candidate Starts for Savage_56:

(3, 37334), (4, 37352), (Start: 5 @37397 has 17 MA's), (17, 37679), (19, 37763), (21, 37781), (22, 37793), (23, 37817), (24, 37850),

Gene: Sproutie_56 Start: 37397, Stop: 37864, Start Num: 5

Candidate Starts for Sproutie_56:

(3, 37334), (4, 37352), (Start: 5 @37397 has 17 MA's), (17, 37679), (19, 37763), (21, 37781), (22, 37793), (23, 37817), (24, 37850),

Gene: Suscepit_58 Start: 40858, Stop: 41307, Start Num: 6

Candidate Starts for Suscepit_58:

(Start: 2 @40729 has 1 MA's), (Start: 6 @40858 has 23 MA's), (8, 40888), (11, 40933), (12, 41038), (17, 41122), (19, 41206), (21, 41224), (23, 41260),

Gene: Tayonia_58 Start: 40857, Stop: 41306, Start Num: 6

Candidate Starts for Tayonia_58:

(Start: 2 @40728 has 1 MA's), (Start: 6 @40857 has 23 MA's), (8, 40887), (11, 40932), (12, 41037), (17, 41121), (19, 41205), (21, 41223), (23, 41259),

Gene: ThankyouJordi_61 Start: 43661, Stop: 43978, Start Num: 6

Candidate Starts for ThankyouJordi_61:

(Start: 6 @43661 has 23 MA's), (11, 43736), (14, 43871), (15, 43889), (17, 43919),

Gene: Trumpet_58 Start: 40858, Stop: 41307, Start Num: 6

Candidate Starts for Trumpet_58:

(Start: 2 @40729 has 1 MA's), (Start: 6 @40858 has 23 MA's), (8, 40888), (11, 40933), (12, 41038), (17, 41122), (19, 41206), (21, 41224), (23, 41260),

Gene: TuertoX_56 Start: 37397, Stop: 37864, Start Num: 5

Candidate Starts for TuertoX_56:

(3, 37334), (4, 37352), (Start: 5 @37397 has 17 MA's), (17, 37679), (19, 37763), (21, 37781), (22, 37793), (23, 37817), (24, 37850),

Gene: WelcomeAyanna_61 Start: 43808, Stop: 44125, Start Num: 6

Candidate Starts for WelcomeAyanna_61:

(Start: 6 @43808 has 23 MA's), (11, 43883), (14, 44018), (15, 44036), (17, 44066),

Gene: Whiteclaw_56 Start: 37397, Stop: 37864, Start Num: 5

Candidate Starts for Whiteclaw_56:

(3, 37334), (4, 37352), (Start: 5 @37397 has 17 MA's), (17, 37679), (19, 37763), (21, 37781), (22, 37793), (23, 37817), (24, 37850),

Gene: Zameen_58 Start: 40857, Stop: 41306, Start Num: 6

Candidate Starts for Zameen_58:

(Start: 2 @40728 has 1 MA's), (Start: 6 @40857 has 23 MA's), (8, 40887), (11, 40932), (12, 41037), (17, 41121), (19, 41205), (21, 41223), (23, 41259),

Gene: Zirinka_55 Start: 41477, Stop: 41926, Start Num: 6

Candidate Starts for Zirinka_55:

(Start: 2 @41348 has 1 MA's), (Start: 6 @41477 has 23 MA's), (8, 41507), (11, 41552), (12, 41657), (17, 41741), (18, 41774), (19, 41825), (21, 41843), (23, 41879),