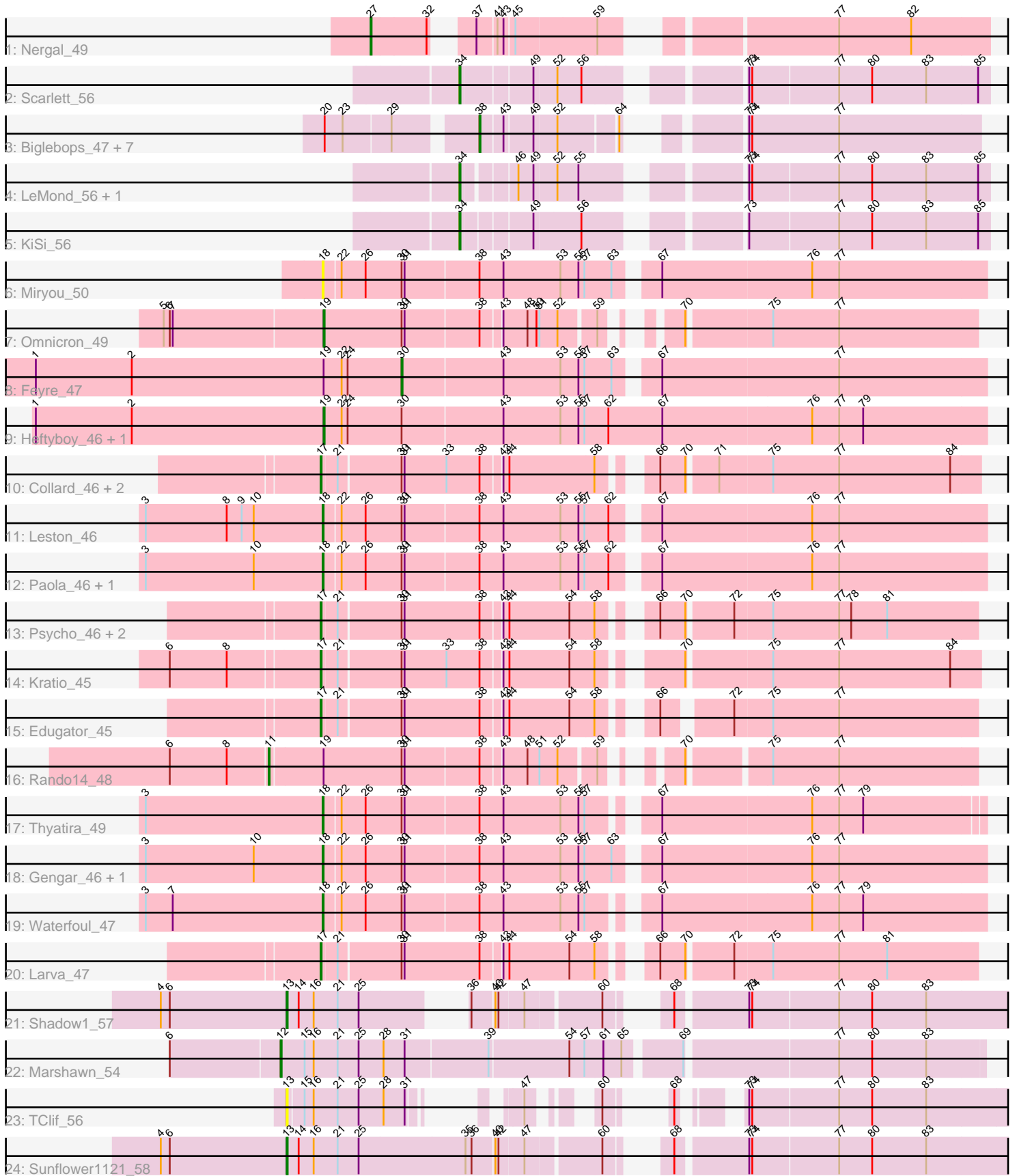


Pham 163747



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 163747 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163747 has 39 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Nergal_49
- Track 2 : Scarlett_56
- Track 3 : Biglebops_47, LilPharaoh_47, Nikao_50, Nutello_47, Enkosi_49, SgtBeansprout_47, Mdavu_48, Amelie_47
- Track 4 : LeMond_56, Oscar_56
- Track 5 : KiSi_56
- Track 6 : Miryou_50
- Track 7 : Omnicron_49
- Track 8 : Feyre_47
- Track 9 : Heftyboy_46, SoSeph_46
- Track 10 : Collard_46, Agent47_46, InvictusManeo_46
- Track 11 : Leston_46
- Track 12 : Paola_46, Guillsminger_47
- Track 13 : Psycho_46, AlleyCat_48, Dadosky_48
- Track 14 : Kratio_45
- Track 15 : Edugator_45
- Track 16 : Rando14_48
- Track 17 : Thyatira_49
- Track 18 : Gengar_46, OkiRoe_46
- Track 19 : Waterfoul_47
- Track 20 : Larva_47
- Track 21 : Shadow1_57
- Track 22 : Marshawn_54
- Track 23 : TClif_56
- Track 24 : Sunflower1121_58

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

The start number called the most often in the published annotations is 38, it was called in 8 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amelie_47, Biglebops_47, Enkosi_49, LilPharaoh_47, Mdavu_48, Nikao_50, Nutello_47, SgtBeansprout_47,

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

- Agent47_46, AlleyCat_48, Collard_46, Dadosky_48, Edugator_45, Gengar_46, Guillsminger_47, InvictusManeo_46, Kratio_45, Larva_47, Leston_46, Miryou_50, OkiRoe_46, Omnicron_49, Paola_46, Psycho_46, Rando14_48, Thyatira_49, Waterfoul_47,

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

- Feyre_47, Heftyboy_46, KiSi_56, LeMond_56, Marshawn_54, Nergal_49, Oscar_56, Scarlett_56, Shadow1_57, SoSeph_46, Sunflower1121_58, TClif_56,

Summary by start number:

Start 11:

- Found in 1 of 39 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rando14_48 (K5),

Start 12:

- Found in 1 of 39 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Marshawn_54 (K6),

Start 13:

- Found in 3 of 39 (7.7%) of genes in pham
- Manual Annotations of this start: 2 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shadow1_57 (K6), Sunflower1121_58 (K6), TClif_56 (K6),

Start 17:

- Found in 9 of 39 (23.1%) of genes in pham
- Manual Annotations of this start: 8 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agent47_46 (K5), AlleyCat_48 (K5), Collard_46 (K5), Dadosky_48 (K5), Edugator_45 (K5), InvictusManeo_46 (K5), Kratio_45 (K5), Larva_47 (K5), Psycho_46 (K5),

Start 18:

- Found in 8 of 39 (20.5%) of genes in pham
- Manual Annotations of this start: 7 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gengar_46 (K5), Guillsminger_47 (K5), Leston_46 (K5), Miryou_50 (K5), OkiRoe_46 (K5), Paola_46 (K5), Thyatira_49 (K5), Waterfoul_47 (K5),

Start 19:

- Found in 5 of 39 (12.8%) of genes in pham
- Manual Annotations of this start: 3 of 36
- Called 60.0% of time when present

- Phage (with cluster) where this start called: Heftyboy_46 (K5), Omnicron_49 (K5), SoSeph_46 (K5),

Start 27:

- Found in 1 of 39 (2.6%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nergal_49 (AG),

Start 30:

- Found in 22 of 39 (56.4%) of genes in pham
- Manual Annotations of this start: 1 of 36
- Called 4.5% of time when present
- Phage (with cluster) where this start called: Feyre_47 (K5),

Start 34:

- Found in 4 of 39 (10.3%) of genes in pham
- Manual Annotations of this start: 4 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KiSi_56 (K1), LeMond_56 (K1), Oscar_56 (K1), Scarlett_56 (K1),

Start 38:

- Found in 27 of 39 (69.2%) of genes in pham
- Manual Annotations of this start: 8 of 36
- Called 29.6% of time when present
- Phage (with cluster) where this start called: Amelie_47 (K1), Binglebops_47 (K1), Enkosi_49 (K1), LilPharaoh_47 (K1), Mdavu_48 (K1), Nikao_50 (K1), Nutello_47 (K1), SgtBeansprout_47 (K1),

Summary by clusters:

There are 4 clusters represented in this pham: AG, K1, K6, K5,

Info for manual annotations of cluster AG:

- Start number 27 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K1:

- Start number 34 was manually annotated 4 times for cluster K1.
- Start number 38 was manually annotated 8 times for cluster K1.

Info for manual annotations of cluster K5:

- Start number 11 was manually annotated 1 time for cluster K5.
- Start number 17 was manually annotated 8 times for cluster K5.
- Start number 18 was manually annotated 7 times for cluster K5.
- Start number 19 was manually annotated 3 times for cluster K5.
- Start number 30 was manually annotated 1 time for cluster K5.

Info for manual annotations of cluster K6:

- Start number 12 was manually annotated 1 time for cluster K6.
- Start number 13 was manually annotated 2 times for cluster K6.

Gene Information:

Gene: Agent47_46 Start: 36423, Stop: 37028, Start Num: 17

Candidate Starts for Agent47_46:

(Start: 17 @36423 has 8 MA's), (21, 36438), (Start: 30 @36498 has 1 MA's), (31, 36501), (33, 36543), (Start: 38 @36576 has 8 MA's), (43, 36594), (44, 36600), (58, 36684), (66, 36720), (70, 36744), (71, 36771), (75, 36822), (77, 36888), (84, 36999),

Gene: AlleyCat_48 Start: 36277, Stop: 36879, Start Num: 17

Candidate Starts for AlleyCat_48:

(Start: 17 @36277 has 8 MA's), (21, 36292), (Start: 30 @36352 has 1 MA's), (31, 36355), (Start: 38 @36430 has 8 MA's), (43, 36448), (44, 36454), (54, 36514), (58, 36538), (66, 36574), (70, 36598), (72, 36640), (75, 36676), (77, 36742), (78, 36754), (81, 36790),

Gene: Amelie_47 Start: 37306, Stop: 37731, Start Num: 38

Candidate Starts for Amelie_47:

(20, 37171), (23, 37189), (29, 37234), (Start: 38 @37306 has 8 MA's), (43, 37327), (49, 37354), (52, 37375), (64, 37429), (73, 37501), (74, 37504), (77, 37591),

Gene: Binglebops_47 Start: 37306, Stop: 37731, Start Num: 38

Candidate Starts for Binglebops_47:

(20, 37171), (23, 37189), (29, 37234), (Start: 38 @37306 has 8 MA's), (43, 37327), (49, 37354), (52, 37375), (64, 37429), (73, 37501), (74, 37504), (77, 37591),

Gene: Collard_46 Start: 36384, Stop: 36989, Start Num: 17

Candidate Starts for Collard_46:

(Start: 17 @36384 has 8 MA's), (21, 36399), (Start: 30 @36459 has 1 MA's), (31, 36462), (33, 36504), (Start: 38 @36537 has 8 MA's), (43, 36555), (44, 36561), (58, 36645), (66, 36681), (70, 36705), (71, 36732), (75, 36783), (77, 36849), (84, 36960),

Gene: Dadosky_48 Start: 36279, Stop: 36881, Start Num: 17

Candidate Starts for Dadosky_48:

(Start: 17 @36279 has 8 MA's), (21, 36294), (Start: 30 @36354 has 1 MA's), (31, 36357), (Start: 38 @36432 has 8 MA's), (43, 36450), (44, 36456), (54, 36516), (58, 36540), (66, 36576), (70, 36600), (72, 36642), (75, 36678), (77, 36744), (78, 36756), (81, 36792),

Gene: Edugator_45 Start: 36704, Stop: 37297, Start Num: 17

Candidate Starts for Edugator_45:

(Start: 17 @36704 has 8 MA's), (21, 36719), (Start: 30 @36779 has 1 MA's), (31, 36782), (Start: 38 @36857 has 8 MA's), (43, 36875), (44, 36881), (54, 36941), (58, 36965), (66, 37001), (72, 37058), (75, 37094), (77, 37160),

Gene: Enkosi_49 Start: 39919, Stop: 40344, Start Num: 38

Candidate Starts for Enkosi_49:

(20, 39784), (23, 39802), (29, 39847), (Start: 38 @39919 has 8 MA's), (43, 39940), (49, 39967), (52, 39988), (64, 40042), (73, 40114), (74, 40117), (77, 40204),

Gene: Feyre_47 Start: 37611, Stop: 38171, Start Num: 30

Candidate Starts for Feyre_47:

(1, 37245), (2, 37341), (Start: 19 @37533 has 3 MA's), (22, 37551), (24, 37557), (Start: 30 @37611 has 1 MA's), (43, 37710), (53, 37767), (55, 37785), (57, 37791), (63, 37818), (67, 37851), (77, 38025),

Gene: Gengar_46 Start: 36147, Stop: 36782, Start Num: 18

Candidate Starts for Gengar_46:

(3, 35970), (10, 36078), (Start: 18 @36147 has 7 MA's), (22, 36162), (26, 36186), (Start: 30 @36222 has 1 MA's), (31, 36225), (Start: 38 @36297 has 8 MA's), (43, 36321), (53, 36378), (55, 36396), (57, 36402), (63, 36429), (67, 36462), (76, 36609), (77, 36636),

Gene: Guillsminger_47 Start: 36118, Stop: 36753, Start Num: 18

Candidate Starts for Guillsminger_47:

(3, 35941), (10, 36049), (Start: 18 @36118 has 7 MA's), (22, 36133), (26, 36157), (Start: 30 @36193 has 1 MA's), (31, 36196), (Start: 38 @36268 has 8 MA's), (43, 36292), (53, 36349), (55, 36367), (57, 36373), (62, 36397), (67, 36433), (76, 36580), (77, 36607),

Gene: Heftyboy_46 Start: 36269, Stop: 36925, Start Num: 19

Candidate Starts for Heftyboy_46:

(1, 35981), (2, 36077), (Start: 19 @36269 has 3 MA's), (22, 36287), (24, 36293), (Start: 30 @36347 has 1 MA's), (43, 36446), (53, 36503), (55, 36521), (57, 36527), (62, 36551), (67, 36605), (76, 36752), (77, 36779), (79, 36803),

Gene: InvictusManeo_46 Start: 36427, Stop: 37032, Start Num: 17

Candidate Starts for InvictusManeo_46:

(Start: 17 @36427 has 8 MA's), (21, 36442), (Start: 30 @36502 has 1 MA's), (31, 36505), (33, 36547), (Start: 38 @36580 has 8 MA's), (43, 36598), (44, 36604), (58, 36688), (66, 36724), (70, 36748), (71, 36775), (75, 36826), (77, 36892), (84, 37003),

Gene: KiSi_56 Start: 38953, Stop: 39420, Start Num: 34

Candidate Starts for KiSi_56:

(Start: 34 @38953 has 4 MA's), (49, 39016), (56, 39061), (73, 39184), (77, 39271), (80, 39304), (83, 39358), (85, 39409),

Gene: Kratio_45 Start: 35977, Stop: 36582, Start Num: 17

Candidate Starts for Kratio_45:

(6, 35833), (8, 35890), (Start: 17 @35977 has 8 MA's), (21, 35992), (Start: 30 @36052 has 1 MA's), (31, 36055), (33, 36097), (Start: 38 @36130 has 8 MA's), (43, 36148), (44, 36154), (54, 36214), (58, 36238), (70, 36298), (75, 36376), (77, 36442), (84, 36553),

Gene: Larva_47 Start: 36146, Stop: 36748, Start Num: 17

Candidate Starts for Larva_47:

(Start: 17 @36146 has 8 MA's), (21, 36161), (Start: 30 @36221 has 1 MA's), (31, 36224), (Start: 38 @36299 has 8 MA's), (43, 36317), (44, 36323), (54, 36383), (58, 36407), (66, 36443), (70, 36467), (72, 36509), (75, 36545), (77, 36611), (81, 36659),

Gene: LeMond_56 Start: 38937, Stop: 39401, Start Num: 34

Candidate Starts for LeMond_56:

(Start: 34 @38937 has 4 MA's), (46, 38982), (49, 38997), (52, 39018), (55, 39039), (73, 39165), (74, 39168), (77, 39252), (80, 39285), (83, 39339), (85, 39390),

Gene: Leston_46 Start: 36247, Stop: 36882, Start Num: 18

Candidate Starts for Leston_46:

(3, 36070), (8, 36151), (9, 36166), (10, 36178), (Start: 18 @36247 has 7 MA's), (22, 36262), (26, 36286), (Start: 30 @36322 has 1 MA's), (31, 36325), (Start: 38 @36397 has 8 MA's), (43, 36421), (53, 36478), (55, 36496), (57, 36502), (62, 36526), (67, 36562), (76, 36709), (77, 36736),

Gene: LilPharaoh_47 Start: 37034, Stop: 37459, Start Num: 38

Candidate Starts for LilPharaoh_47:

(20, 36899), (23, 36917), (29, 36962), (Start: 38 @37034 has 8 MA's), (43, 37055), (49, 37082), (52, 37103), (64, 37157), (73, 37229), (74, 37232), (77, 37319),

Gene: Marshawn_54 Start: 38519, Stop: 39190, Start Num: 12

Candidate Starts for Marshawn_54:

(6, 38411), (Start: 12 @38519 has 1 MA's), (15, 38543), (16, 38552), (21, 38576), (25, 38597), (28, 38621), (31, 38642), (39, 38723), (54, 38801), (57, 38816), (61, 38834), (65, 38852), (69, 38903), (77, 39047), (80, 39080), (83, 39134),

Gene: Mdavu_48 Start: 37295, Stop: 37720, Start Num: 38

Candidate Starts for Mdavu_48:

(20, 37160), (23, 37178), (29, 37223), (Start: 38 @37295 has 8 MA's), (43, 37316), (49, 37343), (52, 37364), (64, 37418), (73, 37490), (74, 37493), (77, 37580),

Gene: Miryou_50 Start: 38449, Stop: 39084, Start Num: 18

Candidate Starts for Miryou_50:

(Start: 18 @38449 has 7 MA's), (22, 38464), (26, 38488), (Start: 30 @38524 has 1 MA's), (31, 38527), (Start: 38 @38599 has 8 MA's), (43, 38623), (53, 38680), (55, 38698), (57, 38704), (63, 38731), (67, 38764), (76, 38911), (77, 38938),

Gene: Nergal_49 Start: 36269, Stop: 36790, Start Num: 27

Candidate Starts for Nergal_49:

(Start: 27 @36269 has 1 MA's), (32, 36323), (37, 36344), (41, 36362), (43, 36368), (45, 36377), (59, 36455), (77, 36641), (82, 36713),

Gene: Nikao_50 Start: 39919, Stop: 40344, Start Num: 38

Candidate Starts for Nikao_50:

(20, 39784), (23, 39802), (29, 39847), (Start: 38 @39919 has 8 MA's), (43, 39940), (49, 39967), (52, 39988), (64, 40042), (73, 40114), (74, 40117), (77, 40204),

Gene: Nutello_47 Start: 37306, Stop: 37731, Start Num: 38

Candidate Starts for Nutello_47:

(20, 37171), (23, 37189), (29, 37234), (Start: 38 @37306 has 8 MA's), (43, 37327), (49, 37354), (52, 37375), (64, 37429), (73, 37501), (74, 37504), (77, 37591),

Gene: OkiRoe_46 Start: 36120, Stop: 36755, Start Num: 18

Candidate Starts for OkiRoe_46:

(3, 35943), (10, 36051), (Start: 18 @36120 has 7 MA's), (22, 36135), (26, 36159), (Start: 30 @36195 has 1 MA's), (31, 36198), (Start: 38 @36270 has 8 MA's), (43, 36294), (53, 36351), (55, 36369), (57, 36375), (63, 36402), (67, 36435), (76, 36582), (77, 36609),

Gene: Omnicron_49 Start: 35732, Stop: 36313, Start Num: 19

Candidate Starts for Omnicron_49:

(5, 35576), (6, 35582), (7, 35585), (Start: 19 @35732 has 3 MA's), (Start: 30 @35810 has 1 MA's), (31, 35813), (Start: 38 @35885 has 8 MA's), (43, 35903), (48, 35927), (50, 35936), (51, 35939), (52, 35957), (59, 35990), (70, 36032), (75, 36110), (77, 36176),

Gene: Oscar_56 Start: 38839, Stop: 39306, Start Num: 34

Candidate Starts for Oscar_56:

(Start: 34 @38839 has 4 MA's), (46, 38887), (49, 38902), (52, 38923), (55, 38944), (73, 39070), (74, 39073), (77, 39157), (80, 39190), (83, 39244), (85, 39295),

Gene: Paola_46 Start: 36118, Stop: 36753, Start Num: 18

Candidate Starts for Paola_46:

(3, 35941), (10, 36049), (Start: 18 @36118 has 7 MA's), (22, 36133), (26, 36157), (Start: 30 @36193 has 1 MA's), (31, 36196), (Start: 38 @36268 has 8 MA's), (43, 36292), (53, 36349), (55, 36367), (57, 36373), (62, 36397), (67, 36433), (76, 36580), (77, 36607),

Gene: Psycho_46 Start: 36276, Stop: 36878, Start Num: 17

Candidate Starts for Psycho_46:

(Start: 17 @36276 has 8 MA's), (21, 36291), (Start: 30 @36351 has 1 MA's), (31, 36354), (Start: 38 @36429 has 8 MA's), (43, 36447), (44, 36453), (54, 36513), (58, 36537), (66, 36573), (70, 36597), (72, 36639), (75, 36675), (77, 36741), (78, 36753), (81, 36789),

Gene: Rando14_48 Start: 35246, Stop: 35872, Start Num: 11

Candidate Starts for Rando14_48:

(6, 35150), (8, 35207), (Start: 11 @35246 has 1 MA's), (Start: 19 @35297 has 3 MA's), (Start: 30 @35375 has 1 MA's), (31, 35378), (Start: 38 @35450 has 8 MA's), (43, 35468), (48, 35492), (51, 35504), (52, 35522), (59, 35555), (70, 35597), (75, 35669), (77, 35735),

Gene: Scarlett_56 Start: 38831, Stop: 39301, Start Num: 34

Candidate Starts for Scarlett_56:

(Start: 34 @38831 has 4 MA's), (49, 38897), (52, 38918), (56, 38942), (73, 39065), (74, 39068), (77, 39152), (80, 39185), (83, 39239), (85, 39290),

Gene: SgtBeansprout_47 Start: 37306, Stop: 37731, Start Num: 38

Candidate Starts for SgtBeansprout_47:

(20, 37171), (23, 37189), (29, 37234), (Start: 38 @37306 has 8 MA's), (43, 37327), (49, 37354), (52, 37375), (64, 37429), (73, 37501), (74, 37504), (77, 37591),

Gene: Shadow1_57 Start: 38538, Stop: 39143, Start Num: 13

Candidate Starts for Shadow1_57:

(4, 38412), (6, 38421), (Start: 13 @38538 has 2 MA's), (14, 38550), (16, 38565), (21, 38589), (25, 38610), (36, 38676), (40, 38697), (42, 38700), (47, 38724), (60, 38793), (68, 38823), (73, 38889), (74, 38892), (77, 38976), (80, 39009), (83, 39063),

Gene: SoSeph_46 Start: 36269, Stop: 36925, Start Num: 19

Candidate Starts for SoSeph_46:

(1, 35981), (2, 36077), (Start: 19 @36269 has 3 MA's), (22, 36287), (24, 36293), (Start: 30 @36347 has 1 MA's), (43, 36446), (53, 36503), (55, 36521), (57, 36527), (62, 36551), (67, 36605), (76, 36752), (77, 36779), (79, 36803),

Gene: Sunflower1121_58 Start: 38639, Stop: 39289, Start Num: 13

Candidate Starts for Sunflower1121_58:

(4, 38513), (6, 38522), (Start: 13 @38639 has 2 MA's), (14, 38651), (16, 38666), (21, 38690), (25, 38711), (35, 38816), (36, 38822), (40, 38843), (42, 38846), (47, 38870), (60, 38939), (68, 38969), (73, 39035), (74, 39038), (77, 39122), (80, 39155), (83, 39209),

Gene: TClif_56 Start: 38682, Stop: 39194, Start Num: 13

Candidate Starts for TClif_56:

(Start: 13 @38682 has 2 MA's), (15, 38697), (16, 38706), (21, 38730), (25, 38751), (28, 38775), (31, 38796), (47, 38832), (60, 38868), (68, 38889), (73, 38925), (74, 38928), (77, 39012), (80, 39045), (83, 39099),

Gene: Thyatira_49 Start: 38470, Stop: 39090, Start Num: 18

Candidate Starts for Thyatira_49:

(3, 38293), (Start: 18 @38470 has 7 MA's), (22, 38485), (26, 38509), (Start: 30 @38545 has 1 MA's), (31, 38548), (Start: 38 @38620 has 8 MA's), (43, 38644), (53, 38701), (55, 38719), (57, 38725), (67, 38776), (76, 38923), (77, 38950), (79, 38974),

Gene: Waterfoul_47 Start: 36361, Stop: 36987, Start Num: 18

Candidate Starts for Waterfoul_47:

(3, 36184), (7, 36211), (Start: 18 @36361 has 7 MA's), (22, 36376), (26, 36400), (Start: 30 @36436 has 1 MA's), (31, 36439), (Start: 38 @36511 has 8 MA's), (43, 36535), (53, 36592), (55, 36610), (57, 36616), (67, 36667), (76, 36814), (77, 36841), (79, 36865),