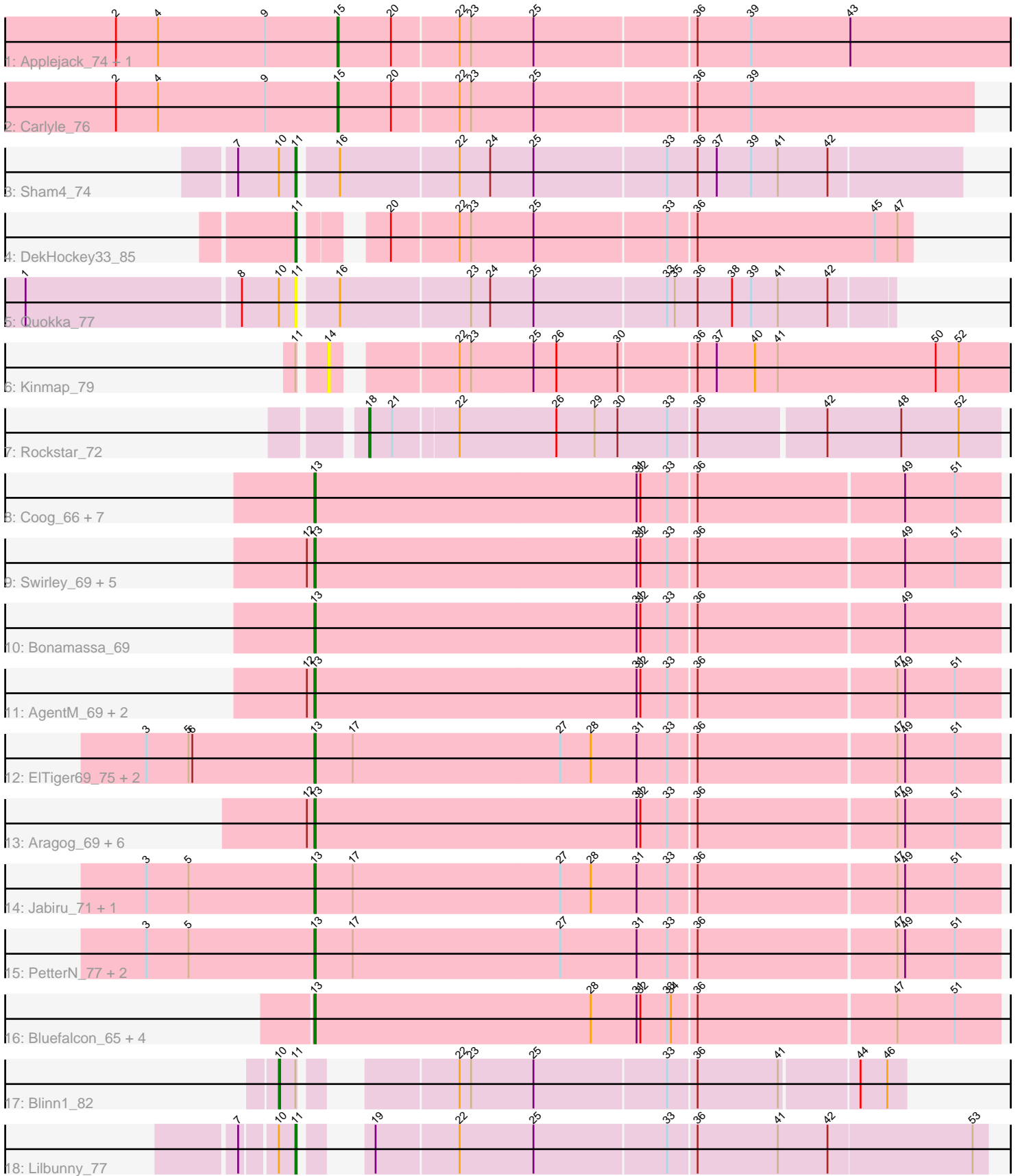


Pham 196611



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 196611 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196611 has 48 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Applejack_74, KBG_73
- Track 2 : Carlyle_76
- Track 3 : Sham4_74
- Track 4 : DekHockey33_85
- Track 5 : Quokka_77
- Track 6 : Kinmap_79
- Track 7 : Rockstar_72
- Track 8 : Coog_66, Midas2_66, MarysWell_69, LittleCherry_68, Micasa_69, HuhtaEnerson15_67, Theia_68, Dublin_69
- Track 9 : Swirley_69, Tarynearal_68, Milcery_69, George_65, Cuco_68, Twigg_66
- Track 10 : Bonamassa_69
- Track 11 : AgentM_69, Tiger_69, Phlorence_68
- Track 12 : ElTiger69_75, Naca_72, Benedict_73
- Track 13 : Aragog_69, Discoknowium_67, Lev2_70, Jovo_70, PickleBack_70, Conspiracy_70, ForGetIt_70
- Track 14 : Jabiru_71, Airmid_72
- Track 15 : PetterN_77, Chadwick_73, Scorpia_73
- Track 16 : Bluefalcon_65, SydNat_69, Ghoulboy_69, Zolita_68, Archetta_67
- Track 17 : Blinn1_82
- Track 18 : Lilbunny_77

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

The start number called the most often in the published annotations is 13, it was called in 37 of the 45 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AgentM_69, Airmid_72, Aragog_69, Archetta_67, Benedict_73, Bluefalcon_65, Bonamassa_69, Chadwick_73, Conspiracy_70, Coog_66, Cuco_68, Discoknowium_67, Dublin_69, ElTiger69_75, ForGetIt_70, George_65, Ghoulboy_69, HuhtaEnerson15_67, Jabiru_71, Jovo_70, Lev2_70, LittleCherry_68, MarysWell_69, Micasa_69, Midas2_66, Milcery_69, Naca_72, PetterN_77, Phlorence_68, PickleBack_70, Scorpia_73, Swirley_69, SydNat_69, Tarynearal_68, Theia_68, Tiger_69, Twigg_66, Zolita_68,

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

-

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

- Applejack_74, Blinn1_82, Carlyle_76, DekHockey33_85, KBG_73, Kinmap_79, Lilbunny_77, Quokka_77, Rockstar_72, Sham4_74,

Summary by start number:

Start 10:

- Found in 4 of 48 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 45
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Blinn1_82 (A6),

Start 11:

- Found in 6 of 48 (12.5%) of genes in pham
- Manual Annotations of this start: 3 of 45
- Called 66.7% of time when present
- Phage (with cluster) where this start called: DekHockey33_85 (A15), Lilbunny_77 (A6), Quokka_77 (A2), Sham4_74 (A11),

Start 13:

- Found in 38 of 48 (79.2%) of genes in pham
- Manual Annotations of this start: 37 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AgentM_69 (A5), Airmid_72 (A5), Aragog_69 (A5), Archetta_67 (A5), Benedict_73 (A5), Bluefalcon_65 (A5), Bonamassa_69 (A5), Chadwick_73 (A5), Conspiracy_70 (A5), Coog_66 (A5), Cuco_68 (A5), Discoknowium_67 (A5), Dublin_69 (A5), ElTiger69_75 (A5), ForGetIt_70 (A5), George_65 (A5), Ghoulyboy_69 (A5), HuhtaEnerson15_67 (A5), Jabiru_71 (A5), Jovo_70 (A5), Lev2_70 (A5), LittleCherry_68 (A5), MarysWell_69 (A5), Micasa_69 (A5), Midas2_66 (A5), Milcery_69 (A5), Naca_72 (A5), PetterN_77 (A5), Phlorence_68 (A5), PickleBack_70 (A5), Scorpio_73 (A5), Swirley_69 (A5), SydNat_69 (A5), Tarynearal_68 (A5), Theia_68 (A5), Tiger_69 (A5), Twigg_66 (A5), Zolita_68 (A5),

Start 14:

- Found in 1 of 48 (2.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kinmap_79 (A21),

Start 15:

- Found in 3 of 48 (6.2%) of genes in pham
- Manual Annotations of this start: 3 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Applejack_74 (A1), Carlyle_76 (A1), KBG_73 (A1),

Start 18:

- Found in 1 of 48 (2.1%) of genes in pham

- Manual Annotations of this start: 1 of 45
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rockstar_72 (A3),

Summary by clusters:

There are 8 clusters represented in this pham: A15, A21, A11, A1, A3, A2, A5, A6,

Info for manual annotations of cluster A1:

- Start number 15 was manually annotated 3 times for cluster A1.

Info for manual annotations of cluster A11:

- Start number 11 was manually annotated 1 time for cluster A11.

Info for manual annotations of cluster A15:

- Start number 11 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A3:

- Start number 18 was manually annotated 1 time for cluster A3.

Info for manual annotations of cluster A5:

- Start number 13 was manually annotated 37 times for cluster A5.

Info for manual annotations of cluster A6:

- Start number 10 was manually annotated 1 time for cluster A6.
- Start number 11 was manually annotated 1 time for cluster A6.

Gene Information:

Gene: AgentM_69 Start: 43551, Stop: 43021, Start Num: 13

Candidate Starts for AgentM_69:

(12, 43557), (Start: 13 @43551 has 37 MA's), (31, 43299), (32, 43296), (33, 43275), (36, 43254), (47, 43101), (49, 43095), (51, 43056),

Gene: Airmid_72 Start: 44380, Stop: 43850, Start Num: 13

Candidate Starts for Airmid_72:

(3, 44512), (5, 44479), (Start: 13 @44380 has 37 MA's), (17, 44350), (27, 44188), (28, 44164), (31, 44128), (33, 44104), (36, 44083), (47, 43930), (49, 43924), (51, 43885),

Gene: Applejack_74 Start: 44460, Stop: 43924, Start Num: 15

Candidate Starts for Applejack_74:

(2, 44634), (4, 44601), (9, 44517), (Start: 15 @44460 has 3 MA's), (20, 44418), (22, 44367), (23, 44358), (25, 44310), (36, 44187), (39, 44145), (43, 44067),

Gene: Aragog_69 Start: 43571, Stop: 43041, Start Num: 13

Candidate Starts for Aragog_69:

(12, 43577), (Start: 13 @43571 has 37 MA's), (31, 43319), (32, 43316), (33, 43295), (36, 43274), (47, 43121), (49, 43115), (51, 43076),

Gene: Archetta_67 Start: 43517, Stop: 42987, Start Num: 13

Candidate Starts for Archetta_67:

(Start: 13 @43517 has 37 MA's), (28, 43301), (31, 43265), (32, 43262), (33, 43241), (34, 43238), (36, 43220), (47, 43067), (51, 43022),

Gene: Benedict_73 Start: 44112, Stop: 43582, Start Num: 13

Candidate Starts for Benedict_73:

(3, 44244), (5, 44211), (6, 44208), (Start: 13 @44112 has 37 MA's), (17, 44082), (27, 43920), (28, 43896), (31, 43860), (33, 43836), (36, 43815), (47, 43662), (49, 43656), (51, 43617),

Gene: Blinn1_82 Start: 45133, Stop: 44699, Start Num: 10

Candidate Starts for Blinn1_82:

(Start: 10 @45133 has 1 MA's), (Start: 11 @45121 has 3 MA's), (22, 45034), (23, 45025), (25, 44977), (33, 44875), (36, 44854), (41, 44791), (44, 44734), (46, 44713),

Gene: Bluefalcon_65 Start: 43537, Stop: 43007, Start Num: 13

Candidate Starts for Bluefalcon_65:

(Start: 13 @43537 has 37 MA's), (28, 43321), (31, 43285), (32, 43282), (33, 43261), (34, 43258), (36, 43240), (47, 43087), (51, 43042),

Gene: Bonamassa_69 Start: 43739, Stop: 43209, Start Num: 13

Candidate Starts for Bonamassa_69:

(Start: 13 @43739 has 37 MA's), (31, 43487), (32, 43484), (33, 43463), (36, 43442), (49, 43283),

Gene: Carlyle_76 Start: 45834, Stop: 45346, Start Num: 15

Candidate Starts for Carlyle_76:

(2, 46008), (4, 45975), (9, 45891), (Start: 15 @45834 has 3 MA's), (20, 45792), (22, 45741), (23, 45732), (25, 45684), (36, 45561), (39, 45519),

Gene: Chadwick_73 Start: 43856, Stop: 43326, Start Num: 13

Candidate Starts for Chadwick_73:

(3, 43988), (5, 43955), (Start: 13 @43856 has 37 MA's), (17, 43826), (27, 43664), (31, 43604), (33, 43580), (36, 43559), (47, 43406), (49, 43400), (51, 43361),

Gene: Conspiracy_70 Start: 43793, Stop: 43263, Start Num: 13

Candidate Starts for Conspiracy_70:

(12, 43799), (Start: 13 @43793 has 37 MA's), (31, 43541), (32, 43538), (33, 43517), (36, 43496), (47, 43343), (49, 43337), (51, 43298),

Gene: Coog_66 Start: 43560, Stop: 43030, Start Num: 13

Candidate Starts for Coog_66:

(Start: 13 @43560 has 37 MA's), (31, 43308), (32, 43305), (33, 43284), (36, 43263), (49, 43104), (51, 43065),

Gene: Cuco_68 Start: 43420, Stop: 42890, Start Num: 13

Candidate Starts for Cuco_68:

(12, 43426), (Start: 13 @43420 has 37 MA's), (31, 43168), (32, 43165), (33, 43144), (36, 43123), (49, 42964), (51, 42925),

Gene: DekHockey33_85 Start: 45865, Stop: 45422, Start Num: 11

Candidate Starts for DekHockey33_85:

(Start: 11 @45865 has 3 MA's), (20, 45820), (22, 45769), (23, 45760), (25, 45712), (33, 45610), (36, 45589), (45, 45451), (47, 45433),

Gene: Discoknowium_67 Start: 43310, Stop: 42780, Start Num: 13

Candidate Starts for Discoknowium_67:

(12, 43316), (Start: 13 @43310 has 37 MA's), (31, 43058), (32, 43055), (33, 43034), (36, 43013), (47, 42860), (49, 42854), (51, 42815),

Gene: Dublin_69 Start: 43699, Stop: 43169, Start Num: 13

Candidate Starts for Dublin_69:

(Start: 13 @43699 has 37 MA's), (31, 43447), (32, 43444), (33, 43423), (36, 43402), (49, 43243), (51, 43204),

Gene: EITiger69_75 Start: 44783, Stop: 44253, Start Num: 13

Candidate Starts for EITiger69_75:

(3, 44915), (5, 44882), (6, 44879), (Start: 13 @44783 has 37 MA's), (17, 44753), (27, 44591), (28, 44567), (31, 44531), (33, 44507), (36, 44486), (47, 44333), (49, 44327), (51, 44288),

Gene: ForGetIt_70 Start: 43818, Stop: 43288, Start Num: 13

Candidate Starts for ForGetIt_70:

(12, 43824), (Start: 13 @43818 has 37 MA's), (31, 43566), (32, 43563), (33, 43542), (36, 43521), (47, 43368), (49, 43362), (51, 43323),

Gene: George_65 Start: 43483, Stop: 42953, Start Num: 13

Candidate Starts for George_65:

(12, 43489), (Start: 13 @43483 has 37 MA's), (31, 43231), (32, 43228), (33, 43207), (36, 43186), (49, 43027), (51, 42988),

Gene: Ghoulboy_69 Start: 43791, Stop: 43261, Start Num: 13

Candidate Starts for Ghoulboy_69:

(Start: 13 @43791 has 37 MA's), (28, 43575), (31, 43539), (32, 43536), (33, 43515), (34, 43512), (36, 43494), (47, 43341), (51, 43296),

Gene: HuhtaEnerson15_67 Start: 43392, Stop: 42862, Start Num: 13

Candidate Starts for HuhtaEnerson15_67:

(Start: 13 @43392 has 37 MA's), (31, 43140), (32, 43137), (33, 43116), (36, 43095), (49, 42936), (51, 42897),

Gene: Jabiru_71 Start: 43967, Stop: 43437, Start Num: 13

Candidate Starts for Jabiru_71:

(3, 44099), (5, 44066), (Start: 13 @43967 has 37 MA's), (17, 43937), (27, 43775), (28, 43751), (31, 43715), (33, 43691), (36, 43670), (47, 43517), (49, 43511), (51, 43472),

Gene: Jovo_70 Start: 44074, Stop: 43544, Start Num: 13

Candidate Starts for Jovo_70:

(12, 44080), (Start: 13 @44074 has 37 MA's), (31, 43822), (32, 43819), (33, 43798), (36, 43777), (47, 43624), (49, 43618), (51, 43579),

Gene: KBG_73 Start: 47323, Stop: 46787, Start Num: 15

Candidate Starts for KBG_73:

(2, 47497), (4, 47464), (9, 47380), (Start: 15 @47323 has 3 MA's), (20, 47281), (22, 47230), (23, 47221), (25, 47173), (36, 47050), (39, 47008), (43, 46930),

Gene: Kinmap_79 Start: 44103, Stop: 43600, Start Num: 14

Candidate Starts for Kinmap_79:

(Start: 11 @44121 has 3 MA's), (14, 44103), (22, 44022), (23, 44013), (25, 43965), (26, 43947), (30, 43899), (36, 43842), (37, 43827), (40, 43797), (41, 43779), (50, 43656), (52, 43638),

Gene: Lev2_70 Start: 43706, Stop: 43176, Start Num: 13

Candidate Starts for Lev2_70:

(12, 43712), (Start: 13 @43706 has 37 MA's), (31, 43454), (32, 43451), (33, 43430), (36, 43409), (47, 43256), (49, 43250), (51, 43211),

Gene: Lilbunny_77 Start: 43973, Stop: 43482, Start Num: 11

Candidate Starts for Lilbunny_77:

(7, 44009), (Start: 10 @43985 has 1 MA's), (Start: 11 @43973 has 3 MA's), (19, 43949), (22, 43886), (25, 43829), (33, 43727), (36, 43706), (41, 43643), (42, 43604), (53, 43493),

Gene: LittleCherry_68 Start: 43262, Stop: 42732, Start Num: 13

Candidate Starts for LittleCherry_68:

(Start: 13 @43262 has 37 MA's), (31, 43010), (32, 43007), (33, 42986), (36, 42965), (49, 42806), (51, 42767),

Gene: MarysWell_69 Start: 43942, Stop: 43412, Start Num: 13

Candidate Starts for MarysWell_69:

(Start: 13 @43942 has 37 MA's), (31, 43690), (32, 43687), (33, 43666), (36, 43645), (49, 43486), (51, 43447),

Gene: Micasa_69 Start: 43664, Stop: 43134, Start Num: 13

Candidate Starts for Micasa_69:

(Start: 13 @43664 has 37 MA's), (31, 43412), (32, 43409), (33, 43388), (36, 43367), (49, 43208), (51, 43169),

Gene: Midas2_66 Start: 43560, Stop: 43030, Start Num: 13

Candidate Starts for Midas2_66:

(Start: 13 @43560 has 37 MA's), (31, 43308), (32, 43305), (33, 43284), (36, 43263), (49, 43104), (51, 43065),

Gene: Milcery_69 Start: 43451, Stop: 42921, Start Num: 13

Candidate Starts for Milcery_69:

(12, 43457), (Start: 13 @43451 has 37 MA's), (31, 43199), (32, 43196), (33, 43175), (36, 43154), (49, 42995), (51, 42956),

Gene: Naca_72 Start: 44855, Stop: 44325, Start Num: 13

Candidate Starts for Naca_72:

(3, 44987), (5, 44954), (6, 44951), (Start: 13 @44855 has 37 MA's), (17, 44825), (27, 44663), (28, 44639), (31, 44603), (33, 44579), (36, 44558), (47, 44405), (49, 44399), (51, 44360),

Gene: PetterN_77 Start: 44642, Stop: 44112, Start Num: 13

Candidate Starts for PetterN_77:

(3, 44774), (5, 44741), (Start: 13 @44642 has 37 MA's), (17, 44612), (27, 44450), (31, 44390), (33, 44366), (36, 44345), (47, 44192), (49, 44186), (51, 44147),

Gene: Phlorence_68 Start: 43451, Stop: 42921, Start Num: 13

Candidate Starts for Phlorence_68:

(12, 43457), (Start: 13 @43451 has 37 MA's), (31, 43199), (32, 43196), (33, 43175), (36, 43154), (47, 43001), (49, 42995), (51, 42956),

Gene: PickleBack_70 Start: 43628, Stop: 43098, Start Num: 13

Candidate Starts for PickleBack_70:

(12, 43634), (Start: 13 @43628 has 37 MA's), (31, 43376), (32, 43373), (33, 43352), (36, 43331), (47, 43178), (49, 43172), (51, 43133),

Gene: Quokka_77 Start: 44822, Stop: 44373, Start Num: 11

Candidate Starts for Quokka_77:

(1, 45026), (8, 44861), (Start: 10 @44834 has 1 MA's), (Start: 11 @44822 has 3 MA's), (16, 44795), (23, 44696), (24, 44681), (25, 44648), (33, 44546), (35, 44540), (36, 44522), (38, 44495), (39, 44480), (41, 44459), (42, 44420),

Gene: Rockstar_72 Start: 44129, Stop: 43650, Start Num: 18

Candidate Starts for Rockstar_72:

(Start: 18 @44129 has 1 MA's), (21, 44111), (22, 44063), (26, 43988), (29, 43958), (30, 43940), (33, 43901), (36, 43880), (42, 43784), (48, 43727), (52, 43682),

Gene: Scorpio_73 Start: 44213, Stop: 43683, Start Num: 13

Candidate Starts for Scorpio_73:

(3, 44345), (5, 44312), (Start: 13 @44213 has 37 MA's), (17, 44183), (27, 44021), (31, 43961), (33, 43937), (36, 43916), (47, 43763), (49, 43757), (51, 43718),

Gene: Sham4_74 Start: 43779, Stop: 43276, Start Num: 11

Candidate Starts for Sham4_74:

(7, 43821), (Start: 10 @43791 has 1 MA's), (Start: 11 @43779 has 3 MA's), (16, 43752), (22, 43662), (24, 43638), (25, 43605), (33, 43503), (36, 43479), (37, 43464), (39, 43437), (41, 43416), (42, 43377),

Gene: Swirley_69 Start: 43601, Stop: 43071, Start Num: 13

Candidate Starts for Swirley_69:

(12, 43607), (Start: 13 @43601 has 37 MA's), (31, 43349), (32, 43346), (33, 43325), (36, 43304), (49, 43145), (51, 43106),

Gene: SydNat_69 Start: 43800, Stop: 43270, Start Num: 13

Candidate Starts for SydNat_69:

(Start: 13 @43800 has 37 MA's), (28, 43584), (31, 43548), (32, 43545), (33, 43524), (34, 43521), (36, 43503), (47, 43350), (51, 43305),

Gene: Tarynearal_68 Start: 43437, Stop: 42907, Start Num: 13

Candidate Starts for Tarynearal_68:

(12, 43443), (Start: 13 @43437 has 37 MA's), (31, 43185), (32, 43182), (33, 43161), (36, 43140), (49, 42981), (51, 42942),

Gene: Theia_68 Start: 43926, Stop: 43396, Start Num: 13

Candidate Starts for Theia_68:

(Start: 13 @43926 has 37 MA's), (31, 43674), (32, 43671), (33, 43650), (36, 43629), (49, 43470), (51, 43431),

Gene: Tiger_69 Start: 43372, Stop: 42842, Start Num: 13

Candidate Starts for Tiger_69:

(12, 43378), (Start: 13 @43372 has 37 MA's), (31, 43120), (32, 43117), (33, 43096), (36, 43075), (47, 42922), (49, 42916), (51, 42877),

Gene: Twigg_66 Start: 43249, Stop: 42719, Start Num: 13

Candidate Starts for Twigg_66:

(12, 43255), (Start: 13 @43249 has 37 MA's), (31, 42997), (32, 42994), (33, 42973), (36, 42952), (49, 42793), (51, 42754),

Gene: Zolita_68 Start: 43804, Stop: 43274, Start Num: 13

Candidate Starts for Zolita_68:

(Start: 13 @43804 has 37 MA's), (28, 43588), (31, 43552), (32, 43549), (33, 43528), (34, 43525), (36, 43507), (47, 43354), (51, 43309),