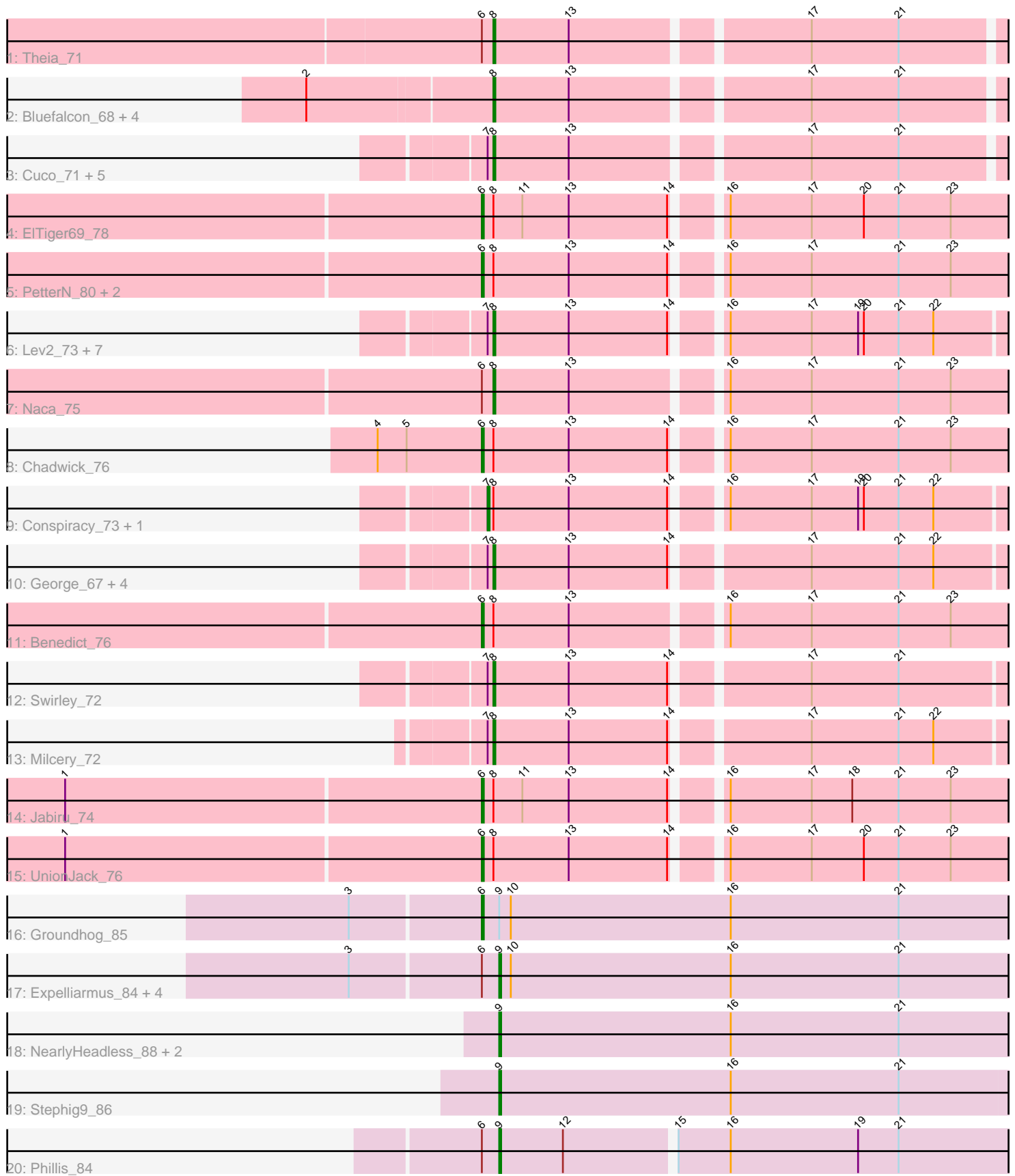


Pham 85739



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 85739 Report

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

Pham number 85739 has 49 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Theia_71
- Track 2 : Bluefalcon_68, Ghoulboy_72, Archetta_70, SydNat_72, Zolita_71
- Track 3 : Cuco_71, Coog_69, Midas2_69, Micasa_70, Dublin_72, MarysWell_72
- Track 4 : ElTiger69_78
- Track 5 : PetterN_80, Scorpia_75, Airmid_75
- Track 6 : Lev2_73, ForGetIt_73, AgentM_72, Discoknowium_70, Tiger_71, Aragog_72, Phlorence_71, PickleBack_73
- Track 7 : Naca_75
- Track 8 : Chadwick_76
- Track 9 : Conspiracy_73, Jovo_72
- Track 10 : George_67, Bonamassa_72, HuhtaEnerson15_70, LittleCherry_71, Tarynearal_71
- Track 11 : Benedict_76
- Track 12 : Swirley_72
- Track 13 : Milcery_72
- Track 14 : Jabiru_74
- Track 15 : UnionJack_76
- Track 16 : Groundhog_85
- Track 17 : Expelliarmus_84, Astro_87, Dixon_86, Smeadley_87, Roary_89
- Track 18 : NearlyHeadless_88, Saintus_83, Danforth_88
- Track 19 : Stephig9_86
- Track 20 : Phillis_84

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

The start number called the most often in the published annotations is 8, it was called in 27 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AgentM_72, Aragog_72, Archetta_70, Bluefalcon_68, Bonamassa_72, Coog_69, Cuco_71, Discoknowium_70, Dublin_72, ForGetIt_73, George_67, Ghoulboy_72, HuhtaEnerson15_70, Lev2_73, LittleCherry_71, MarysWell_72, Micasa_70, Midas2_69, Milcery_72, Naca_75, Phlorence_71, PickleBack_73, Swirley_72, SydNat_72, Tarynearal_71, Theia_71, Tiger_71, Zolita_71,

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

- Airmid_75, Benedict_76, Chadwick_76, Conspiracy_73, ElTiger69_78, Jabiru_74, Jovo_72, PetterN_80, Scorpia_75, UnionJack_76,

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

- Astro_87, Danforth_88, Dixon_86, Expelliarmus_84, Groundhog_85, NearlyHeadless_88, Phillis_84, Roary_89, Saintus_83, Smeadley_87, Stephig9_86,

Summary by start number:

Start 6:

- Found in 17 of 49 (34.7%) of genes in pham
- Manual Annotations of this start: 9 of 48
- Called 52.9% of time when present
- Phage (with cluster) where this start called: Airmid_75 (A5), Benedict_76 (A5), Chadwick_76 (A5), ElTiger69_78 (A5), Groundhog_85 (A8), Jabiru_74 (A5), PetterN_80 (A5), Scorpia_75 (A5), UnionJack_76 (A5),

Start 7:

- Found in 23 of 49 (46.9%) of genes in pham
- Manual Annotations of this start: 2 of 48
- Called 8.7% of time when present
- Phage (with cluster) where this start called: Conspiracy_73 (A5), Jovo_72 (A5),

Start 8:

- Found in 38 of 49 (77.6%) of genes in pham
- Manual Annotations of this start: 27 of 48
- Called 73.7% of time when present
- Phage (with cluster) where this start called: AgentM_72 (A5), Aragog_72 (A5), Archetta_70 (A5), Bluefalcon_68 (A5), Bonamassa_72 (A5), Coog_69 (A5), Cuco_71 (A5), Discoknowium_70 (A5), Dublin_72 (A5), ForGetIt_73 (A5), George_67 (A5), Ghoulyboy_72 (A5), HuhtaEnerson15_70 (A5), Lev2_73 (A5), LittleCherry_71 (A5), MarysWell_72 (A5), Micasa_70 (A5), Midas2_69 (A5), Milcery_72 (A5), Naca_75 (A5), Phlorence_71 (A5), PickleBack_73 (A5), Swirley_72 (A5), SydNat_72 (A5), Tarynearal_71 (A5), Theia_71 (A5), Tiger_71 (A5), Zolita_71 (A5),

Start 9:

- Found in 11 of 49 (22.4%) of genes in pham
- Manual Annotations of this start: 10 of 48
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Astro_87 (A8), Danforth_88 (A8), Dixon_86 (A8), Expelliarmus_84 (A8), NearlyHeadless_88 (A8), Phillis_84 (A8), Roary_89 (A8), Saintus_83 (A8), Smeadley_87 (A8), Stephig9_86 (A8),

Summary by clusters:

There are 2 clusters represented in this pham: A8, A5,

Info for manual annotations of cluster A5:

- Start number 6 was manually annotated 8 times for cluster A5.
- Start number 7 was manually annotated 2 times for cluster A5.
- Start number 8 was manually annotated 27 times for cluster A5.

Info for manual annotations of cluster A8:

- Start number 6 was manually annotated 1 time for cluster A8.
- Start number 9 was manually annotated 10 times for cluster A8.

Gene Information:

Gene: AgentM_72 Start: 44610, Stop: 44356, Start Num: 8

Candidate Starts for AgentM_72:

(Start: 7 @44613 has 2 MA's), (Start: 8 @44610 has 27 MA's), (13, 44571), (14, 44520), (16, 44499), (17, 44457), (19, 44433), (20, 44430), (21, 44412), (22, 44394),

Gene: Airmid_75 Start: 45430, Stop: 45164, Start Num: 6

Candidate Starts for Airmid_75:

(Start: 6 @45430 has 9 MA's), (Start: 8 @45424 has 27 MA's), (13, 45385), (14, 45334), (16, 45313), (17, 45271), (21, 45226), (23, 45199),

Gene: Aragog_72 Start: 44628, Stop: 44374, Start Num: 8

Candidate Starts for Aragog_72:

(Start: 7 @44631 has 2 MA's), (Start: 8 @44628 has 27 MA's), (13, 44589), (14, 44538), (16, 44517), (17, 44475), (19, 44451), (20, 44448), (21, 44430), (22, 44412),

Gene: Archetta_70 Start: 44566, Stop: 44315, Start Num: 8

Candidate Starts for Archetta_70:

(2, 44659), (Start: 8 @44566 has 27 MA's), (13, 44527), (17, 44413), (21, 44368),

Gene: Astro_87 Start: 47140, Stop: 46877, Start Num: 9

Candidate Starts for Astro_87:

(3, 47215), (Start: 6 @47149 has 9 MA's), (Start: 9 @47140 has 10 MA's), (10, 47134), (16, 47020), (21, 46933),

Gene: Benedict_76 Start: 45162, Stop: 44896, Start Num: 6

Candidate Starts for Benedict_76:

(Start: 6 @45162 has 9 MA's), (Start: 8 @45156 has 27 MA's), (13, 45117), (16, 45045), (17, 45003), (21, 44958), (23, 44931),

Gene: Bluefalcon_68 Start: 44565, Stop: 44314, Start Num: 8

Candidate Starts for Bluefalcon_68:

(2, 44658), (Start: 8 @44565 has 27 MA's), (13, 44526), (17, 44412), (21, 44367),

Gene: Bonamassa_72 Start: 44798, Stop: 44544, Start Num: 8

Candidate Starts for Bonamassa_72:

(Start: 7 @44801 has 2 MA's), (Start: 8 @44798 has 27 MA's), (13, 44759), (14, 44708), (17, 44645), (21, 44600), (22, 44582),

Gene: Chadwick_76 Start: 44906, Stop: 44640, Start Num: 6

Candidate Starts for Chadwick_76:

(4, 44960), (5, 44945), (Start: 6 @44906 has 9 MA's), (Start: 8 @44900 has 27 MA's), (13, 44861), (14, 44810), (16, 44789), (17, 44747), (21, 44702), (23, 44675),

Gene: Conspiracy_73 Start: 44853, Stop: 44596, Start Num: 7

Candidate Starts for Conspiracy_73:

(Start: 7 @44853 has 2 MA's), (Start: 8 @44850 has 27 MA's), (13, 44811), (14, 44760), (16, 44739), (17, 44697), (19, 44673), (20, 44670), (21, 44652), (22, 44634),

Gene: Coog_69 Start: 44613, Stop: 44362, Start Num: 8

Candidate Starts for Coog_69:

(Start: 7 @44616 has 2 MA's), (Start: 8 @44613 has 27 MA's), (13, 44574), (17, 44460), (21, 44415),

Gene: Cuco_71 Start: 44473, Stop: 44222, Start Num: 8

Candidate Starts for Cuco_71:

(Start: 7 @44476 has 2 MA's), (Start: 8 @44473 has 27 MA's), (13, 44434), (17, 44320), (21, 44275),

Gene: Danforth_88 Start: 47246, Stop: 46980, Start Num: 9

Candidate Starts for Danforth_88:

(Start: 9 @47246 has 10 MA's), (16, 47126), (21, 47039),

Gene: Discoknowium_70 Start: 44367, Stop: 44113, Start Num: 8

Candidate Starts for Discoknowium_70:

(Start: 7 @44370 has 2 MA's), (Start: 8 @44367 has 27 MA's), (13, 44328), (14, 44277), (16, 44256), (17, 44214), (19, 44190), (20, 44187), (21, 44169), (22, 44151),

Gene: Dixon_86 Start: 46699, Stop: 46436, Start Num: 9

Candidate Starts for Dixon_86:

(3, 46774), (Start: 6 @46708 has 9 MA's), (Start: 9 @46699 has 10 MA's), (10, 46693), (16, 46579), (21, 46492),

Gene: Dublin_72 Start: 44745, Stop: 44494, Start Num: 8

Candidate Starts for Dublin_72:

(Start: 7 @44748 has 2 MA's), (Start: 8 @44745 has 27 MA's), (13, 44706), (17, 44592), (21, 44547),

Gene: ElTiger69_78 Start: 45851, Stop: 45588, Start Num: 6

Candidate Starts for ElTiger69_78:

(Start: 6 @45851 has 9 MA's), (Start: 8 @45845 has 27 MA's), (11, 45830), (13, 45806), (14, 45755), (16, 45734), (17, 45692), (20, 45665), (21, 45647), (23, 45620),

Gene: Expelliarmus_84 Start: 46913, Stop: 46650, Start Num: 9

Candidate Starts for Expelliarmus_84:

(3, 46988), (Start: 6 @46922 has 9 MA's), (Start: 9 @46913 has 10 MA's), (10, 46907), (16, 46793), (21, 46706),

Gene: ForGetIt_73 Start: 44875, Stop: 44621, Start Num: 8

Candidate Starts for ForGetIt_73:

(Start: 7 @44878 has 2 MA's), (Start: 8 @44875 has 27 MA's), (13, 44836), (14, 44785), (16, 44764), (17, 44722), (19, 44698), (20, 44695), (21, 44677), (22, 44659),

Gene: George_67 Start: 44536, Stop: 44282, Start Num: 8

Candidate Starts for George_67:

(Start: 7 @44539 has 2 MA's), (Start: 8 @44536 has 27 MA's), (13, 44497), (14, 44446), (17, 44383), (21, 44338), (22, 44320),

Gene: Ghouboy_72 Start: 44840, Stop: 44589, Start Num: 8

Candidate Starts for Ghouboy_72:

(2, 44933), (Start: 8 @44840 has 27 MA's), (13, 44801), (17, 44687), (21, 44642),

Gene: Groundhog_85 Start: 46978, Stop: 46706, Start Num: 6

Candidate Starts for Groundhog_85:

(3, 47044), (Start: 6 @46978 has 9 MA's), (Start: 9 @46969 has 10 MA's), (10, 46963), (16, 46849), (21, 46762),

Gene: HuhtaEnerson15_70 Start: 44451, Stop: 44197, Start Num: 8

Candidate Starts for HuhtaEnerson15_70:

(Start: 7 @44454 has 2 MA's), (Start: 8 @44451 has 27 MA's), (13, 44412), (14, 44361), (17, 44298), (21, 44253), (22, 44235),

Gene: Jabiru_74 Start: 45017, Stop: 44751, Start Num: 6

Candidate Starts for Jabiru_74:

(1, 45230), (Start: 6 @45017 has 9 MA's), (Start: 8 @45011 has 27 MA's), (11, 44996), (13, 44972), (14, 44921), (16, 44900), (17, 44858), (18, 44837), (21, 44813), (23, 44786),

Gene: Jovo_72 Start: 45134, Stop: 44877, Start Num: 7

Candidate Starts for Jovo_72:

(Start: 7 @45134 has 2 MA's), (Start: 8 @45131 has 27 MA's), (13, 45092), (14, 45041), (16, 45020), (17, 44978), (19, 44954), (20, 44951), (21, 44933), (22, 44915),

Gene: Lev2_73 Start: 44763, Stop: 44509, Start Num: 8

Candidate Starts for Lev2_73:

(Start: 7 @44766 has 2 MA's), (Start: 8 @44763 has 27 MA's), (13, 44724), (14, 44673), (16, 44652), (17, 44610), (19, 44586), (20, 44583), (21, 44565), (22, 44547),

Gene: LittleCherry_71 Start: 44321, Stop: 44067, Start Num: 8

Candidate Starts for LittleCherry_71:

(Start: 7 @44324 has 2 MA's), (Start: 8 @44321 has 27 MA's), (13, 44282), (14, 44231), (17, 44168), (21, 44123), (22, 44105),

Gene: MarysWell_72 Start: 44988, Stop: 44737, Start Num: 8

Candidate Starts for MarysWell_72:

(Start: 7 @44991 has 2 MA's), (Start: 8 @44988 has 27 MA's), (13, 44949), (17, 44835), (21, 44790),

Gene: Micasa_70 Start: 44710, Stop: 44459, Start Num: 8

Candidate Starts for Micasa_70:

(Start: 7 @44713 has 2 MA's), (Start: 8 @44710 has 27 MA's), (13, 44671), (17, 44557), (21, 44512),

Gene: Midas2_69 Start: 44613, Stop: 44362, Start Num: 8

Candidate Starts for Midas2_69:

(Start: 7 @44616 has 2 MA's), (Start: 8 @44613 has 27 MA's), (13, 44574), (17, 44460), (21, 44415),

Gene: Milcery_72 Start: 44504, Stop: 44250, Start Num: 8

Candidate Starts for Milcery_72:

(Start: 7 @44507 has 2 MA's), (Start: 8 @44504 has 27 MA's), (13, 44465), (14, 44414), (17, 44351), (21, 44306), (22, 44288),

Gene: Naca_75 Start: 45899, Stop: 45639, Start Num: 8

Candidate Starts for Naca_75:

(Start: 6 @45905 has 9 MA's), (Start: 8 @45899 has 27 MA's), (13, 45860), (16, 45788), (17, 45746), (21, 45701), (23, 45674),

Gene: NearlyHeadless_88 Start: 46983, Stop: 46720, Start Num: 9

Candidate Starts for NearlyHeadless_88:

(Start: 9 @46983 has 10 MA's), (16, 46863), (21, 46776),

Gene: PetterN_80 Start: 45692, Stop: 45426, Start Num: 6

Candidate Starts for PetterN_80:

(Start: 6 @45692 has 9 MA's), (Start: 8 @45686 has 27 MA's), (13, 45647), (14, 45596), (16, 45575), (17, 45533), (21, 45488), (23, 45461),

Gene: Phillis_84 Start: 45993, Stop: 45736, Start Num: 9

Candidate Starts for Phillis_84:

(Start: 6 @46002 has 9 MA's), (Start: 9 @45993 has 10 MA's), (12, 45960), (15, 45906), (16, 45879), (19, 45813), (21, 45792),

Gene: Phlorence_71 Start: 44510, Stop: 44256, Start Num: 8

Candidate Starts for Phlorence_71:

(Start: 7 @44513 has 2 MA's), (Start: 8 @44510 has 27 MA's), (13, 44471), (14, 44420), (16, 44399), (17, 44357), (19, 44333), (20, 44330), (21, 44312), (22, 44294),

Gene: PickleBack_73 Start: 44685, Stop: 44431, Start Num: 8

Candidate Starts for PickleBack_73:

(Start: 7 @44688 has 2 MA's), (Start: 8 @44685 has 27 MA's), (13, 44646), (14, 44595), (16, 44574), (17, 44532), (19, 44508), (20, 44505), (21, 44487), (22, 44469),

Gene: Roary_89 Start: 47171, Stop: 46908, Start Num: 9

Candidate Starts for Roary_89:

(3, 47246), (Start: 6 @47180 has 9 MA's), (Start: 9 @47171 has 10 MA's), (10, 47165), (16, 47051), (21, 46964),

Gene: Saintus_83 Start: 43848, Stop: 43582, Start Num: 9

Candidate Starts for Saintus_83:

(Start: 9 @43848 has 10 MA's), (16, 43728), (21, 43641),

Gene: Scorpia_75 Start: 45263, Stop: 44997, Start Num: 6

Candidate Starts for Scorpia_75:

(Start: 6 @45263 has 9 MA's), (Start: 8 @45257 has 27 MA's), (13, 45218), (14, 45167), (16, 45146), (17, 45104), (21, 45059), (23, 45032),

Gene: Smeadley_87 Start: 47035, Stop: 46772, Start Num: 9

Candidate Starts for Smeadley_87:

(3, 47110), (Start: 6 @47044 has 9 MA's), (Start: 9 @47035 has 10 MA's), (10, 47029), (16, 46915), (21, 46828),

Gene: Stephig9_86 Start: 47003, Stop: 46737, Start Num: 9

Candidate Starts for Stephig9_86:

(Start: 9 @47003 has 10 MA's), (16, 46883), (21, 46796),

Gene: Swirley_72 Start: 44654, Stop: 44400, Start Num: 8

Candidate Starts for Swirley_72:

(Start: 7 @44657 has 2 MA's), (Start: 8 @44654 has 27 MA's), (13, 44615), (14, 44564), (17, 44501), (21, 44456),

Gene: SydNat_72 Start: 44849, Stop: 44598, Start Num: 8

Candidate Starts for SydNat_72:

(2, 44942), (Start: 8 @44849 has 27 MA's), (13, 44810), (17, 44696), (21, 44651),

Gene: Tarynearal_71 Start: 44490, Stop: 44236, Start Num: 8

Candidate Starts for Tarynearal_71:

(Start: 7 @44493 has 2 MA's), (Start: 8 @44490 has 27 MA's), (13, 44451), (14, 44400), (17, 44337), (21, 44292), (22, 44274),

Gene: Theia_71 Start: 44972, Stop: 44721, Start Num: 8

Candidate Starts for Theia_71:

(Start: 6 @44978 has 9 MA's), (Start: 8 @44972 has 27 MA's), (13, 44933), (17, 44819), (21, 44774),

Gene: Tiger_71 Start: 44431, Stop: 44177, Start Num: 8

Candidate Starts for Tiger_71:

(Start: 7 @44434 has 2 MA's), (Start: 8 @44431 has 27 MA's), (13, 44392), (14, 44341), (16, 44320), (17, 44278), (19, 44254), (20, 44251), (21, 44233), (22, 44215),

Gene: UnionJack_76 Start: 44927, Stop: 44661, Start Num: 6

Candidate Starts for UnionJack_76:

(1, 45140), (Start: 6 @44927 has 9 MA's), (Start: 8 @44921 has 27 MA's), (13, 44882), (14, 44831), (16, 44810), (17, 44768), (20, 44741), (21, 44723), (23, 44696),

Gene: Zolita_71 Start: 44832, Stop: 44581, Start Num: 8

Candidate Starts for Zolita_71:

(2, 44925), (Start: 8 @44832 has 27 MA's), (13, 44793), (17, 44679), (21, 44634),