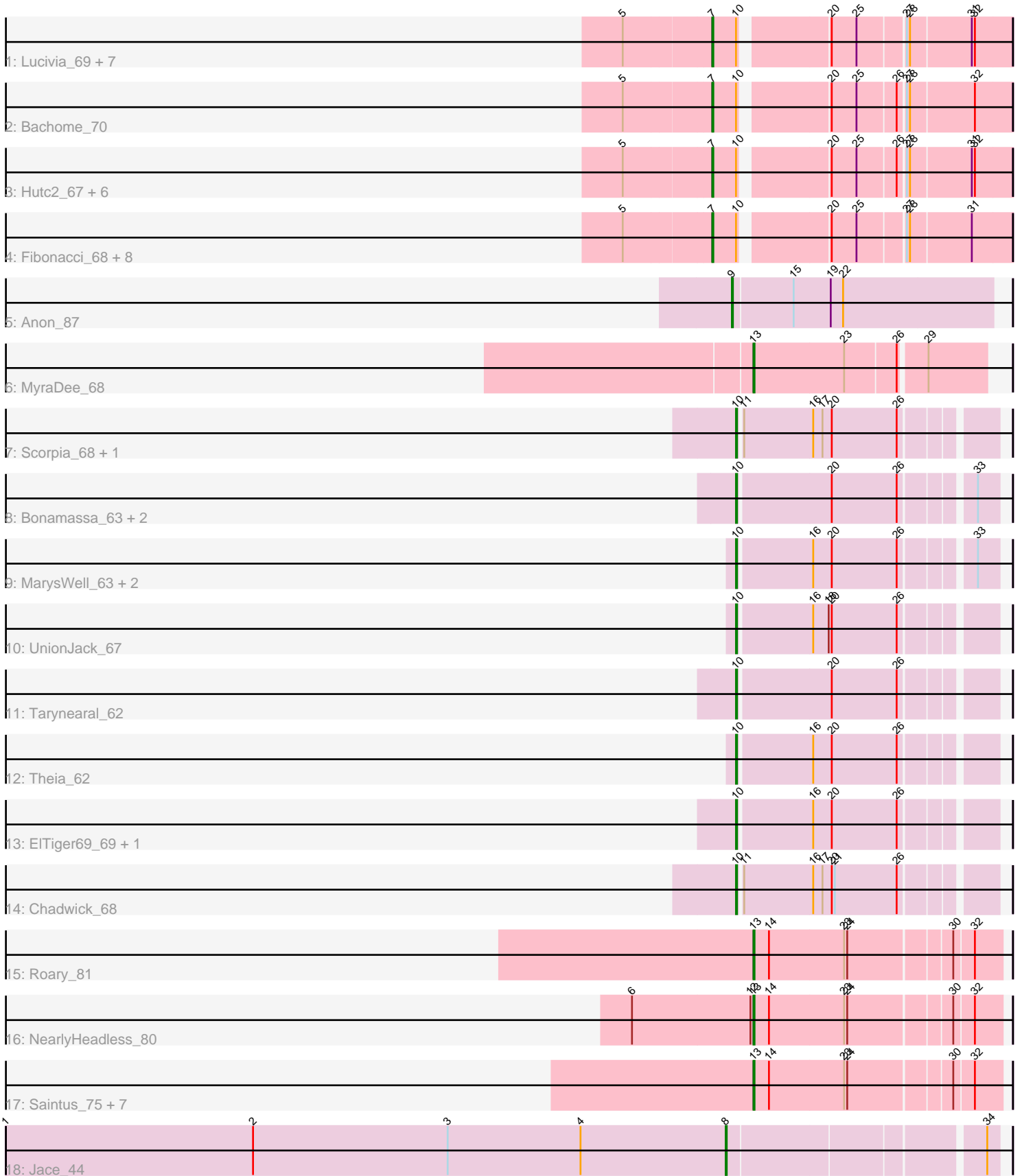


Pham 163661



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 163661 Report

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

Pham number 163661 has 52 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Lucivia_69, Orange_67, Flaverint_69, Bowtie_69, Sham4_68, Timothy_68, Munch_68, Aneem_69
- Track 2 : Bachome_70
- Track 3 : Hutc2_67, Petersenfast_66, Insomnia_67, Jabith_69, TinyTimmy_66, Bud_67, Joselito_69
- Track 4 : Fibonacci_68, MaCh_68, Mulciber_67, Salz_67, Snape_68, Ebony_68, Gilberta_69, Et2Brutus_67, Mabel_68
- Track 5 : Anon_87
- Track 6 : MyraDee_68
- Track 7 : Scorpia_68, PetterN_72
- Track 8 : Bonamassa_63, George_60, Milcery_63
- Track 9 : MarysWell_63, Dublin_63, Micasa_61
- Track 10 : UnionJack_67
- Track 11 : Tarynearal_62
- Track 12 : Theia_62
- Track 13 : EITiger69_69, Naca_66
- Track 14 : Chadwick_68
- Track 15 : Roary_81
- Track 16 : NearlyHeadless_80
- Track 17 : Saintus_75, Groundhog_77, Expelliarmus_76, Astro_79, Dixon_78, Stephig9_78, Danforth_80, Smeadley_79
- Track 18 : Jace_44

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

The start number called the most often in the published annotations is 7, it was called in 22 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aneem_69, Bachome_70, Bowtie_69, Bud_67, Ebony_68, Et2Brutus_67, Fibonacci_68, Flaverint_69, Gilberta_69, Hutc2_67, Insomnia_67, Jabith_69, Joselito_69, Lucivia_69, MaCh_68, Mabel_68, Mulciber_67, Munch_68, Orange_67, Petersenfast_66, Salz_67, Sham4_68, Snape_68, Timothy_68, TinyTimmy_66,

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

-

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

- Anon_87, Astro_79, Bonamassa_63, Chadwick_68, Danforth_80, Dixon_78, Dublin_63, ElTiger69_69, Expelliarmus_76, George_60, Groundhog_77, Jace_44, MarysWell_63, Micasa_61, Milcery_63, MyraDee_68, Naca_66, NearlyHeadless_80, PetterN_72, Roary_81, Saintus_75, Scorpia_68, Smeadley_79, Stepfig9_78, Tarynearal_62, Theia_62, UnionJack_67,

Summary by start number:

Start 7:

- Found in 25 of 52 (48.1%) of genes in pham
- Manual Annotations of this start: 22 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aneem_69 (A11), Bachome_70 (A11), Bowtie_69 (A11), Bud_67 (A11), Ebony_68 (A11), Et2Brutus_67 (A11), Fibonacci_68 (A11), Flaverint_69 (A11), Gilberta_69 (A11), Hutc2_67 (A11), Insomnia_67 (A11), Jabith_69 (A11), Joselito_69 (A11), Lucivia_69 (A11), MaCh_68 (A11), Mabel_68 (A11), Mulciber_67 (A11), Munch_68 (A11), Orange_67 (A11), Petersenfast_66 (A11), Salz_67 (A11), Sham4_68 (A11), Snape_68 (A11), Timothy_68 (A11), TinyTimmy_66 (A11),

Start 8:

- Found in 1 of 52 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jace_44 (singleton),

Start 9:

- Found in 1 of 52 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anon_87 (A15),

Start 10:

- Found in 39 of 52 (75.0%) of genes in pham
- Manual Annotations of this start: 13 of 48
- Called 35.9% of time when present
- Phage (with cluster) where this start called: Bonamassa_63 (A5), Chadwick_68 (A5), Dublin_63 (A5), ElTiger69_69 (A5), George_60 (A5), MarysWell_63 (A5), Micasa_61 (A5), Milcery_63 (A5), Naca_66 (A5), PetterN_72 (A5), Scorpia_68 (A5), Tarynearal_62 (A5), Theia_62 (A5), UnionJack_67 (A5),

Start 13:

- Found in 11 of 52 (21.2%) of genes in pham
- Manual Annotations of this start: 11 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Astro_79 (A8), Danforth_80 (A8), Dixon_78 (A8), Expelliarmus_76 (A8), Groundhog_77 (A8), MyraDee_68 (A18), NearlyHeadless_80 (A8), Roary_81 (A8), Saintus_75 (A8), Smeadley_79 (A8), Stepfig9_78 (A8),

Summary by clusters:

There are 6 clusters represented in this pham: A15, singleton, A11, A18, A5, A8,

Info for manual annotations of cluster A11:

- Start number 7 was manually annotated 22 times for cluster A11.

Info for manual annotations of cluster A15:

- Start number 9 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A18:

- Start number 13 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A5:

- Start number 10 was manually annotated 13 times for cluster A5.

Info for manual annotations of cluster A8:

- Start number 13 was manually annotated 10 times for cluster A8.

Gene Information:

Gene: Aneem_69 Start: 41746, Stop: 41486, Start Num: 7

Candidate Starts for Aneem_69:

(5, 41827), (Start: 7 @41746 has 22 MA's), (Start: 10 @41725 has 13 MA's), (20, 41650), (25, 41626), (27, 41584), (28, 41581), (31, 41524), (32, 41521),

Gene: Anon_87 Start: 47141, Stop: 46893, Start Num: 9

Candidate Starts for Anon_87:

(Start: 9 @47141 has 1 MA's), (15, 47084), (19, 47048), (22, 47036),

Gene: Astro_79 Start: 43758, Stop: 43531, Start Num: 13

Candidate Starts for Astro_79:

(Start: 13 @43758 has 11 MA's), (14, 43743), (23, 43671), (24, 43668), (30, 43575), (32, 43557),

Gene: Bachome_70 Start: 41742, Stop: 41482, Start Num: 7

Candidate Starts for Bachome_70:

(5, 41823), (Start: 7 @41742 has 22 MA's), (Start: 10 @41721 has 13 MA's), (20, 41646), (25, 41622), (26, 41586), (27, 41580), (28, 41577), (32, 41517),

Gene: Bonamassa_63 Start: 41386, Stop: 41156, Start Num: 10

Candidate Starts for Bonamassa_63:

(Start: 10 @41386 has 13 MA's), (20, 41299), (26, 41236), (33, 41176),

Gene: Bowtie_69 Start: 41753, Stop: 41493, Start Num: 7

Candidate Starts for Bowtie_69:

(5, 41834), (Start: 7 @41753 has 22 MA's), (Start: 10 @41732 has 13 MA's), (20, 41657), (25, 41633), (27, 41591), (28, 41588), (31, 41531), (32, 41528),

Gene: Bud_67 Start: 41300, Stop: 41040, Start Num: 7

Candidate Starts for Bud_67:

(5, 41381), (Start: 7 @41300 has 22 MA's), (Start: 10 @41279 has 13 MA's), (20, 41204), (25, 41180), (26, 41144), (27, 41138), (28, 41135), (31, 41078), (32, 41075),

Gene: Chadwick_68 Start: 41682, Stop: 41452, Start Num: 10

Candidate Starts for Chadwick_68:

(Start: 10 @41682 has 13 MA's), (11, 41679), (16, 41613), (17, 41604), (20, 41595), (21, 41592), (26, 41532),

Gene: Danforth_80 Start: 43835, Stop: 43608, Start Num: 13

Candidate Starts for Danforth_80:

(Start: 13 @43835 has 11 MA's), (14, 43820), (23, 43748), (24, 43745), (30, 43652), (32, 43634),

Gene: Dixon_78 Start: 43317, Stop: 43090, Start Num: 13

Candidate Starts for Dixon_78:

(Start: 13 @43317 has 11 MA's), (14, 43302), (23, 43230), (24, 43227), (30, 43134), (32, 43116),

Gene: Dublin_63 Start: 41343, Stop: 41113, Start Num: 10

Candidate Starts for Dublin_63:

(Start: 10 @41343 has 13 MA's), (16, 41274), (20, 41256), (26, 41193), (33, 41133),

Gene: Ebony_68 Start: 41317, Stop: 41057, Start Num: 7

Candidate Starts for Ebony_68:

(5, 41398), (Start: 7 @41317 has 22 MA's), (Start: 10 @41296 has 13 MA's), (20, 41221), (25, 41197), (27, 41155), (28, 41152), (31, 41095),

Gene: EITiger69_69 Start: 42424, Stop: 42194, Start Num: 10

Candidate Starts for EITiger69_69:

(Start: 10 @42424 has 13 MA's), (16, 42355), (20, 42337), (26, 42274),

Gene: Et2Brutus_67 Start: 41280, Stop: 41020, Start Num: 7

Candidate Starts for Et2Brutus_67:

(5, 41361), (Start: 7 @41280 has 22 MA's), (Start: 10 @41259 has 13 MA's), (20, 41184), (25, 41160), (27, 41118), (28, 41115), (31, 41058),

Gene: Expelliarmus_76 Start: 43531, Stop: 43304, Start Num: 13

Candidate Starts for Expelliarmus_76:

(Start: 13 @43531 has 11 MA's), (14, 43516), (23, 43444), (24, 43441), (30, 43348), (32, 43330),

Gene: Fibonacci_68 Start: 41286, Stop: 41026, Start Num: 7

Candidate Starts for Fibonacci_68:

(5, 41367), (Start: 7 @41286 has 22 MA's), (Start: 10 @41265 has 13 MA's), (20, 41190), (25, 41166), (27, 41124), (28, 41121), (31, 41064),

Gene: Flaverint_69 Start: 41744, Stop: 41484, Start Num: 7

Candidate Starts for Flaverint_69:

(5, 41825), (Start: 7 @41744 has 22 MA's), (Start: 10 @41723 has 13 MA's), (20, 41648), (25, 41624), (27, 41582), (28, 41579), (31, 41522), (32, 41519),

Gene: George_60 Start: 41130, Stop: 40900, Start Num: 10

Candidate Starts for George_60:

(Start: 10 @41130 has 13 MA's), (20, 41043), (26, 40980), (33, 40920),

Gene: Gilberta_69 Start: 41737, Stop: 41477, Start Num: 7

Candidate Starts for Gilberta_69:

(5, 41818), (Start: 7 @41737 has 22 MA's), (Start: 10 @41716 has 13 MA's), (20, 41641), (25, 41617), (27, 41575), (28, 41572), (31, 41515),

Gene: Groundhog_77 Start: 43587, Stop: 43366, Start Num: 13

Candidate Starts for Groundhog_77:

(Start: 13 @43587 has 11 MA's), (14, 43572), (23, 43500), (24, 43497), (30, 43404), (32, 43386),

Gene: Hutc2_67 Start: 41286, Stop: 41026, Start Num: 7

Candidate Starts for Hutc2_67:

(5, 41367), (Start: 7 @41286 has 22 MA's), (Start: 10 @41265 has 13 MA's), (20, 41190), (25, 41166), (26, 41130), (27, 41124), (28, 41121), (31, 41064), (32, 41061),

Gene: Insomnia_67 Start: 41725, Stop: 41465, Start Num: 7

Candidate Starts for Insomnia_67:

(5, 41806), (Start: 7 @41725 has 22 MA's), (Start: 10 @41704 has 13 MA's), (20, 41629), (25, 41605), (26, 41569), (27, 41563), (28, 41560), (31, 41503), (32, 41500),

Gene: Jabith_69 Start: 41742, Stop: 41482, Start Num: 7

Candidate Starts for Jabith_69:

(5, 41823), (Start: 7 @41742 has 22 MA's), (Start: 10 @41721 has 13 MA's), (20, 41646), (25, 41622), (26, 41586), (27, 41580), (28, 41577), (31, 41520), (32, 41517),

Gene: Jace_44 Start: 31248, Stop: 31490, Start Num: 8

Candidate Starts for Jace_44:

(1, 30549), (2, 30789), (3, 30978), (4, 31107), (Start: 8 @31248 has 1 MA's), (34, 31479),

Gene: Joselito_69 Start: 41762, Stop: 41502, Start Num: 7

Candidate Starts for Joselito_69:

(5, 41843), (Start: 7 @41762 has 22 MA's), (Start: 10 @41741 has 13 MA's), (20, 41666), (25, 41642), (26, 41606), (27, 41600), (28, 41597), (31, 41540), (32, 41537),

Gene: Lucivia_69 Start: 41795, Stop: 41535, Start Num: 7

Candidate Starts for Lucivia_69:

(5, 41876), (Start: 7 @41795 has 22 MA's), (Start: 10 @41774 has 13 MA's), (20, 41699), (25, 41675), (27, 41633), (28, 41630), (31, 41573), (32, 41570),

Gene: MaCh_68 Start: 41741, Stop: 41481, Start Num: 7

Candidate Starts for MaCh_68:

(5, 41822), (Start: 7 @41741 has 22 MA's), (Start: 10 @41720 has 13 MA's), (20, 41645), (25, 41621), (27, 41579), (28, 41576), (31, 41519),

Gene: Mabel_68 Start: 41742, Stop: 41482, Start Num: 7

Candidate Starts for Mabel_68:

(5, 41823), (Start: 7 @41742 has 22 MA's), (Start: 10 @41721 has 13 MA's), (20, 41646), (25, 41622), (27, 41580), (28, 41577), (31, 41520),

Gene: MarysWell_63 Start: 41586, Stop: 41356, Start Num: 10

Candidate Starts for MarysWell_63:

(Start: 10 @41586 has 13 MA's), (16, 41517), (20, 41499), (26, 41436), (33, 41376),

Gene: Micasa_61 Start: 41308, Stop: 41078, Start Num: 10

Candidate Starts for Micasa_61:

(Start: 10 @41308 has 13 MA's), (16, 41239), (20, 41221), (26, 41158), (33, 41098),

Gene: Milcery_63 Start: 41098, Stop: 40868, Start Num: 10

Candidate Starts for Milcery_63:

(Start: 10 @41098 has 13 MA's), (20, 41011), (26, 40948), (33, 40888),

Gene: Mulciber_67 Start: 41283, Stop: 41023, Start Num: 7

Candidate Starts for Mulciber_67:

(5, 41364), (Start: 7 @41283 has 22 MA's), (Start: 10 @41262 has 13 MA's), (20, 41187), (25, 41163), (27, 41121), (28, 41118), (31, 41061),

Gene: Munch_68 Start: 41746, Stop: 41486, Start Num: 7

Candidate Starts for Munch_68:

(5, 41827), (Start: 7 @41746 has 22 MA's), (Start: 10 @41725 has 13 MA's), (20, 41650), (25, 41626), (27, 41584), (28, 41581), (31, 41524), (32, 41521),

Gene: MyraDee_68 Start: 40150, Stop: 39935, Start Num: 13

Candidate Starts for MyraDee_68:

(Start: 13 @40150 has 11 MA's), (23, 40063), (26, 40015), (29, 39991),

Gene: Naca_66 Start: 42496, Stop: 42266, Start Num: 10

Candidate Starts for Naca_66:

(Start: 10 @42496 has 13 MA's), (16, 42427), (20, 42409), (26, 42346),

Gene: NearlyHeadless_80 Start: 43601, Stop: 43374, Start Num: 13

Candidate Starts for NearlyHeadless_80:

(6, 43718), (12, 43604), (Start: 13 @43601 has 11 MA's), (14, 43586), (23, 43514), (24, 43511), (30, 43418), (32, 43400),

Gene: Orange_67 Start: 41295, Stop: 41035, Start Num: 7

Candidate Starts for Orange_67:

(5, 41376), (Start: 7 @41295 has 22 MA's), (Start: 10 @41274 has 13 MA's), (20, 41199), (25, 41175), (27, 41133), (28, 41130), (31, 41073), (32, 41070),

Gene: Petersenfast_66 Start: 41294, Stop: 41034, Start Num: 7

Candidate Starts for Petersenfast_66:

(5, 41375), (Start: 7 @41294 has 22 MA's), (Start: 10 @41273 has 13 MA's), (20, 41198), (25, 41174), (26, 41138), (27, 41132), (28, 41129), (31, 41072), (32, 41069),

Gene: PetterN_72 Start: 42468, Stop: 42238, Start Num: 10

Candidate Starts for PetterN_72:

(Start: 10 @42468 has 13 MA's), (11, 42465), (16, 42399), (17, 42390), (20, 42381), (26, 42318),

Gene: Roary_81 Start: 43837, Stop: 43610, Start Num: 13

Candidate Starts for Roary_81:

(Start: 13 @43837 has 11 MA's), (14, 43822), (23, 43750), (24, 43747), (30, 43654), (32, 43636),

Gene: Saintus_75 Start: 40485, Stop: 40258, Start Num: 13

Candidate Starts for Saintus_75:

(Start: 13 @40485 has 11 MA's), (14, 40470), (23, 40398), (24, 40395), (30, 40302), (32, 40284),

Gene: Salz_67 Start: 41209, Stop: 40949, Start Num: 7

Candidate Starts for Salz_67:

(5, 41290), (Start: 7 @41209 has 22 MA's), (Start: 10 @41188 has 13 MA's), (20, 41113), (25, 41089), (27, 41047), (28, 41044), (31, 40987),

Gene: Scorpia_68 Start: 42039, Stop: 41809, Start Num: 10

Candidate Starts for Scorpia_68:

(Start: 10 @42039 has 13 MA's), (11, 42036), (16, 41970), (17, 41961), (20, 41952), (26, 41889),

Gene: Sham4_68 Start: 41293, Stop: 41033, Start Num: 7

Candidate Starts for Sham4_68:

(5, 41374), (Start: 7 @41293 has 22 MA's), (Start: 10 @41272 has 13 MA's), (20, 41197), (25, 41173), (27, 41131), (28, 41128), (31, 41071), (32, 41068),

Gene: Smeadley_79 Start: 43653, Stop: 43426, Start Num: 13

Candidate Starts for Smeadley_79:

(Start: 13 @43653 has 11 MA's), (14, 43638), (23, 43566), (24, 43563), (30, 43470), (32, 43452),

Gene: Snape_68 Start: 41285, Stop: 41025, Start Num: 7

Candidate Starts for Snape_68:

(5, 41366), (Start: 7 @41285 has 22 MA's), (Start: 10 @41264 has 13 MA's), (20, 41189), (25, 41165), (27, 41123), (28, 41120), (31, 41063),

Gene: Stephig9_78 Start: 43592, Stop: 43365, Start Num: 13

Candidate Starts for Stephig9_78:

(Start: 13 @43592 has 11 MA's), (14, 43577), (23, 43505), (24, 43502), (30, 43409), (32, 43391),

Gene: Tarynearal_62 Start: 41084, Stop: 40854, Start Num: 10

Candidate Starts for Tarynearal_62:

(Start: 10 @41084 has 13 MA's), (20, 40997), (26, 40934),

Gene: Theia_62 Start: 41570, Stop: 41340, Start Num: 10

Candidate Starts for Theia_62:

(Start: 10 @41570 has 13 MA's), (16, 41501), (20, 41483), (26, 41420),

Gene: Timothy_68 Start: 41262, Stop: 41002, Start Num: 7

Candidate Starts for Timothy_68:

(5, 41343), (Start: 7 @41262 has 22 MA's), (Start: 10 @41241 has 13 MA's), (20, 41166), (25, 41142), (27, 41100), (28, 41097), (31, 41040), (32, 41037),

Gene: TinyTimmy_66 Start: 41255, Stop: 40995, Start Num: 7

Candidate Starts for TinyTimmy_66:

(5, 41336), (Start: 7 @41255 has 22 MA's), (Start: 10 @41234 has 13 MA's), (20, 41159), (25, 41135), (26, 41099), (27, 41093), (28, 41090), (31, 41033), (32, 41030),

Gene: UnionJack_67 Start: 41521, Stop: 41291, Start Num: 10

Candidate Starts for UnionJack_67:

(Start: 10 @41521 has 13 MA's), (16, 41452), (18, 41437), (20, 41434), (26, 41371),