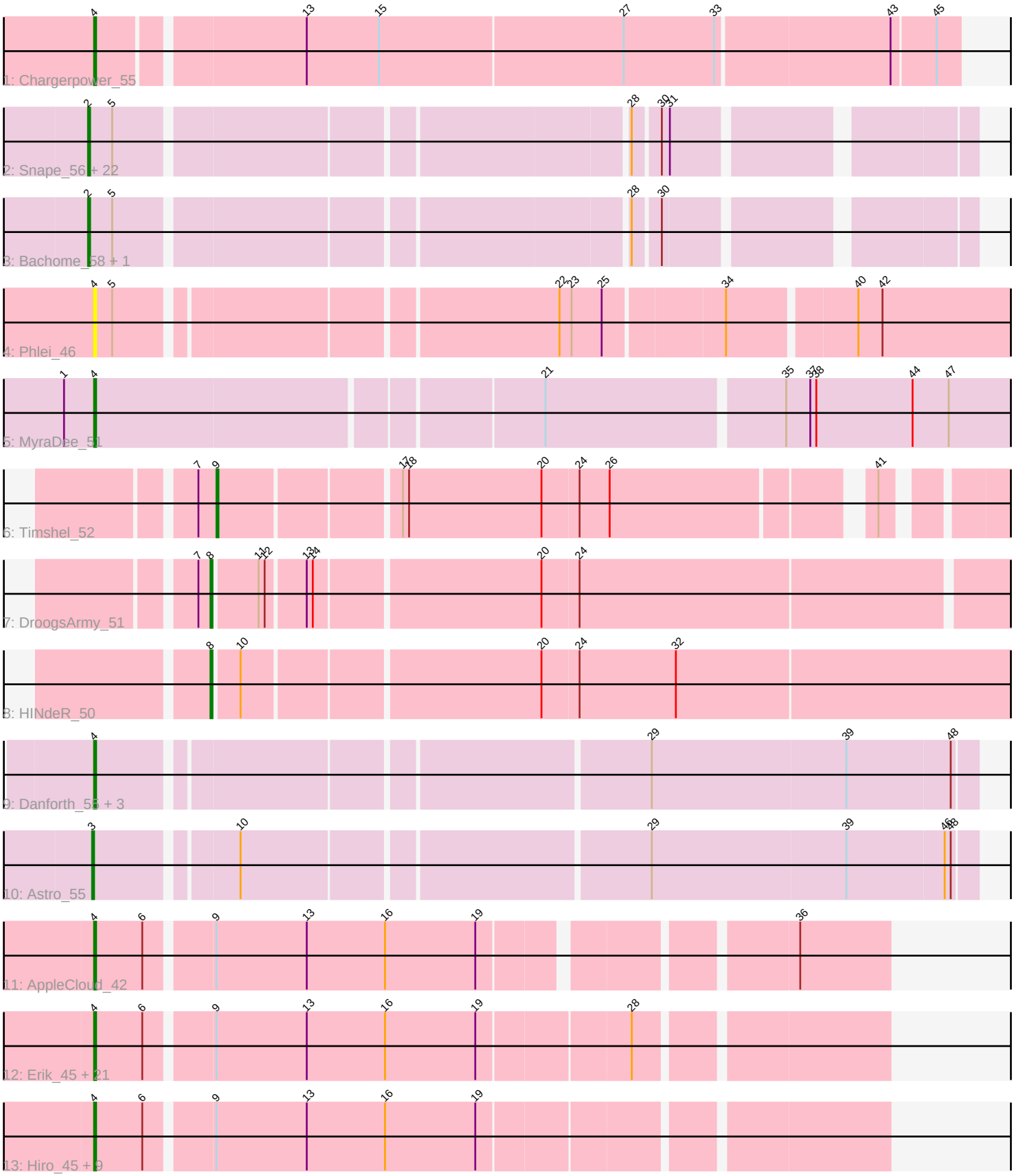
Pham 171438


1: Chargerpower_55
2: Snape_56 + 22
3: Bachome_58 + 1
4: Phlei_46
5: MyraDee_51
6: Timshel_52
7: DroogsArmy_51
8: HINdeR_50
9: Danforth_53 + 3
10: Astro_55
11: AppleCloud_42
12: Erik_45 + 21
13: Hiro_45 + 9

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 171438 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171438 has 69 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Chargerpower_55
• Track 2 : Snape_56, Ebony_56, TinyTimmy_55, Aneem_57, Jabith_57, Fibonacci_56, Gilberta_57, Bud_56, Flaverint_57, Joselito_57, Salz_55, Timothy_56, Lucivia_57, Munch_57, Orange_56, Petersenfast_55, Et2Brutus_55, Bowtie_57, Hutc2_56, Insomnia_57, Mabel_56, Sham4_56, Mulciber_56
• Track 3 : Bachome_58, MaCh_57
• Track 4 : Phlei_46
• Track 5 : MyraDee_51
• Track 6 : Timshel_52
• Track 7 : DroogsArmy_51
• Track 8 : HINdeR_50
• Track 9 : Danforth_55, Groundhog_54, NearlyHeadless_55, Roary_56
• Track 10 : Astro_55
• Track 11 : AppleCloud_42
• Track 12 : Erik_45, UhSalsa_45, Gollum_45, Nancinator_45, Espica_45, Shuman_45, Alatin_44, CosmicSans_45, TWAMP_45, Bradshaw_45, Rasputin_45, RexFury_44, Krishelle_45, Phrankenstein_45, StCroix_44, Naiad_44, RER2_38, Lillie_45, Natosaleda_44, Rhodalysa_45, Belenaria_45, Swann_45
• Track 13 : Hiro_45, Yogi_44, Alpacados_44, Jester_44, Yoncess_44, Harlequin_44, PhailMary_44, Bonanza_45, Bryce_44, BobbyDazzler_45

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

The start number called the most often in the published annotations is 4, it was called in 38 of the 65 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alatin_44, Alpacados_44, AppleCloud_42, Belenaria_45, BobbyDazzler_45, Bonanza_45, Bradshaw_45, Bryce_44, Chargerpower_55, CosmicSans_45, Danforth_55, Erik_45, Espica_45, Gollum_45, Groundhog_54, Harlequin_44, Hiro_45, Jester_44, Krishelle_45, Lillie_45, MyraDee_51, Naiad_44, Nancinator_45, Natosaleda_44, NearlyHeadless_55, PhailMary_44, Phlei_46, Phrankenstein_45, RER2_38, Rasputin_45, RexFury_44, Rhodalysa_45, Roary_56, Shuman_45, StCroix_44, Swann_45, TWAMP_45, UhSalsa_45, Yogi_44, Yoncess_44,

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

Genes that do not have the "Most Annotated" start:
• Aneem_57, Astro_55, Bachome_58, Bowtie_57, Bud_56, DroogsArmy_51, Ebony_56, Et2Brutus_55, Fibonacci_56, Flaverint_57, Gilberta_57, HINdeR_50, Hutc2_56, Insomnia_57, Jabith_57, Joselito_57, Lucivia_57, MaCh_57, Mabel_56, Mulciber_56, Munch_57, Orange_56, Petersenfast_55, Salz_55, Sham4_56, Snape_56, Timothy_56, Timshel_52, TinyTimmy_55,

Summary by start number:

Start 2:
• Found in 25 of 69 (36.2%) of genes in pham
• Manual Annotations of this start: 23 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aneem_57 (A11), Bachome_58 (A11), Bowtie_57 (A11), Bud_56 (A11), Ebony_56 (A11), Et2Brutus_55 (A11), Fibonacci_56 (A11), Flaverint_57 (A11), Gilberta_57 (A11), Hutc2_56 (A11), Insomnia_57 (A11), Jabith_57 (A11), Joselito_57 (A11), Lucivia_57 (A11), MaCh_57 (A11), Mabel_56 (A11), Mulciber_56 (A11), Munch_57 (A11), Orange_56 (A11), Petersenfast_55 (A11), Salz_55 (A11), Sham4_56 (A11), Snape_56 (A11), Timothy_56 (A11), TinyTimmy_55 (A11),

Start 3:
• Found in 1 of 69 (1.4%) of genes in pham
• Manual Annotations of this start: 1 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Astro_55 (A8),

Start 4:
• Found in 40 of 69 (58.0%) of genes in pham
• Manual Annotations of this start: 38 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alatin_44 (CA), Alpacados_44 (CA), AppleCloud_42 (CA), Belenaria_45 (CA), BobbyDazzler_45 (CA), Bonanza_45 (CA), Bradshaw_45 (CA), Bryce_44 (CA), Chargerpower_55 (A), CosmicSans_45 (CA), Danforth_55 (A8), Erik_45 (CA), Espica_45 (CA), Gollum_45 (CA), Groundhog_54 (A8), Harlequin_44 (CA), Hiro_45 (CA), Jester_44 (CA), Krishelle_45 (CA), Lillie_45 (CA), MyraDee_51 (A18), Naiad_44 (CA), Nancinator_45 (CA), Natosaleda_44 (CA), NearlyHeadless_55 (A8), PhailMary_44 (CA), Phlei_46 (A13), Phrankenstein_45 (CA), RER2_38 (CA), Rasputin_45 (CA), RexFury_44 (CA), Rhodalysa_45 (CA), Roary_56 (A8), Shuman_45 (CA), StCroix_44 (CA), Swann_45 (CA), TWAMP_45 (CA), UhSalsa_45 (CA), Yogi_44 (CA), Yoncess_44 (CA),

Start 8:
• Found in 2 of 69 (2.9%) of genes in pham
• Manual Annotations of this start: 2 of 65
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DroogsArmy_51 (A7), HINdeR_50 (A7),

Start 9:

• Found in 34 of 69 (49.3%) of genes in pham
• Manual Annotations of this start: 1 of 65
• Called 2.9% of time when present
• Phage (with cluster) where this start called: Timshel_52 (A7),

Summary by clusters:

There are 7 clusters represented in this pham: A, A11, A13, CA, A18, A7, A8,

Info for manual annotations of cluster A:
•Start number 4 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A11:
•Start number 2 was manually annotated 23 times for cluster A11.

Info for manual annotations of cluster A18:
•Start number 4 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A7:
•Start number 8 was manually annotated 2 times for cluster A7.
•Start number 9 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A8:
•Start number 3 was manually annotated 1 time for cluster A8.
•Start number 4 was manually annotated 4 times for cluster A8.

Info for manual annotations of cluster CA:
•Start number 4 was manually annotated 32 times for cluster CA.

Gene Information:

Gene: Alatin_44 Start: 34028, Stop: 33657, Start Num: 4
Candidate Starts for Alatin_44:
(Start: 4 @34028 has 38 MA's), (6, 34004), (Start: 9 @33974 has 1 MA's), (13, 33929), (16, 33890), (19, 33845), (28, 33773),

Gene: Alpacados_44 Start: 33933, Stop: 33562, Start Num: 4
Candidate Starts for Alpacados_44:
(Start: 4 @33933 has 38 MA's), (6, 33909), (Start: 9 @33879 has 1 MA's), (13, 33834), (16, 33795), (19, 33750),

Gene: Aneem_57 Start: 37514, Stop: 37116, Start Num: 2
Candidate Starts for Aneem_57:
(Start: 2 @37514 has 23 MA's), (5, 37502), (28, 37265), (30, 37253), (31, 37250),

Gene: AppleCloud_42 Start: 33752, Stop: 33387, Start Num: 4
Candidate Starts for AppleCloud_42:
(Start: 4 @33752 has 38 MA's), (6, 33728), (Start: 9 @33698 has 1 MA's), (13, 33653), (16, 33614), (19, 33569), (36, 33431),

Gene: Astro_55 Start: 36581, Stop: 36168, Start Num: 3
Candidate Starts for Astro_55:
(Start: 3 @36581 has 1 MA's), (10, 36518), (29, 36326), (39, 36230), (46, 36182), (48, 36179),

Gene: Bachome_58 Start: 37494, Stop: 37096, Start Num: 2
Candidate Starts for Bachome_58:
(Start: 2 @37494 has 23 MA's), (5, 37482), (28, 37245), (30, 37233),

Gene: Belenaria_45 Start: 33894, Stop: 33523, Start Num: 4
Candidate Starts for Belenaria_45:
(Start: 4 @33894 has 38 MA's), (6, 33870), (Start: 9 @33840 has 1 MA's), (13, 33795), (16, 33756), (19, 33711), (28, 33639),

Gene: BobbyDazzler_45 Start: 34007, Stop: 33636, Start Num: 4
Candidate Starts for BobbyDazzler_45:
(Start: 4 @34007 has 38 MA's), (6, 33983), (Start: 9 @33953 has 1 MA's), (13, 33908), (16, 33869), (19, 33824),

Gene: Bonanza_45 Start: 33935, Stop: 33564, Start Num: 4
Candidate Starts for Bonanza_45:
(Start: 4 @33935 has 38 MA's), (6, 33911), (Start: 9 @33881 has 1 MA's), (13, 33836), (16, 33797), (19, 33752),

Gene: Bowtie_57 Start: 37521, Stop: 37123, Start Num: 2
Candidate Starts for Bowtie_57:
(Start: 2 @37521 has 23 MA's), (5, 37509), (28, 37272), (30, 37260), (31, 37257),

Gene: Bradshaw_45 Start: 33961, Stop: 33590, Start Num: 4
Candidate Starts for Bradshaw_45:
(Start: 4 @33961 has 38 MA's), (6, 33937), (Start: 9 @33907 has 1 MA's), (13, 33862), (16, 33823), (19, 33778), (28, 33706),

Gene: Bryce_44 Start: 33715, Stop: 33344, Start Num: 4
Candidate Starts for Bryce_44:
(Start: 4 @33715 has 38 MA's), (6, 33691), (Start: 9 @33661 has 1 MA's), (13, 33616), (16, 33577), (19, 33532),

Gene: Bud_56 Start: 37068, Stop: 36670, Start Num: 2
Candidate Starts for Bud_56:
(Start: 2 @37068 has 23 MA's), (5, 37056), (28, 36819), (30, 36807), (31, 36804),

Gene: Chargerpower_55 Start: 36865, Stop: 36452, Start Num: 4
Candidate Starts for Chargerpower_55:
(Start: 4 @36865 has 38 MA's), (13, 36769), (15, 36733), (27, 36613), (33, 36568), (43, 36484), (45, 36463),

Gene: CosmicSans_45 Start: 33961, Stop: 33590, Start Num: 4
Candidate Starts for CosmicSans_45:
(Start: 4 @33961 has 38 MA's), (6, 33937), (Start: 9 @33907 has 1 MA's), (13, 33862), (16, 33823), (19, 33778), (28, 33706),

Gene: Danforth_55 Start: 36610, Stop: 36197, Start Num: 4
Candidate Starts for Danforth_55:

(Start: 4 @36610 has 38 MA's), (29, 36355), (39, 36259), (48, 36208),

Gene: DroogsArmy_51 Start: 39147, Stop: 38755, Start Num: 8
Candidate Starts for DroogsArmy_51:
(7, 39153), (Start: 8 @39147 has 2 MA's), (11, 39126), (12, 39123), (13, 39105), (14, 39102), (20, 38994), (24, 38976),

Gene: Ebony_56 Start: 37085, Stop: 36687, Start Num: 2
Candidate Starts for Ebony_56:
(Start: 2 @37085 has 23 MA's), (5, 37073), (28, 36836), (30, 36824), (31, 36821),

Gene: Erik_45 Start: 33893, Stop: 33522, Start Num: 4
Candidate Starts for Erik_45:
(Start: 4 @33893 has 38 MA's), (6, 33869), (Start: 9 @33839 has 1 MA's), (13, 33794), (16, 33755), (19, 33710), (28, 33638),

Gene: Espica_45 Start: 33894, Stop: 33523, Start Num: 4
Candidate Starts for Espica_45:
(Start: 4 @33894 has 38 MA's), (6, 33870), (Start: 9 @33840 has 1 MA's), (13, 33795), (16, 33756), (19, 33711), (28, 33639),

Gene: Et2Brutus_55 Start: 37048, Stop: 36650, Start Num: 2
Candidate Starts for Et2Brutus_55:
(Start: 2 @37048 has 23 MA's), (5, 37036), (28, 36799), (30, 36787), (31, 36784),

Gene: Fibonacci_56 Start: 37054, Stop: 36656, Start Num: 2
Candidate Starts for Fibonacci_56:
(Start: 2 @37054 has 23 MA's), (5, 37042), (28, 36805), (30, 36793), (31, 36790),

Gene: Flaverint_57 Start: 37512, Stop: 37114, Start Num: 2
Candidate Starts for Flaverint_57:
(Start: 2 @37512 has 23 MA's), (5, 37500), (28, 37263), (30, 37251), (31, 37248),

Gene: Gilberta_57 Start: 37505, Stop: 37107, Start Num: 2
Candidate Starts for Gilberta_57:
(Start: 2 @37505 has 23 MA's), (5, 37493), (28, 37256), (30, 37244), (31, 37241),

Gene: Gollum_45 Start: 33959, Stop: 33588, Start Num: 4
Candidate Starts for Gollum_45:
(Start: 4 @33959 has 38 MA's), (6, 33935), (Start: 9 @33905 has 1 MA's), (13, 33860), (16, 33821), (19, 33776), (28, 33704),

Gene: Groundhog_54 Start: 36525, Stop: 36112, Start Num: 4
Candidate Starts for Groundhog_54:
(Start: 4 @36525 has 38 MA's), (29, 36270), (39, 36174), (48, 36123),

Gene: HINdeR_50 Start: 38800, Stop: 38402, Start Num: 8
Candidate Starts for HINdeR_50:
(Start: 8 @38800 has 2 MA's), (10, 38788), (20, 38647), (24, 38629), (32, 38581),

Gene: Harlequin_44 Start: 33745, Stop: 33374, Start Num: 4
Candidate Starts for Harlequin_44:

(Start: 4 @33745 has 38 MA's), (6, 33721), (Start: 9 @33691 has 1 MA's), (13, 33646), (16, 33607), (19, 33562),

Gene: Hiro_45 Start: 34221, Stop: 33850, Start Num: 4
Candidate Starts for Hiro_45:
(Start: 4 @34221 has 38 MA's), (6, 34197), (Start: 9 @34167 has 1 MA's), (13, 34122), (16, 34083), (19, 34038),

Gene: Hutc2_56 Start: 37054, Stop: 36656, Start Num: 2
Candidate Starts for Hutc2_56:
(Start: 2 @37054 has 23 MA's), (5, 37042), (28, 36805), (30, 36793), (31, 36790),

Gene: Insomnia_57 Start: 37565, Stop: 37167, Start Num: 2
Candidate Starts for Insomnia_57:
(Start: 2 @37565 has 23 MA's), (5, 37553), (28, 37316), (30, 37304), (31, 37301),

Gene: Jabith_57 Start: 37566, Stop: 37168, Start Num: 2
Candidate Starts for Jabith_57:
(Start: 2 @37566 has 23 MA's), (5, 37554), (28, 37317), (30, 37305), (31, 37302),

Gene: Jester_44 Start: 33676, Stop: 33305, Start Num: 4
Candidate Starts for Jester_44:
(Start: 4 @33676 has 38 MA's), (6, 33652), (Start: 9 @33622 has 1 MA's), (13, 33577), (16, 33538), (19, 33493),

Gene: Joselito_57 Start: 37514, Stop: 37116, Start Num: 2
Candidate Starts for Joselito_57:
(Start: 2 @37514 has 23 MA's), (5, 37502), (28, 37265), (30, 37253), (31, 37250),

Gene: Krishelle_45 Start: 34321, Stop: 33950, Start Num: 4
Candidate Starts for Krishelle_45:
(Start: 4 @34321 has 38 MA's), (6, 34297), (Start: 9 @34267 has 1 MA's), (13, 34222), (16, 34183), (19, 34138), (28, 34066),

Gene: Lillie_45 Start: 33961, Stop: 33590, Start Num: 4
Candidate Starts for Lillie_45:
(Start: 4 @33961 has 38 MA's), (6, 33937), (Start: 9 @33907 has 1 MA's), (13, 33862), (16, 33823), (19, 33778), (28, 33706),

Gene: Lucivia_57 Start: 37563, Stop: 37165, Start Num: 2
Candidate Starts for Lucivia_57:
(Start: 2 @37563 has 23 MA's), (5, 37551), (28, 37314), (30, 37302), (31, 37299),

Gene: MaCh_57 Start: 37493, Stop: 37095, Start Num: 2
Candidate Starts for MaCh_57:
(Start: 2 @37493 has 23 MA's), (5, 37481), (28, 37244), (30, 37232),

Gene: Mabel_56 Start: 37095, Stop: 36697, Start Num: 2
Candidate Starts for Mabel_56:
(Start: 2 @37095 has 23 MA's), (5, 37083), (28, 36846), (30, 36834), (31, 36831),

Gene: Mulciber_56 Start: 37051, Stop: 36653, Start Num: 2
Candidate Starts for Mulciber_56:

(Start: 2 @37051 has 23 MA's), (5, 37039), (28, 36802), (30, 36790), (31, 36787),

Gene: Munch_57 Start: 37514, Stop: 37116, Start Num: 2
Candidate Starts for Munch_57:
(Start: 2 @37514 has 23 MA's), (5, 37502), (28, 37265), (30, 37253), (31, 37250),

Gene: MyraDee_51 Start: 34558, Stop: 34052, Start Num: 4
Candidate Starts for MyraDee_51:
(1, 34573), (Start: 4 @34558 has 38 MA's), (21, 34345), (35, 34231), (37, 34219), (38, 34216), (44, 34168), (47, 34150),

Gene: Naiad_44 Start: 33974, Stop: 33603, Start Num: 4
Candidate Starts for Naiad_44:
(Start: 4 @33974 has 38 MA's), (6, 33950), (Start: 9 @33920 has 1 MA's), (13, 33875), (16, 33836), (19, 33791), (28, 33719),

Gene: Nancinator_45 Start: 33894, Stop: 33523, Start Num: 4
Candidate Starts for Nancinator_45:
(Start: 4 @33894 has 38 MA's), (6, 33870), (Start: 9 @33840 has 1 MA's), (13, 33795), (16, 33756), (19, 33711), (28, 33639),

Gene: Natosaleda_44 Start: 33893, Stop: 33522, Start Num: 4
Candidate Starts for Natosaleda_44:
(Start: 4 @33893 has 38 MA's), (6, 33869), (Start: 9 @33839 has 1 MA's), (13, 33794), (16, 33755), (19, 33710), (28, 33638),

Gene: NearlyHeadless_55 Start: 36376, Stop: 35963, Start Num: 4
Candidate Starts for NearlyHeadless_55:
(Start: 4 @36376 has 38 MA's), (29, 36121), (39, 36025), (48, 35974),

Gene: Orange_56 Start: 37063, Stop: 36665, Start Num: 2
Candidate Starts for Orange_56:
(Start: 2 @37063 has 23 MA's), (5, 37051), (28, 36814), (30, 36802), (31, 36799),

Gene: Petersenfast_55 Start: 37062, Stop: 36664, Start Num: 2
Candidate Starts for Petersenfast_55:
(Start: 2 @37062 has 23 MA's), (5, 37050), (28, 36813), (30, 36801), (31, 36798),

Gene: PhailMary_44 Start: 34283, Stop: 33912, Start Num: 4
Candidate Starts for PhailMary_44:
(Start: 4 @34283 has 38 MA's), (6, 34259), (Start: 9 @34229 has 1 MA's), (13, 34184), (16, 34145), (19, 34100),

Gene: Phlei_46 Start: 37634, Stop: 37167, Start Num: 4
Candidate Starts for Phlei_46:
(Start: 4 @37634 has 38 MA's), (5, 37625), (22, 37421), (23, 37415), (25, 37400), (34, 37343), (40, 37283), (42, 37271),

Gene: Phrankenstein_45 Start: 33907, Stop: 33536, Start Num: 4
Candidate Starts for Phrankenstein_45:
(Start: 4 @33907 has 38 MA's), (6, 33883), (Start: 9 @33853 has 1 MA's), (13, 33808), (16, 33769), (19, 33724), (28, 33652),

Gene: RER2_38 Start: 30833, Stop: 30462, Start Num: 4
Candidate Starts for RER2_38:
(Start: 4 @30833 has 38 MA's), (6, 30809), (Start: 9 @30779 has 1 MA's), (13, 30734), (16, 30695), (19, 30650), (28, 30578),

Gene: Rasputin_45 Start: 33931, Stop: 33560, Start Num: 4
Candidate Starts for Rasputin_45:
(Start: 4 @33931 has 38 MA's), (6, 33907), (Start: 9 @33877 has 1 MA's), (13, 33832), (16, 33793), (19, 33748), (28, 33676),

Gene: RexFury_44 Start: 33992, Stop: 33621, Start Num: 4
Candidate Starts for RexFury_44:
(Start: 4 @33992 has 38 MA's), (6, 33968), (Start: 9 @33938 has 1 MA's), (13, 33893), (16, 33854), (19, 33809), (28, 33737),

Gene: Rhodalysa_45 Start: 33961, Stop: 33590, Start Num: 4
Candidate Starts for Rhodalysa_45:
(Start: 4 @33961 has 38 MA's), (6, 33937), (Start: 9 @33907 has 1 MA's), (13, 33862), (16, 33823), (19, 33778), (28, 33706),

Gene: Roary_56 Start: 36595, Stop: 36182, Start Num: 4
Candidate Starts for Roary_56:
(Start: 4 @36595 has 38 MA's), (29, 36340), (39, 36244), (48, 36193),

Gene: Salz_55 Start: 37033, Stop: 36635, Start Num: 2
Candidate Starts for Salz_55:
(Start: 2 @37033 has 23 MA's), (5, 37021), (28, 36784), (30, 36772), (31, 36769),

Gene: Sham4_56 Start: 37061, Stop: 36663, Start Num: 2
Candidate Starts for Sham4_56:
(Start: 2 @37061 has 23 MA's), (5, 37049), (28, 36812), (30, 36800), (31, 36797),

Gene: Shuman_45 Start: 33906, Stop: 33535, Start Num: 4
Candidate Starts for Shuman_45:
(Start: 4 @33906 has 38 MA's), (6, 33882), (Start: 9 @33852 has 1 MA's), (13, 33807), (16, 33768), (19, 33723), (28, 33651),

Gene: Snape_56 Start: 37053, Stop: 36655, Start Num: 2
Candidate Starts for Snape_56:
(Start: 2 @37053 has 23 MA's), (5, 37041), (28, 36804), (30, 36792), (31, 36789),

Gene: StCroix_44 Start: 33974, Stop: 33603, Start Num: 4
Candidate Starts for StCroix_44:
(Start: 4 @33974 has 38 MA's), (6, 33950), (Start: 9 @33920 has 1 MA's), (13, 33875), (16, 33836), (19, 33791), (28, 33719),

Gene: Swann_45 Start: 33959, Stop: 33588, Start Num: 4
Candidate Starts for Swann_45:
(Start: 4 @33959 has 38 MA's), (6, 33935), (Start: 9 @33905 has 1 MA's), (13, 33860), (16, 33821), (19, 33776), (28, 33704),

Gene: TWAMP_45 Start: 33961, Stop: 33590, Start Num: 4
Candidate Starts for TWAMP_45:

(Start: 4 @33961 has 38 MA's), (6, 33937), (Start: 9 @33907 has 1 MA's), (13, 33862), (16, 33823), (19, 33778), (28, 33706),

Gene: Timothy_56 Start: 37030, Stop: 36632, Start Num: 2
Candidate Starts for Timothy_56:
(Start: 2 @37030 has 23 MA's), (5, 37018), (28, 36781), (30, 36769), (31, 36766),

Gene: Timshel_52 Start: 39204, Stop: 38836, Start Num: 9
Candidate Starts for Timshel_52:
(7, 39213), (Start: 9 @39204 has 1 MA's), (17, 39120), (18, 39117), (20, 39051), (24, 39033), (26, 39018), (41, 38901),

Gene: TinyTimmy_55 Start: 37079, Stop: 36681, Start Num: 2
Candidate Starts for TinyTimmy_55:
(Start: 2 @37079 has 23 MA's), (5, 37067), (28, 36830), (30, 36818), (31, 36815),

Gene: UhSalsa_45 Start: 33894, Stop: 33523, Start Num: 4
Candidate Starts for UhSalsa_45:
(Start: 4 @33894 has 38 MA's), (6, 33870), (Start: 9 @33840 has 1 MA's), (13, 33795), (16, 33756), (19, 33711), (28, 33639),

Gene: Yogi_44 Start: 33935, Stop: 33564, Start Num: 4
Candidate Starts for Yogi_44:
(Start: 4 @33935 has 38 MA's), (6, 33911), (Start: 9 @33881 has 1 MA's), (13, 33836), (16, 33797), (19, 33752),

Gene: Yoncess_44 Start: 33715, Stop: 33344, Start Num: 4
Candidate Starts for Yoncess_44:
(Start: 4 @33715 has 38 MA's), (6, 33691), (Start: 9 @33661 has 1 MA's), (13, 33616), (16, 33577), (19, 33532),