Pham 347561


1: Snape_56 + 25
2: Bachome_58 + 1
3: Phlei_46
4: MyraDee_51
5: Kinmap_53
6: Chargerpower_55
7: Timshel_52
8: DroogsArmy_51
9: HINdeR_50
10: Saintus_50
11: Danforth_55 + 3
12: Astro_55
13: AppleCloud_42
14: Erik_45 + 21
15: 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 347561 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347561 has 74 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Snape_56, Kimba_56, Ebony_56, TinyTimmy_56, Aneem_57, Jabith_57, Fibonacci_56, Munch_57, Petersenfast_56, Gilberta_57, Bud_56, Joselito_57, Salz_55, Timothy_56, Lucivia_57, Flaverint_57, Orange_56, Et2Brutus_55, Saskia_57, Bowtie_57, Hutc2_56, Wolpertinger_55, Insomnia_57, Mabel_56, Sham4_56, Mulciber_56
• Track 2 : Bachome_58, MaCh_57
• Track 3 : Phlei_46
• Track 4 : MyraDee_51
• Track 5 : Kinmap_53
• Track 6 : Chargerpower_55
• Track 7 : Timshel_52
• Track 8 : DroogsArmy_51
• Track 9 : HINdeR_50
• Track 10 : Saintus_50
• Track 11 : Danforth_55, Groundhog_54, NearlyHeadless_55, Roary_56
• Track 12 : Astro_55
• Track 13 : AppleCloud_42
• Track 14 : 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 15 : Hiro_45, Alpacados_44, Yogi_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 69 of the 72 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alatin_44, Alpacados_44, Aneem_57, AppleCloud_42, Bachome_58, Belenaria_45, BobbyDazzler_45, Bonanza_45, Bowtie_57, Bradshaw_45, Bryce_44, Bud_56, Chargerpower_55, CosmicSans_45, Danforth_55, DroogsArmy_51, Ebony_56, Erik_45, Espica_45, Et2Brutus_55, Fibonacci_56, Flaverint_57, Gilberta_57,

Gollum_45, Groundhog_54, HINdeR_50, Harlequin_44, Hiro_45, Hutc2_56, Insomnia_57, Jabith_57, Jester_44, Joselito_57, Kimba_56, Krishelle_45, Lillie_45, Lucivia_57, MaCh_57, Mabel_56, Mulciber_56, Munch_57, MyraDee_51, Naiad_44, Nancinator_45, Natosaleda_44, NearlyHeadless_55, Orange_56, Petersenfast_56, PhailMary_44, Phlei_46, Phrankenstein_45, RER2_38, Rasputin_45, RexFury_44, Rhodalysa_45, Roary_56, Saintus_50, Salz_55, Saskia_57, Sham4_56, Shuman_45, Snape_56, StCroix_44, Swann_45, TWAMP_45, Timothy_56, TinyTimmy_56, UhSalsa_45, Wolpertinger_55, 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:
• Astro_55, Kinmap_53, Timshel_52,

Summary by start number:

Start 3:
• Found in 2 of 74 (2.7%) of genes in pham
• Manual Annotations of this start: 2 of 72
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Astro_55 (A8), Kinmap_53 (A21),

Start 4:
• Found in 71 of 74 (95.9%) of genes in pham
• Manual Annotations of this start: 69 of 72
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alatin_44 (CA), Alpacados_44 (CA), Aneem_57 (A11), AppleCloud_42 (CA), Bachome_58 (A11), Belenaria_45 (CA), BobbyDazzler_45 (CA), Bonanza_45 (CA), Bowtie_57 (A11), Bradshaw_45 (CA), Bryce_44 (CA), Bud_56 (A11), Chargerpower_55 (A22), CosmicSans_45 (CA), Danforth_55 (A8), DroogsArmy_51 (A7), Ebony_56 (A11), Erik_45 (CA), Espica_45 (CA), Et2Brutus_55 (A11), Fibonacci_56 (A11), Flaverint_57 (A11), Gilberta_57 (A11), Gollum_45 (CA), Groundhog_54 (A8), HINdeR_50 (A7), Harlequin_44 (CA), Hiro_45 (CA), Hutc2_56 (A11), Insomnia_57 (A11), Jabith_57 (A11), Jester_44 (CA), Joselito_57 (A11), Kimba_56 (A11), Krishelle_45 (CA), Lillie_45 (CA), Lucivia_57 (A11), MaCh_57 (A11), Mabel_56 (A11), Mulciber_56 (A11), Munch_57 (A11), MyraDee_51 (A18), Naiad_44 (CA), Nancinator_45 (CA), Natosaleda_44 (CA), NearlyHeadless_55 (A8), Orange_56 (A11), Petersenfast_56 (A11), PhailMary_44 (CA), Phlei_46 (A13), Phrankenstein_45 (CA), RER2_38 (CA), Rasputin_45 (CA), RexFury_44 (CA), Rhodalysa_45 (CA), Roary_56 (A8), Saintus_50 (A8), Salz_55 (A11), Saskia_57 (A11), Sham4_56 (A11), Shuman_45 (CA), Snape_56 (A11), StCroix_44 (CA), Swann_45 (CA), TWAMP_45 (CA), Timothy_56 (A11), TinyTimmy_56 (A11), UhSalsa_45 (CA), Wolpertinger_55 (A11), Yogi_44 (CA), Yoncess_44 (CA),

Start 5:
• Found in 1 of 74 (1.4%) of genes in pham
• Manual Annotations of this start: 1 of 72
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Timshel_52 (A7),

Summary by clusters:

There are 8 clusters represented in this pham: A21, A22, A11, A13, CA, A18, A7, A8,

Info for manual annotations of cluster A11:
•Start number 4 was manually annotated 28 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 A21:
•Start number 3 was manually annotated 1 time for cluster A21.

Info for manual annotations of cluster A22:
•Start number 4 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A7:
•Start number 4 was manually annotated 2 times for cluster A7.
•Start number 5 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 5 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 69 MA's), (9, 34004), (13, 33974), (18, 33929), (22, 33890), (24, 33845), (32, 33773),

Gene: Alpacados_44 Start: 33933, Stop: 33562, Start Num: 4
Candidate Starts for Alpacados_44:
(Start: 4 @33933 has 69 MA's), (9, 33909), (13, 33879), (18, 33834), (22, 33795), (24, 33750),

Gene: Aneem_57 Start: 37514, Stop: 37116, Start Num: 4
Candidate Starts for Aneem_57:
(Start: 4 @37514 has 69 MA's), (6, 37502), (32, 37265), (33, 37253), (34, 37250),

Gene: AppleCloud_42 Start: 33752, Stop: 33387, Start Num: 4
Candidate Starts for AppleCloud_42:
(Start: 4 @33752 has 69 MA's), (9, 33728), (13, 33698), (18, 33653), (22, 33614), (24, 33569), (41, 33431),

Gene: Astro_55 Start: 36581, Stop: 36168, Start Num: 3
Candidate Starts for Astro_55:
(Start: 3 @36581 has 2 MA's), (15, 36518), (32, 36326), (42, 36230), (45, 36182), (46, 36179),

Gene: Bachome_58 Start: 37494, Stop: 37096, Start Num: 4
Candidate Starts for Bachome_58:
(Start: 4 @37494 has 69 MA's), (6, 37482), (32, 37245), (33, 37233),

Gene: Belenaria_45 Start: 33894, Stop: 33523, Start Num: 4
Candidate Starts for Belenaria_45:
(Start: 4 @33894 has 69 MA's), (9, 33870), (13, 33840), (18, 33795), (22, 33756), (24, 33711), (32, 33639),

Gene: BobbyDazzler_45 Start: 34007, Stop: 33636, Start Num: 4
Candidate Starts for BobbyDazzler_45:
(Start: 4 @34007 has 69 MA's), (9, 33983), (13, 33953), (18, 33908), (22, 33869), (24, 33824),

Gene: Bonanza_45 Start: 33935, Stop: 33564, Start Num: 4
Candidate Starts for Bonanza_45:
(Start: 4 @33935 has 69 MA's), (9, 33911), (13, 33881), (18, 33836), (22, 33797), (24, 33752),

Gene: Bowtie_57 Start: 37521, Stop: 37123, Start Num: 4
Candidate Starts for Bowtie_57:
(Start: 4 @37521 has 69 MA's), (6, 37509), (32, 37272), (33, 37260), (34, 37257),

Gene: Bradshaw_45 Start: 33961, Stop: 33590, Start Num: 4
Candidate Starts for Bradshaw_45:
(Start: 4 @33961 has 69 MA's), (9, 33937), (13, 33907), (18, 33862), (22, 33823), (24, 33778), (32, 33706),

Gene: Bryce_44 Start: 33715, Stop: 33344, Start Num: 4
Candidate Starts for Bryce_44:
(Start: 4 @33715 has 69 MA's), (9, 33691), (13, 33661), (18, 33616), (22, 33577), (24, 33532),

Gene: Bud_56 Start: 37068, Stop: 36670, Start Num: 4
Candidate Starts for Bud_56:
(Start: 4 @37068 has 69 MA's), (6, 37056), (32, 36819), (33, 36807), (34, 36804),

Gene: Chargerpower_55 Start: 36865, Stop: 36452, Start Num: 4
Candidate Starts for Chargerpower_55:
(Start: 4 @36865 has 69 MA's), (18, 36769), (21, 36733), (31, 36613), (36, 36568), (44, 36484), (48, 36463),

Gene: CosmicSans_45 Start: 33961, Stop: 33590, Start Num: 4
Candidate Starts for CosmicSans_45:
(Start: 4 @33961 has 69 MA's), (9, 33937), (13, 33907), (18, 33862), (22, 33823), (24, 33778), (32, 33706),

Gene: Danforth_55 Start: 36610, Stop: 36197, Start Num: 4
Candidate Starts for Danforth_55:
(Start: 4 @36610 has 69 MA's), (32, 36355), (42, 36259), (46, 36208),

Gene: DroogsArmy_51 Start: 39147, Stop: 38755, Start Num: 4
Candidate Starts for DroogsArmy_51:
(2, 39153), (Start: 4 @39147 has 69 MA's), (8, 39126), (9, 39123), (10, 39105), (11, 39102), (23, 38994), (24, 38976),

Gene: Ebony_56 Start: 37085, Stop: 36687, Start Num: 4
Candidate Starts for Ebony_56:
(Start: 4 @37085 has 69 MA's), (6, 37073), (32, 36836), (33, 36824), (34, 36821),

Gene: Erik_45 Start: 33893, Stop: 33522, Start Num: 4
Candidate Starts for Erik_45:
(Start: 4 @33893 has 69 MA's), (9, 33869), (13, 33839), (18, 33794), (22, 33755), (24, 33710), (32, 33638),

Gene: Espica_45 Start: 33894, Stop: 33523, Start Num: 4
Candidate Starts for Espica_45:
(Start: 4 @33894 has 69 MA's), (9, 33870), (13, 33840), (18, 33795), (22, 33756), (24, 33711), (32, 33639),

Gene: Et2Brutus_55 Start: 37048, Stop: 36650, Start Num: 4
Candidate Starts for Et2Brutus_55:
(Start: 4 @37048 has 69 MA's), (6, 37036), (32, 36799), (33, 36787), (34, 36784),

Gene: Fibonacci_56 Start: 37054, Stop: 36656, Start Num: 4
Candidate Starts for Fibonacci_56:
(Start: 4 @37054 has 69 MA's), (6, 37042), (32, 36805), (33, 36793), (34, 36790),

Gene: Flaverint_57 Start: 37512, Stop: 37114, Start Num: 4
Candidate Starts for Flaverint_57:
(Start: 4 @37512 has 69 MA's), (6, 37500), (32, 37263), (33, 37251), (34, 37248),

Gene: Gilberta_57 Start: 37505, Stop: 37107, Start Num: 4
Candidate Starts for Gilberta_57:
(Start: 4 @37505 has 69 MA's), (6, 37493), (32, 37256), (33, 37244), (34, 37241),

Gene: Gollum_45 Start: 33959, Stop: 33588, Start Num: 4
Candidate Starts for Gollum_45:
(Start: 4 @33959 has 69 MA's), (9, 33935), (13, 33905), (18, 33860), (22, 33821), (24, 33776), (32, 33704),

Gene: Groundhog_54 Start: 36525, Stop: 36112, Start Num: 4
Candidate Starts for Groundhog_54:
(Start: 4 @36525 has 69 MA's), (32, 36270), (42, 36174), (46, 36123),

Gene: HINdeR_50 Start: 38800, Stop: 38402, Start Num: 4
Candidate Starts for HINdeR_50:
(Start: 4 @38800 has 69 MA's), (7, 38788), (23, 38647), (24, 38629), (29, 38581),

Gene: Harlequin_44 Start: 33745, Stop: 33374, Start Num: 4
Candidate Starts for Harlequin_44:
(Start: 4 @33745 has 69 MA's), (9, 33721), (13, 33691), (18, 33646), (22, 33607), (24, 33562),

Gene: Hiro_45 Start: 34221, Stop: 33850, Start Num: 4
Candidate Starts for Hiro_45:
(Start: 4 @34221 has 69 MA's), (9, 34197), (13, 34167), (18, 34122), (22, 34083), (24, 34038),

Gene: Hutc2_56 Start: 37054, Stop: 36656, Start Num: 4
Candidate Starts for Hutc2_56:

(Start: 4 @37054 has 69 MA's), (6, 37042), (32, 36805), (33, 36793), (34, 36790),

Gene: Insomnia_57 Start: 37565, Stop: 37167, Start Num: 4
Candidate Starts for Insomnia_57:
(Start: 4 @37565 has 69 MA's), (6, 37553), (32, 37316), (33, 37304), (34, 37301),

Gene: Jabith_57 Start: 37566, Stop: 37168, Start Num: 4
Candidate Starts for Jabith_57:
(Start: 4 @37566 has 69 MA's), (6, 37554), (32, 37317), (33, 37305), (34, 37302),

Gene: Jester_44 Start: 33676, Stop: 33305, Start Num: 4
Candidate Starts for Jester_44:
(Start: 4 @33676 has 69 MA's), (9, 33652), (13, 33622), (18, 33577), (22, 33538), (24, 33493),

Gene: Joselito_57 Start: 37514, Stop: 37116, Start Num: 4
Candidate Starts for Joselito_57:
(Start: 4 @37514 has 69 MA's), (6, 37502), (32, 37265), (33, 37253), (34, 37250),

Gene: Kimba_56 Start: 37086, Stop: 36688, Start Num: 4
Candidate Starts for Kimba_56:
(Start: 4 @37086 has 69 MA's), (6, 37074), (32, 36837), (33, 36825), (34, 36822),

Gene: Kinmap_53 Start: 36580, Stop: 36203, Start Num: 3
Candidate Starts for Kinmap_53:
(Start: 3 @36580 has 2 MA's), (7, 36568), (14, 36520), (19, 36478), (20, 36466), (37, 36307), (41, 36268), (46, 36208),

Gene: Krishelle_45 Start: 34321, Stop: 33950, Start Num: 4
Candidate Starts for Krishelle_45:
(Start: 4 @34321 has 69 MA's), (9, 34297), (13, 34267), (18, 34222), (22, 34183), (24, 34138), (32, 34066),

Gene: Lillie_45 Start: 33961, Stop: 33590, Start Num: 4
Candidate Starts for Lillie_45:
(Start: 4 @33961 has 69 MA's), (9, 33937), (13, 33907), (18, 33862), (22, 33823), (24, 33778), (32, 33706),

Gene: Lucivia_57 Start: 37563, Stop: 37165, Start Num: 4
Candidate Starts for Lucivia_57:
(Start: 4 @37563 has 69 MA's), (6, 37551), (32, 37314), (33, 37302), (34, 37299),

Gene: MaCh_57 Start: 37493, Stop: 37095, Start Num: 4
Candidate Starts for MaCh_57:
(Start: 4 @37493 has 69 MA's), (6, 37481), (32, 37244), (33, 37232),

Gene: Mabel_56 Start: 37095, Stop: 36697, Start Num: 4
Candidate Starts for Mabel_56:
(Start: 4 @37095 has 69 MA's), (6, 37083), (32, 36846), (33, 36834), (34, 36831),

Gene: Mulciber_56 Start: 37051, Stop: 36653, Start Num: 4
Candidate Starts for Mulciber_56:
(Start: 4 @37051 has 69 MA's), (6, 37039), (32, 36802), (33, 36790), (34, 36787),

Gene: Munch_57 Start: 37514, Stop: 37116, Start Num: 4
Candidate Starts for Munch_57:
(Start: 4 @37514 has 69 MA's), (6, 37502), (32, 37265), (33, 37253), (34, 37250),

Gene: MyraDee_51 Start: 34558, Stop: 34052, Start Num: 4
Candidate Starts for MyraDee_51:
(1, 34573), (Start: 4 @34558 has 69 MA's), (26, 34345), (38, 34231), (39, 34219), (41, 34216), (44, 34168), (47, 34150),

Gene: Naiad_44 Start: 33974, Stop: 33603, Start Num: 4
Candidate Starts for Naiad_44:
(Start: 4 @33974 has 69 MA's), (9, 33950), (13, 33920), (18, 33875), (22, 33836), (24, 33791), (32, 33719),

Gene: Nancinator_45 Start: 33894, Stop: 33523, Start Num: 4
Candidate Starts for Nancinator_45:
(Start: 4 @33894 has 69 MA's), (9, 33870), (13, 33840), (18, 33795), (22, 33756), (24, 33711), (32, 33639),

Gene: Natosaleda_44 Start: 33893, Stop: 33522, Start Num: 4
Candidate Starts for Natosaleda_44:
(Start: 4 @33893 has 69 MA's), (9, 33869), (13, 33839), (18, 33794), (22, 33755), (24, 33710), (32, 33638),

Gene: NearlyHeadless_55 Start: 36376, Stop: 35963, Start Num: 4
Candidate Starts for NearlyHeadless_55:
(Start: 4 @36376 has 69 MA's), (32, 36121), (42, 36025), (46, 35974),

Gene: Orange_56 Start: 37063, Stop: 36665, Start Num: 4
Candidate Starts for Orange_56:
(Start: 4 @37063 has 69 MA's), (6, 37051), (32, 36814), (33, 36802), (34, 36799),

Gene: Petersenfast_56 Start: 37062, Stop: 36664, Start Num: 4
Candidate Starts for Petersenfast_56:
(Start: 4 @37062 has 69 MA's), (6, 37050), (32, 36813), (33, 36801), (34, 36798),

Gene: PhailMary_44 Start: 34283, Stop: 33912, Start Num: 4
Candidate Starts for PhailMary_44:
(Start: 4 @34283 has 69 MA's), (9, 34259), (13, 34229), (18, 34184), (22, 34145), (24, 34100),

Gene: Phlei_46 Start: 37634, Stop: 37167, Start Num: 4
Candidate Starts for Phlei_46:
(Start: 4 @37634 has 69 MA's), (6, 37625), (27, 37421), (28, 37415), (30, 37400), (35, 37343), (42, 37283), (43, 37271),

Gene: Phrankenstein_45 Start: 33907, Stop: 33536, Start Num: 4
Candidate Starts for Phrankenstein_45:
(Start: 4 @33907 has 69 MA's), (9, 33883), (13, 33853), (18, 33808), (22, 33769), (24, 33724), (32, 33652),

Gene: RER2_38 Start: 30833, Stop: 30462, Start Num: 4
Candidate Starts for RER2_38:

(Start: 4 @30833 has 69 MA's), (9, 30809), (13, 30779), (18, 30734), (22, 30695), (24, 30650), (32, 30578),

Gene: Rasputin_45 Start: 33931, Stop: 33560, Start Num: 4
Candidate Starts for Rasputin_45:
(Start: 4 @33931 has 69 MA's), (9, 33907), (13, 33877), (18, 33832), (22, 33793), (24, 33748), (32, 33676),

Gene: RexFury_44 Start: 33992, Stop: 33621, Start Num: 4
Candidate Starts for RexFury_44:
(Start: 4 @33992 has 69 MA's), (9, 33968), (13, 33938), (18, 33893), (22, 33854), (24, 33809), (32, 33737),

Gene: Rhodalysa_45 Start: 33961, Stop: 33590, Start Num: 4
Candidate Starts for Rhodalysa_45:
(Start: 4 @33961 has 69 MA's), (9, 33937), (13, 33907), (18, 33862), (22, 33823), (24, 33778), (32, 33706),

Gene: Roary_56 Start: 36595, Stop: 36182, Start Num: 4
Candidate Starts for Roary_56:
(Start: 4 @36595 has 69 MA's), (32, 36340), (42, 36244), (46, 36193),

Gene: Saintus_50 Start: 33275, Stop: 32889, Start Num: 4
Candidate Starts for Saintus_50:
(Start: 4 @33275 has 69 MA's), (12, 33230),

Gene: Salz_55 Start: 37033, Stop: 36635, Start Num: 4
Candidate Starts for Salz_55:
(Start: 4 @37033 has 69 MA's), (6, 37021), (32, 36784), (33, 36772), (34, 36769),

Gene: Saskia_57 Start: 37061, Stop: 36663, Start Num: 4
Candidate Starts for Saskia_57:
(Start: 4 @37061 has 69 MA's), (6, 37049), (32, 36812), (33, 36800), (34, 36797),

Gene: Sham4_56 Start: 37061, Stop: 36663, Start Num: 4
Candidate Starts for Sham4_56:
(Start: 4 @37061 has 69 MA's), (6, 37049), (32, 36812), (33, 36800), (34, 36797),

Gene: Shuman_45 Start: 33906, Stop: 33535, Start Num: 4
Candidate Starts for Shuman_45:
(Start: 4 @33906 has 69 MA's), (9, 33882), (13, 33852), (18, 33807), (22, 33768), (24, 33723), (32, 33651),

Gene: Snape_56 Start: 37053, Stop: 36655, Start Num: 4
Candidate Starts for Snape_56:
(Start: 4 @37053 has 69 MA's), (6, 37041), (32, 36804), (33, 36792), (34, 36789),

Gene: StCroix_44 Start: 33974, Stop: 33603, Start Num: 4
Candidate Starts for StCroix_44:
(Start: 4 @33974 has 69 MA's), (9, 33950), (13, 33920), (18, 33875), (22, 33836), (24, 33791), (32, 33719),

Gene: Swann_45 Start: 33959, Stop: 33588, Start Num: 4

Candidate Starts for Swann_45:
(Start: 4 @33959 has 69 MA's), (9, 33935), (13, 33905), (18, 33860), (22, 33821), (24, 33776), (32, 33704),

Gene: TWAMP_45 Start: 33961, Stop: 33590, Start Num: 4
Candidate Starts for TWAMP_45:
(Start: 4 @33961 has 69 MA's), (9, 33937), (13, 33907), (18, 33862), (22, 33823), (24, 33778), (32, 33706),

Gene: Timothy_56 Start: 37030, Stop: 36632, Start Num: 4
Candidate Starts for Timothy_56:
(Start: 4 @37030 has 69 MA's), (6, 37018), (32, 36781), (33, 36769), (34, 36766),

Gene: Timshel_52 Start: 39204, Stop: 38836, Start Num: 5
Candidate Starts for Timshel_52:
(2, 39213), (Start: 5 @39204 has 1 MA's), (16, 39120), (17, 39117), (23, 39051), (24, 39033), (25, 39018), (40, 38901),

Gene: TinyTimmy_56 Start: 37079, Stop: 36681, Start Num: 4
Candidate Starts for TinyTimmy_56:
(Start: 4 @37079 has 69 MA's), (6, 37067), (32, 36830), (33, 36818), (34, 36815),

Gene: UhSalsa_45 Start: 33894, Stop: 33523, Start Num: 4
Candidate Starts for UhSalsa_45:
(Start: 4 @33894 has 69 MA's), (9, 33870), (13, 33840), (18, 33795), (22, 33756), (24, 33711), (32, 33639),

Gene: Wolpertinger_55 Start: 37062, Stop: 36664, Start Num: 4
Candidate Starts for Wolpertinger_55:
(Start: 4 @37062 has 69 MA's), (6, 37050), (32, 36813), (33, 36801), (34, 36798),

Gene: Yogi_44 Start: 33935, Stop: 33564, Start Num: 4
Candidate Starts for Yogi_44:
(Start: 4 @33935 has 69 MA's), (9, 33911), (13, 33881), (18, 33836), (22, 33797), (24, 33752),

Gene: Yoncess_44 Start: 33715, Stop: 33344, Start Num: 4
Candidate Starts for Yoncess_44:
(Start: 4 @33715 has 69 MA's), (9, 33691), (13, 33661), (18, 33616), (22, 33577), (24, 33532),