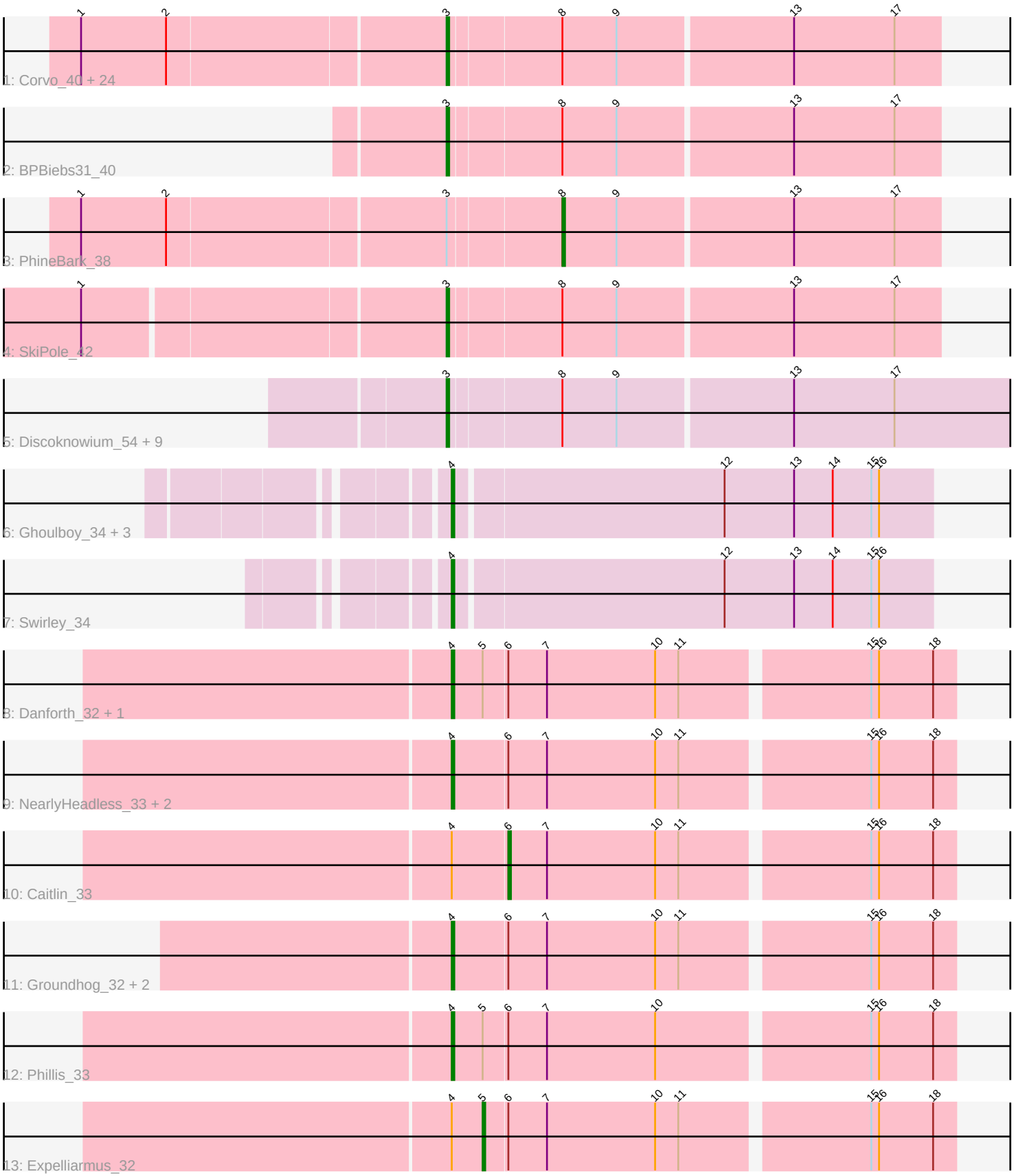
Pham 347683


1: Corvo_40 + 24
2: BPBiebs31_40
3: PhineBark_38
4: SkiPole_42
5: Discoknowium_54 + 9
6: Ghoulboy_34 + 3
7: Swirley_34
8: Danforth_32 + 1
9: NearlyHeadless_33 + 2
10: Caitlin_33
11: Groundhog_32 + 2
12: Phillis_33
13: Expelliarmus_32

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 347683 Report

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

Pham number 347683 has 54 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Corvo_40, BluSpix_36, ConceptII_41, LilBib_39, SwissCheese_41, EnzoK_38, McSinger_40, Blackflame_39, HanShotFirst_38, Kanely_40, Forsytheast_39, Marchy_34, Levia_36, MetalQZJ_39, Gandalf20_40, IgnatiusPatJac_38, ShortQueendom_35, Moose_39, Altman_41, Teodoridan_37, MaryBeth_39, Watermelon_41, STLscum_40, Mryolo_37, Payneful_39
• Track 2 : BPBiebs31_40
• Track 3 : PhineBark_38
• Track 4 : SkiPole_42
• Track 5 : Discoknowium_54, Jovo_56, Lev2_56, Conspiracy_56, Archetta_55, ForGetIt_56, Tiger_55, AgentM_55, Aragog_55, Phlorence_54
• Track 6 : Ghoulboy_34, Zolita_33, SydNat_34, Micasa_34
• Track 7 : Swirley_34
• Track 8 : Danforth_32, Roary_33
• Track 9 : NearlyHeadless_33, Stephig9_33, Dixon_33
• Track 10 : Caitlin_33
• Track 11 : Groundhog_32, Smeadley_33, Astro_33
• Track 12 : Phillis_33
• Track 13 : Expelliarmus_32

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

The start number called the most often in the published annotations is 3, it was called in 35 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AgentM_55, Altman_41, Aragog_55, Archetta_55, BPBiebs31_40, Blackflame_39, BluSpix_36, ConceptII_41, Conspiracy_56, Corvo_40, Discoknowium_54, EnzoK_38, ForGetIt_56, Forsytheast_39, Gandalf20_40, HanShotFirst_38, IgnatiusPatJac_38, Jovo_56, Kanely_40, Lev2_56, Levia_36, LilBib_39, Marchy_34, MaryBeth_39, McSinger_40, MetalQZJ_39, Moose_39, Mryolo_37, Payneful_39, Phlorence_54, STLscum_40, ShortQueendom_35, SkiPole_42, SwissCheese_41, Teodoridan_37, Tiger_55, Watermelon_41,

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

• PhineBark_38,

Genes that do not have the "Most Annotated" start:
• Astro_33, Caitlin_33, Danforth_32, Dixon_33, Expelliarmus_32, Ghoulboy_34, Groundhog_32, Micasa_34, NearlyHeadless_33, Phillis_33, Roary_33, Smeadley_33, Stephig9_33, Swirley_34, SydNat_34, Zolita_33,

Summary by start number:

Start 3:
• Found in 38 of 54 (70.4%) of genes in pham
• Manual Annotations of this start: 35 of 52
• Called 97.4% of time when present
• Phage (with cluster) where this start called: AgentM_55 (A5), Altman_41 (A1), Aragog_55 (A5), Archetta_55 (A5), BPBiebs31_40 (A1), Blackflame_39 (A1), BluSpix_36 (A1), ConceptII_41 (A1), Conspiracy_56 (A5), Corvo_40 (A1), Discoknowium_54 (A5), EnzoK_38 (A1), ForGetIt_56 (A5), Forsytheast_39 (A1), Gandalf20_40 (A1), HanShotFirst_38 (A1), IgnatiusPatJac_38 (A1), Jovo_56 (A5), Kanely_40 (A1), Lev2_56 (A5), Levia_36 (A1), LilBib_39 (A1), Marchy_34 (A1), MaryBeth_39 (A1), McSinger_40 (A1), MetalQZJ_39 (A1), Moose_39 (A1), Mryolo_37 (A1), Payneful_39 (A1), Phlorence_54 (A5), STLscum_40 (A1), ShortQueendom_35 (A1), SkiPole_42 (A1), SwissCheese_41 (A1), Teodoridan_37 (A1), Tiger_55 (A5), Watermelon_41 (A1),

Start 4:
• Found in 16 of 54 (29.6%) of genes in pham
• Manual Annotations of this start: 14 of 52
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Astro_33 (A8), Danforth_32 (A8), Dixon_33 (A8), Ghoulboy_34 (A5), Groundhog_32 (A8), Micasa_34 (A5), NearlyHeadless_33 (A8), Phillis_33 (A8), Roary_33 (A8), Smeadley_33 (A8), Stephig9_33 (A8), Swirley_34 (A5), SydNat_34 (A5), Zolita_33 (A5),

Start 5:
• Found in 4 of 54 (7.4%) of genes in pham
• Manual Annotations of this start: 1 of 52
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Expelliarmus_32 (A8),

Start 6:
• Found in 11 of 54 (20.4%) of genes in pham
• Manual Annotations of this start: 1 of 52
• Called 9.1% of time when present
• Phage (with cluster) where this start called: Caitlin_33 (A8),

Start 8:
• Found in 38 of 54 (70.4%) of genes in pham
• Manual Annotations of this start: 1 of 52
• Called 2.6% of time when present
• Phage (with cluster) where this start called: PhineBark_38 (A1),

Summary by clusters:

There are 3 clusters represented in this pham: A1, A8, A5,

Info for manual annotations of cluster A1:
•Start number 3 was manually annotated 25 times for cluster A1.
•Start number 8 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A5:
•Start number 3 was manually annotated 10 times for cluster A5.
•Start number 4 was manually annotated 5 times for cluster A5.

Info for manual annotations of cluster A8:
•Start number 4 was manually annotated 9 times for cluster A8.
•Start number 5 was manually annotated 1 time for cluster A8.
•Start number 6 was manually annotated 1 time for cluster A8.

Gene Information:

Gene: AgentM_55 Start: 38824, Stop: 38606, Start Num: 3
Candidate Starts for AgentM_55:
(Start: 3 @38824 has 35 MA's), (Start: 8 @38782 has 1 MA's), (9, 38761), (13, 38695), (17, 38656),

Gene: Altman_41 Start: 32441, Stop: 32256, Start Num: 3
Candidate Starts for Altman_41:
(1, 32579), (2, 32546), (Start: 3 @32441 has 35 MA's), (Start: 8 @32399 has 1 MA's), (9, 32378), (13, 32312), (17, 32273),

Gene: Aragog_55 Start: 38844, Stop: 38626, Start Num: 3
Candidate Starts for Aragog_55:
(Start: 3 @38844 has 35 MA's), (Start: 8 @38802 has 1 MA's), (9, 38781), (13, 38715), (17, 38676),

Gene: Archetta_55 Start: 39254, Stop: 39036, Start Num: 3
Candidate Starts for Archetta_55:
(Start: 3 @39254 has 35 MA's), (Start: 8 @39212 has 1 MA's), (9, 39191), (13, 39125), (17, 39086),

Gene: Astro_33 Start: 26479, Stop: 26291, Start Num: 4
Candidate Starts for Astro_33:
(Start: 4 @26479 has 14 MA's), (Start: 6 @26458 has 1 MA's), (7, 26443), (10, 26401), (11, 26392), (15, 26323), (16, 26320), (18, 26299),

Gene: BPBiebs31_40 Start: 31925, Stop: 31740, Start Num: 3
Candidate Starts for BPBiebs31_40:
(Start: 3 @31925 has 35 MA's), (Start: 8 @31883 has 1 MA's), (9, 31862), (13, 31796), (17, 31757),

Gene: Blackflame_39 Start: 31133, Stop: 30948, Start Num: 3
Candidate Starts for Blackflame_39:
(1, 31271), (2, 31238), (Start: 3 @31133 has 35 MA's), (Start: 8 @31091 has 1 MA's), (9, 31070), (13, 31004), (17, 30965),

Gene: BluSpix_36 Start: 27533, Stop: 27348, Start Num: 3
Candidate Starts for BluSpix_36:

(1, 27671), (2, 27638), (Start: 3 @27533 has 35 MA's), (Start: 8 @27491 has 1 MA's), (9, 27470), (13, 27404), (17, 27365),

Gene: Caitlin_33 Start: 26451, Stop: 26284, Start Num: 6
Candidate Starts for Caitlin_33:
(Start: 4 @26472 has 14 MA's), (Start: 6 @26451 has 1 MA's), (7, 26436), (10, 26394), (11, 26385), (15, 26316), (16, 26313), (18, 26292),

Gene: ConceptII_41 Start: 32595, Stop: 32362, Start Num: 3
Candidate Starts for ConceptII_41:
(1, 32733), (2, 32700), (Start: 3 @32595 has 35 MA's), (Start: 8 @32553 has 1 MA's), (9, 32532), (13, 32466), (17, 32427),

Gene: Conspiracy_56 Start: 39066, Stop: 38848, Start Num: 3
Candidate Starts for Conspiracy_56:
(Start: 3 @39066 has 35 MA's), (Start: 8 @39024 has 1 MA's), (9, 39003), (13, 38937), (17, 38898),

Gene: Corvo_40 Start: 32455, Stop: 32270, Start Num: 3
Candidate Starts for Corvo_40:
(1, 32593), (2, 32560), (Start: 3 @32455 has 35 MA's), (Start: 8 @32413 has 1 MA's), (9, 32392), (13, 32326), (17, 32287),

Gene: Danforth_32 Start: 26364, Stop: 26176, Start Num: 4
Candidate Starts for Danforth_32:
(Start: 4 @26364 has 14 MA's), (Start: 5 @26352 has 1 MA's), (Start: 6 @26343 has 1 MA's), (7, 26328), (10, 26286), (11, 26277), (15, 26208), (16, 26205), (18, 26184),

Gene: Discoknowium_54 Start: 38733, Stop: 38515, Start Num: 3
Candidate Starts for Discoknowium_54:
(Start: 3 @38733 has 35 MA's), (Start: 8 @38691 has 1 MA's), (9, 38670), (13, 38604), (17, 38565),

Gene: Dixon_33 Start: 26473, Stop: 26285, Start Num: 4
Candidate Starts for Dixon_33:
(Start: 4 @26473 has 14 MA's), (Start: 6 @26452 has 1 MA's), (7, 26437), (10, 26395), (11, 26386), (15, 26317), (16, 26314), (18, 26293),

Gene: EnzoK_38 Start: 29630, Stop: 29445, Start Num: 3
Candidate Starts for EnzoK_38:
(1, 29768), (2, 29735), (Start: 3 @29630 has 35 MA's), (Start: 8 @29588 has 1 MA's), (9, 29567), (13, 29501), (17, 29462),

Gene: Expelliarmus_32 Start: 26338, Stop: 26162, Start Num: 5
Candidate Starts for Expelliarmus_32:
(Start: 4 @26350 has 14 MA's), (Start: 5 @26338 has 1 MA's), (Start: 6 @26329 has 1 MA's), (7, 26314), (10, 26272), (11, 26263), (15, 26194), (16, 26191), (18, 26170),

Gene: ForGetIt_56 Start: 39091, Stop: 38873, Start Num: 3
Candidate Starts for ForGetIt_56:
(Start: 3 @39091 has 35 MA's), (Start: 8 @39049 has 1 MA's), (9, 39028), (13, 38962), (17, 38923),

Gene: Forsytheast_39 Start: 31733, Stop: 31548, Start Num: 3
Candidate Starts for Forsytheast_39:

(1, 31871), (2, 31838), (Start: 3 @31733 has 35 MA's), (Start: 8 @31691 has 1 MA's), (9, 31670), (13, 31604), (17, 31565),

Gene: Gandalf20_40 Start: 32430, Stop: 32245, Start Num: 3
Candidate Starts for Gandalf20_40:
(1, 32568), (2, 32535), (Start: 3 @32430 has 35 MA's), (Start: 8 @32388 has 1 MA's), (9, 32367), (13, 32301), (17, 32262),

Gene: Ghoulboy_34 Start: 27580, Stop: 27398, Start Num: 4
Candidate Starts for Ghoulboy_34:
(Start: 4 @27580 has 14 MA's), (12, 27478), (13, 27451), (14, 27436), (15, 27421), (16, 27418),

Gene: Groundhog_32 Start: 26444, Stop: 26256, Start Num: 4
Candidate Starts for Groundhog_32:
(Start: 4 @26444 has 14 MA's), (Start: 6 @26423 has 1 MA's), (7, 26408), (10, 26366), (11, 26357), (15, 26288), (16, 26285), (18, 26264),

Gene: HanShotFirst_38 Start: 31085, Stop: 30900, Start Num: 3
Candidate Starts for HanShotFirst_38:
(1, 31223), (2, 31190), (Start: 3 @31085 has 35 MA's), (Start: 8 @31043 has 1 MA's), (9, 31022), (13, 30956), (17, 30917),

Gene: IgnatiusPatJac_38 Start: 31478, Stop: 31293, Start Num: 3
Candidate Starts for IgnatiusPatJac_38:
(1, 31616), (2, 31583), (Start: 3 @31478 has 35 MA's), (Start: 8 @31436 has 1 MA's), (9, 31415), (13, 31349), (17, 31310),

Gene: Jovo_56 Start: 39347, Stop: 39129, Start Num: 3
Candidate Starts for Jovo_56:
(Start: 3 @39347 has 35 MA's), (Start: 8 @39305 has 1 MA's), (9, 39284), (13, 39218), (17, 39179),

Gene: Kanely_40 Start: 32217, Stop: 32032, Start Num: 3
Candidate Starts for Kanely_40:
(1, 32355), (2, 32322), (Start: 3 @32217 has 35 MA's), (Start: 8 @32175 has 1 MA's), (9, 32154), (13, 32088), (17, 32049),

Gene: Lev2_56 Start: 38979, Stop: 38761, Start Num: 3
Candidate Starts for Lev2_56:
(Start: 3 @38979 has 35 MA's), (Start: 8 @38937 has 1 MA's), (9, 38916), (13, 38850), (17, 38811),

Gene: Levia_36 Start: 31376, Stop: 31191, Start Num: 3
Candidate Starts for Levia_36:
(1, 31514), (2, 31481), (Start: 3 @31376 has 35 MA's), (Start: 8 @31334 has 1 MA's), (9, 31313), (13, 31247), (17, 31208),

Gene: LilBib_39 Start: 32292, Stop: 32104, Start Num: 3
Candidate Starts for LilBib_39:
(1, 32430), (2, 32397), (Start: 3 @32292 has 35 MA's), (Start: 8 @32247 has 1 MA's), (9, 32226), (13, 32160), (17, 32121),

Gene: Marchy_34 Start: 28457, Stop: 28272, Start Num: 3
Candidate Starts for Marchy_34:

(1, 28595), (2, 28562), (Start: 3 @28457 has 35 MA's), (Start: 8 @28415 has 1 MA's), (9, 28394), (13, 28328), (17, 28289),

Gene: MaryBeth_39 Start: 31672, Stop: 31487, Start Num: 3
Candidate Starts for MaryBeth_39:
(1, 31810), (2, 31777), (Start: 3 @31672 has 35 MA's), (Start: 8 @31630 has 1 MA's), (9, 31609), (13, 31543), (17, 31504),

Gene: McSinger_40 Start: 32058, Stop: 31873, Start Num: 3
Candidate Starts for McSinger_40:
(1, 32196), (2, 32163), (Start: 3 @32058 has 35 MA's), (Start: 8 @32016 has 1 MA's), (9, 31995), (13, 31929), (17, 31890),

Gene: MetalQZJ_39 Start: 31672, Stop: 31487, Start Num: 3
Candidate Starts for MetalQZJ_39:
(1, 31810), (2, 31777), (Start: 3 @31672 has 35 MA's), (Start: 8 @31630 has 1 MA's), (9, 31609), (13, 31543), (17, 31504),

Gene: Micasa_34 Start: 27303, Stop: 27121, Start Num: 4
Candidate Starts for Micasa_34:
(Start: 4 @27303 has 14 MA's), (12, 27201), (13, 27174), (14, 27159), (15, 27144), (16, 27141),

Gene: Moose_39 Start: 31733, Stop: 31548, Start Num: 3
Candidate Starts for Moose_39:
(1, 31871), (2, 31838), (Start: 3 @31733 has 35 MA's), (Start: 8 @31691 has 1 MA's), (9, 31670), (13, 31604), (17, 31565),

Gene: Mryolo_37 Start: 31217, Stop: 31032, Start Num: 3
Candidate Starts for Mryolo_37:
(1, 31355), (2, 31322), (Start: 3 @31217 has 35 MA's), (Start: 8 @31175 has 1 MA's), (9, 31154), (13, 31088), (17, 31049),

Gene: NearlyHeadless_33 Start: 26403, Stop: 26215, Start Num: 4
Candidate Starts for NearlyHeadless_33:
(Start: 4 @26403 has 14 MA's), (Start: 6 @26382 has 1 MA's), (7, 26367), (10, 26325), (11, 26316), (15, 26247), (16, 26244), (18, 26223),

Gene: Payneful_39 Start: 31174, Stop: 30989, Start Num: 3
Candidate Starts for Payneful_39:
(1, 31312), (2, 31279), (Start: 3 @31174 has 35 MA's), (Start: 8 @31132 has 1 MA's), (9, 31111), (13, 31045), (17, 31006),

Gene: Phillis_33 Start: 26429, Stop: 26241, Start Num: 4
Candidate Starts for Phillis_33:
(Start: 4 @26429 has 14 MA's), (Start: 5 @26417 has 1 MA's), (Start: 6 @26408 has 1 MA's), (7, 26393), (10, 26351), (15, 26273), (16, 26270), (18, 26249),

Gene: PhineBark_38 Start: 32352, Stop: 32209, Start Num: 8
Candidate Starts for PhineBark_38:
(1, 32532), (2, 32499), (Start: 3 @32394 has 35 MA's), (Start: 8 @32352 has 1 MA's), (9, 32331), (13, 32265), (17, 32226),

Gene: Phlorence_54 Start: 38724, Stop: 38506, Start Num: 3

Candidate Starts for Phlorence_54:
(Start: 3 @38724 has 35 MA's), (Start: 8 @38682 has 1 MA's), (9, 38661), (13, 38595), (17, 38556),

Gene: Roary_33 Start: 26349, Stop: 26161, Start Num: 4
Candidate Starts for Roary_33:
(Start: 4 @26349 has 14 MA's), (Start: 5 @26337 has 1 MA's), (Start: 6 @26328 has 1 MA's), (7, 26313), (10, 26271), (11, 26262), (15, 26193), (16, 26190), (18, 26169),

Gene: STLscum_40 Start: 32567, Stop: 32382, Start Num: 3
Candidate Starts for STLscum_40:
(1, 32705), (2, 32672), (Start: 3 @32567 has 35 MA's), (Start: 8 @32525 has 1 MA's), (9, 32504), (13, 32438), (17, 32399),

Gene: ShortQueendom_35 Start: 28214, Stop: 28029, Start Num: 3
Candidate Starts for ShortQueendom_35:
(1, 28352), (2, 28319), (Start: 3 @28214 has 35 MA's), (Start: 8 @28172 has 1 MA's), (9, 28151), (13, 28085), (17, 28046),

Gene: SkiPole_42 Start: 32086, Stop: 31901, Start Num: 3
Candidate Starts for SkiPole_42:
(1, 32221), (Start: 3 @32086 has 35 MA's), (Start: 8 @32044 has 1 MA's), (9, 32023), (13, 31957), (17, 31918),

Gene: Smeadley_33 Start: 26472, Stop: 26284, Start Num: 4
Candidate Starts for Smeadley_33:
(Start: 4 @26472 has 14 MA's), (Start: 6 @26451 has 1 MA's), (7, 26436), (10, 26394), (11, 26385), (15, 26316), (16, 26313), (18, 26292),

Gene: Stephig9_33 Start: 26377, Stop: 26189, Start Num: 4
Candidate Starts for Stephig9_33:
(Start: 4 @26377 has 14 MA's), (Start: 6 @26356 has 1 MA's), (7, 26341), (10, 26299), (11, 26290), (15, 26221), (16, 26218), (18, 26197),

Gene: Swirley_34 Start: 27310, Stop: 27128, Start Num: 4
Candidate Starts for Swirley_34:
(Start: 4 @27310 has 14 MA's), (12, 27208), (13, 27181), (14, 27166), (15, 27151), (16, 27148),

Gene: SwissCheese_41 Start: 32233, Stop: 32048, Start Num: 3
Candidate Starts for SwissCheese_41:
(1, 32371), (2, 32338), (Start: 3 @32233 has 35 MA's), (Start: 8 @32191 has 1 MA's), (9, 32170), (13, 32104), (17, 32065),

Gene: SydNat_34 Start: 27589, Stop: 27407, Start Num: 4
Candidate Starts for SydNat_34:
(Start: 4 @27589 has 14 MA's), (12, 27487), (13, 27460), (14, 27445), (15, 27430), (16, 27427),

Gene: Teodoridan_37 Start: 31023, Stop: 30790, Start Num: 3
Candidate Starts for Teodoridan_37:
(1, 31161), (2, 31128), (Start: 3 @31023 has 35 MA's), (Start: 8 @30981 has 1 MA's), (9, 30960), (13, 30894), (17, 30855),

Gene: Tiger_55 Start: 38645, Stop: 38427, Start Num: 3
Candidate Starts for Tiger_55:

(Start: 3 @38645 has 35 MA's), (Start: 8 @38603 has 1 MA's), (9, 38582), (13, 38516), (17, 38477),

Gene: Watermelon_41 Start: 32437, Stop: 32249, Start Num: 3
Candidate Starts for Watermelon_41:
(1, 32575), (2, 32542), (Start: 3 @32437 has 35 MA's), (Start: 8 @32392 has 1 MA's), (9, 32371), (13, 32305), (17, 32266),

Gene: Zolita_33 Start: 27593, Stop: 27411, Start Num: 4
Candidate Starts for Zolita_33:
(Start: 4 @27593 has 14 MA's), (12, 27491), (13, 27464), (14, 27449), (15, 27434), (16, 27431),