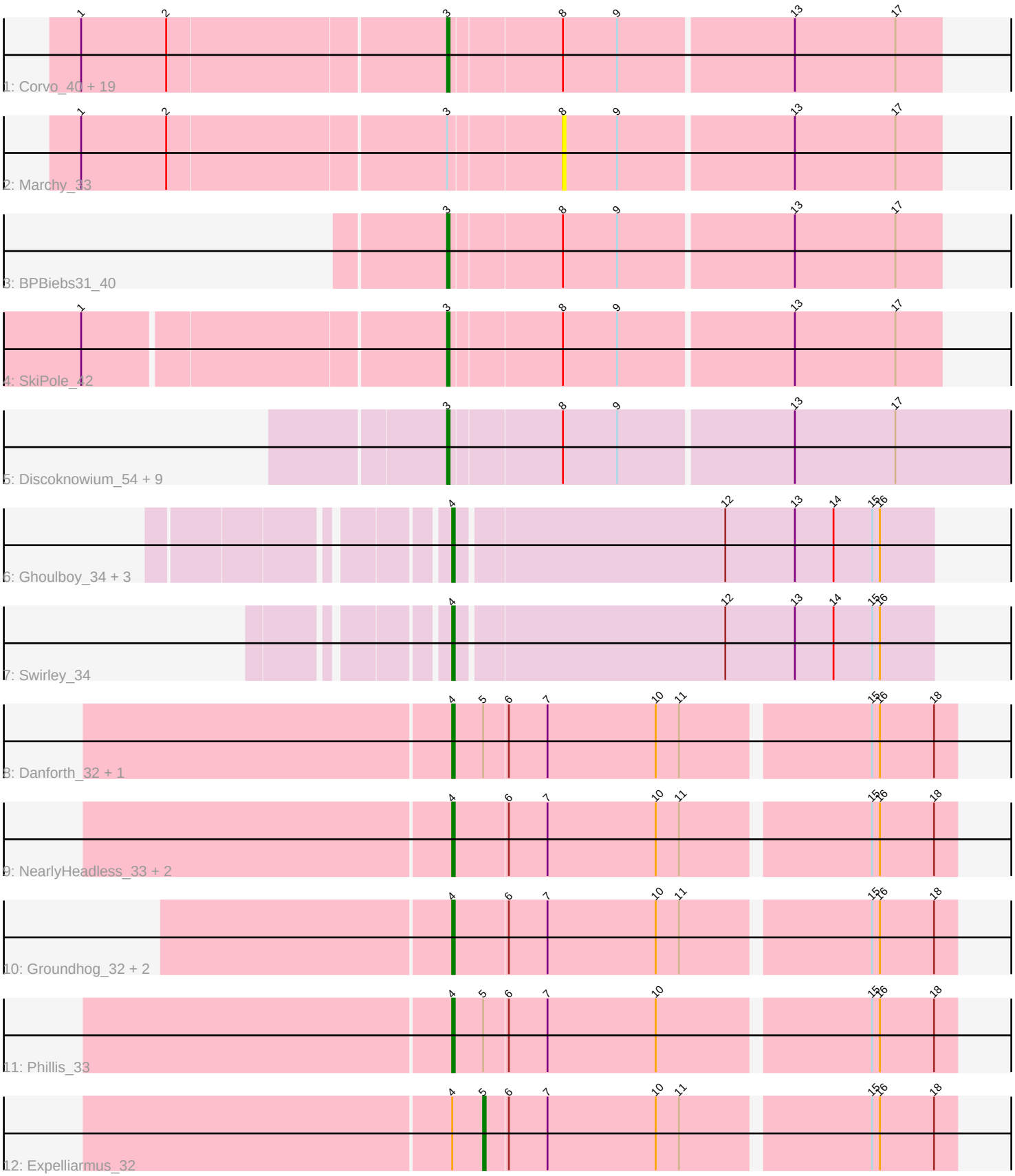
Pham 163680


1: Corvo_40 + 19
2: Marchy_33
3: BPBiebs31_40
4: SkiPole_42
5: Discoknowium_54 + 9
6: Ghoulboy_34 + 3
7: Swirley_34
8: Danforth_32 + 1
9: NearlyHeadless_33 + 2
10: Groundhog_32 + 2
11: Phillis_33
12: 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 163680 Report

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

Pham number 163680 has 48 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Corvo_40, BluSpix_36, ConceptII_41, LilBib_39, SwissCheese_41, HanShotFirst_38, Kanely_40, Forsytheast_39, MetalQZJ_39, Gandalf20_40, IgnatiusPatJac_38, ShortQueendom_34, Moose_39, Altman_41, Teodoridan_37, MaryBeth_39, Watermelon_41, STLscum_40, Mryolo_37, Payneful_38
• Track 2 : Marchy_33
• Track 3 : BPBiebs31_40
• 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, SydNat_34, Zolita_33, Micasa_33
• Track 7 : Swirley_34
• Track 8 : Danforth_32, Roary_33
• Track 9 : NearlyHeadless_33, Stephig9_33, Dixon_33
• Track 10 : Groundhog_32, Smeadley_33, Astro_33
• Track 11 : Phillis_33
• Track 12 : 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 28 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AgentM_55, Altman_41, Aragog_55, Archetta_55, BPBiebs31_40, BluSpix_36, ConceptII_41, Conspiracy_56, Corvo_40, Discoknowium_54, ForGetIt_56, Forsytheast_39, Gandalf20_40, HanShotFirst_38, IgnatiusPatJac_38, Jovo_56, Kanely_40, Lev2_56, LilBib_39, MaryBeth_39, MetalQZJ_39, Moose_39, Mryolo_37, Payneful_38, Phlorence_54, STLscum_40, ShortQueendom_34, SkiPole_42, SwissCheese_41, Teodoridan_37, Tiger_55, Watermelon_41,

Genes that have the "Most Annotated" start but do not call it:
• Marchy_33,

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

• Astro_33, Danforth_32, Dixon_33, Expelliarmus_32, Ghoulboy_34, Groundhog_32, Micasa_33, NearlyHeadless_33, Phillis_33, Roary_33, Smeadley_33, Stephig9_33, Swirley_34, SydNat_34, Zolita_33,

Summary by start number:

Start 3:
• Found in 33 of 48 (68.8%) of genes in pham
• Manual Annotations of this start: 28 of 42
• Called 97.0% 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), BluSpix_36 (A1), ConceptII_41 (A1), Conspiracy_56 (A5), Corvo_40 (A1), Discoknowium_54 (A5), ForGetIt_56 (A5), Forsytheast_39 (A1), Gandalf20_40 (A1), HanShotFirst_38 (A1), IgnatiusPatJac_38 (A1), Jovo_56 (A5), Kanely_40 (A1), Lev2_56 (A5), LilBib_39 (A1), MaryBeth_39 (A1), MetalQZJ_39 (A1), Moose_39 (A1), Mryolo_37 (A1), Payneful_38 (A1), Phlorence_54 (A5), STLscum_40 (A1), ShortQueendom_34 (A1), SkiPole_42 (A1), SwissCheese_41 (A1), Teodoridan_37 (A1), Tiger_55 (A5), Watermelon_41 (A1),

Start 4:
• Found in 15 of 48 (31.2%) of genes in pham
• Manual Annotations of this start: 13 of 42
• Called 93.3% 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_33 (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 48 (8.3%) of genes in pham
• Manual Annotations of this start: 1 of 42
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Expelliarmus_32 (A8),

Start 8:
• Found in 33 of 48 (68.8%) of genes in pham
• No Manual Annotations of this start.
• Called 3.0% of time when present
• Phage (with cluster) where this start called: Marchy_33 (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 18 times 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 4 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.

Gene Information:

Gene: AgentM_55 Start: 38824, Stop: 38606, Start Num: 3
Candidate Starts for AgentM_55:
(Start: 3 @38824 has 28 MA's), (8, 38782), (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 28 MA's), (8, 32399), (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 28 MA's), (8, 38802), (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 28 MA's), (8, 39212), (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 13 MA's), (6, 26458), (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 28 MA's), (8, 31883), (9, 31862), (13, 31796), (17, 31757),

Gene: BluSpix_36 Start: 27533, Stop: 27348, Start Num: 3
Candidate Starts for BluSpix_36:
(1, 27671), (2, 27638), (Start: 3 @27533 has 28 MA's), (8, 27491), (9, 27470), (13, 27404), (17, 27365),

Gene: ConceptII_41 Start: 32595, Stop: 32362, Start Num: 3
Candidate Starts for ConceptII_41:
(1, 32733), (2, 32700), (Start: 3 @32595 has 28 MA's), (8, 32553), (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 28 MA's), (8, 39024), (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 28 MA's), (8, 32413), (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 13 MA's), (Start: 5 @26352 has 1 MA's), (6, 26343), (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 28 MA's), (8, 38691), (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 13 MA's), (6, 26452), (7, 26437), (10, 26395), (11, 26386), (15, 26317), (16, 26314), (18, 26293),

Gene: Expelliarmus_32 Start: 26338, Stop: 26162, Start Num: 5
Candidate Starts for Expelliarmus_32:
(Start: 4 @26350 has 13 MA's), (Start: 5 @26338 has 1 MA's), (6, 26329), (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 28 MA's), (8, 39049), (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 28 MA's), (8, 31691), (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 28 MA's), (8, 32388), (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 13 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 13 MA's), (6, 26423), (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 28 MA's), (8, 31043), (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 28 MA's), (8, 31436), (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 28 MA's), (8, 39305), (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 28 MA's), (8, 32175), (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 28 MA's), (8, 38937), (9, 38916), (13, 38850), (17, 38811),

Gene: LilBib_39 Start: 32292, Stop: 32104, Start Num: 3
Candidate Starts for LilBib_39:
(1, 32430), (2, 32397), (Start: 3 @32292 has 28 MA's), (8, 32247), (9, 32226), (13, 32160), (17, 32121),

Gene: Marchy_33 Start: 28415, Stop: 28272, Start Num: 8
Candidate Starts for Marchy_33:
(1, 28595), (2, 28562), (Start: 3 @28457 has 28 MA's), (8, 28415), (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 28 MA's), (8, 31630), (9, 31609), (13, 31543), (17, 31504),

Gene: MetalQZJ_39 Start: 31672, Stop: 31487, Start Num: 3
Candidate Starts for MetalQZJ_39:
(1, 31810), (2, 31777), (Start: 3 @31672 has 28 MA's), (8, 31630), (9, 31609), (13, 31543), (17, 31504),

Gene: Micasa_33 Start: 27303, Stop: 27121, Start Num: 4
Candidate Starts for Micasa_33:
(Start: 4 @27303 has 13 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 28 MA's), (8, 31691), (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 28 MA's), (8, 31175), (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 13 MA's), (6, 26382), (7, 26367), (10, 26325), (11, 26316), (15, 26247), (16, 26244), (18, 26223),

Gene: Payneful_38 Start: 31174, Stop: 30989, Start Num: 3
Candidate Starts for Payneful_38:

(1, 31312), (2, 31279), (Start: 3 @31174 has 28 MA's), (8, 31132), (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 13 MA's), (Start: 5 @26417 has 1 MA's), (6, 26408), (7, 26393), (10, 26351), (15, 26273), (16, 26270), (18, 26249),

Gene: Phlorence_54 Start: 38724, Stop: 38506, Start Num: 3
Candidate Starts for Phlorence_54:
(Start: 3 @38724 has 28 MA's), (8, 38682), (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 13 MA's), (Start: 5 @26337 has 1 MA's), (6, 26328), (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 28 MA's), (8, 32525), (9, 32504), (13, 32438), (17, 32399),

Gene: ShortQueendom_34 Start: 28214, Stop: 28029, Start Num: 3
Candidate Starts for ShortQueendom_34:
(1, 28352), (2, 28319), (Start: 3 @28214 has 28 MA's), (8, 28172), (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 28 MA's), (8, 32044), (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 13 MA's), (6, 26451), (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 13 MA's), (6, 26356), (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 13 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 28 MA's), (8, 32191), (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 13 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 28 MA's), (8, 30981), (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 28 MA's), (8, 38603), (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 28 MA's), (8, 32392), (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 13 MA's), (12, 27491), (13, 27464), (14, 27449), (15, 27434), (16, 27431),