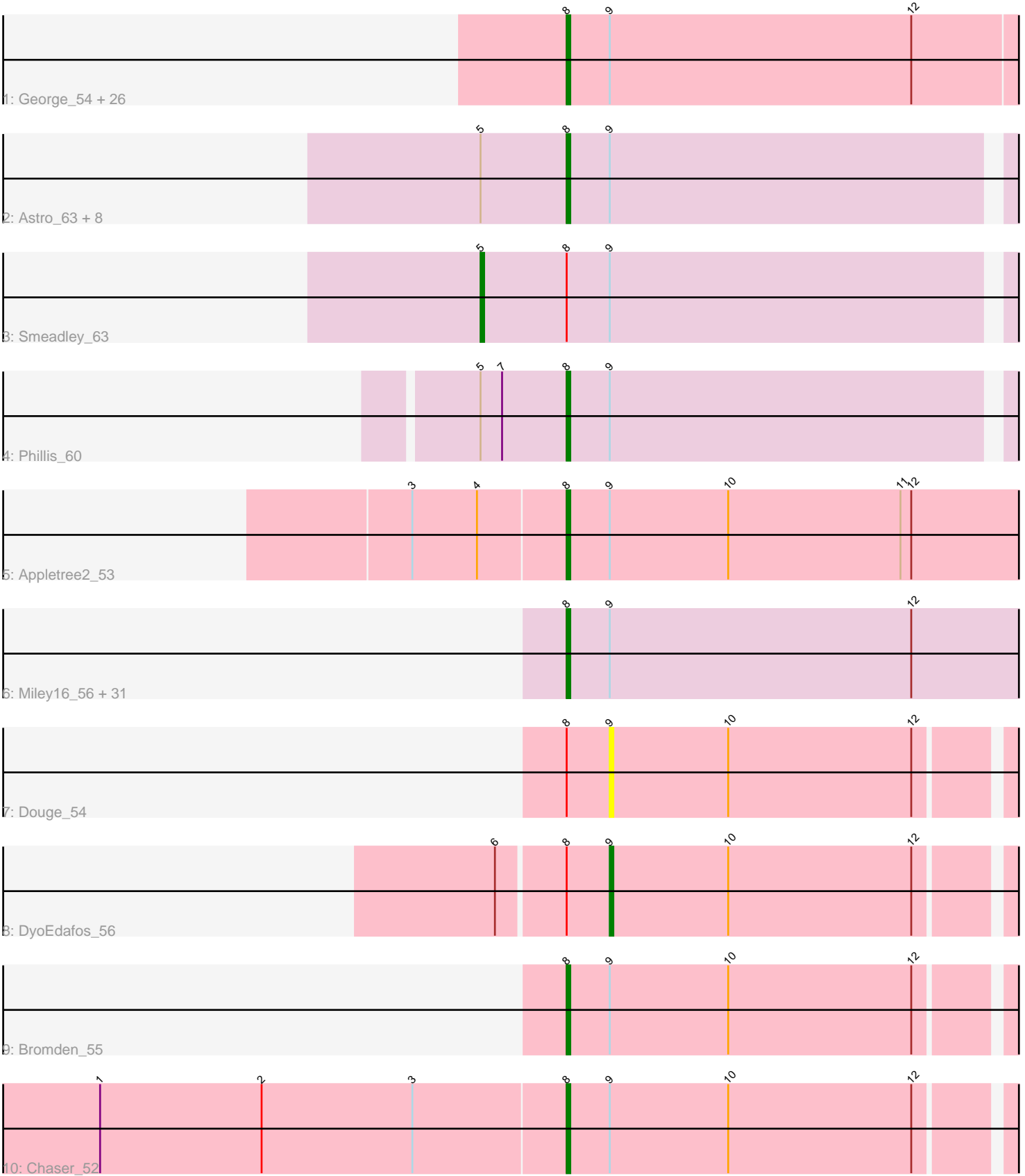


Pham 85431



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 85431 Report

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

Pham number 85431 has 75 members, 6 are drafts.

Phages represented in each track:

- Track 1 : George\_54, Cuco\_57, Jovo\_58, Discoknowium\_56, PickleBack\_58, Lev2\_58, Dublin\_57, Ghouboy\_59, Conspiracy\_58, Archetta\_57, Zolita\_58, Bonamassa\_55, ForGetIt\_58, Micasa\_55, Swirley\_58, HuhtaEnerson15\_56, Tiger\_57, MarysWell\_57, AgentM\_57, LittleCherry\_56, Aragog\_57, Phlorence\_56, SydNat\_59, Theia\_56, Milcery\_56, Tarynearal\_54, Bluefalcon\_55
- Track 2 : Astro\_63, Roary\_64, Dixon\_62, Danforth\_63, Stephig9\_62, Expelliarmus\_60, NearlyHeadless\_63, Saintus\_58, Groundhog\_62
- Track 3 : Smeadley\_63
- Track 4 : Phillis\_60
- Track 5 : Appletree2\_53
- Track 6 : Miley16\_56, Bazzle\_56, Gabriela\_53, Gardann\_57, Archie\_56, Loadrie\_55, Zakai\_57, Rumpelstiltskin\_55, Kahlid\_56, Tourach\_55, Itos\_55, LilDestine\_56, Lewan\_57, BobsGarage\_56, Crossroads\_56, Baoshan\_54, DrSeegs\_56, Hafay\_57, Winky\_56, Vetrix\_56, Breezonia\_56, Finemlucis\_56, BigCheese\_56, Claus\_56, GuuelaD\_55, Nicholasp3\_56, Wigglewiggle\_56, Netyap\_57, Wilder\_57, MkaliMitinis3\_57, Faith1\_56, ZhongYanYuan\_54
- Track 7 : Douge\_54
- Track 8 : DyoEdafos\_56
- Track 9 : Bromden\_55
- Track 10 : Chaser\_52

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

The start number called the most often in the published annotations is 8, it was called in 67 of the 69 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AgentM\_57, Appletree2\_53, Aragog\_57, Archetta\_57, Archie\_56, Astro\_63, Baoshan\_54, Bazzle\_56, BigCheese\_56, Bluefalcon\_55, BobsGarage\_56, Bonamassa\_55, Breezonia\_56, Bromden\_55, Chaser\_52, Claus\_56, Conspiracy\_58, Crossroads\_56, Cuco\_57, Danforth\_63, Discoknowium\_56, Dixon\_62, DrSeegs\_56, Dublin\_57, Expelliarmus\_60, Faith1\_56, Finemlucis\_56, ForGetIt\_58, Gabriela\_53, Gardann\_57, George\_54, Ghouboy\_59, Groundhog\_62, GuuelaD\_55, Hafay\_57, HuhtaEnerson15\_56, Itos\_55, Jovo\_58, Kahlid\_56, Lev2\_58, Lewan\_57,

LilDestine\_56, LittleCherry\_56, Loadrie\_55, MarysWell\_57, Micasa\_55, Milcery\_56, Miley16\_56, MkaliMitinis3\_57, NearlyHeadless\_63, Netyap\_57, Nicholasp3\_56, Phillis\_60, Phlorence\_56, PickleBack\_58, Roary\_64, Rumpelstiltskin\_55, Saintus\_58, Stephig9\_62, Swirley\_58, SydNat\_59, Tarynearal\_54, Theia\_56, Tiger\_57, Tourach\_55, Vetrix\_56, Wigglewiggles\_56, Wilder\_57, Winky\_56, Zakai\_57, ZhongYanYuan\_54, Zolita\_58,

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

- Douge\_54, DyoEdafos\_56, Smeadley\_63,

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

- 

### Summary by start number:

Start 5:

- Found in 11 of 75 ( 14.7% ) of genes in pham
- Manual Annotations of this start: 1 of 69
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Smeadley\_63 (A8),

Start 8:

- Found in 75 of 75 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 67 of 69
- Called 96.0% of time when present
- Phage (with cluster) where this start called: AgentM\_57 (A5), Appletree2\_53 (L1), Aragog\_57 (A5), Archetta\_57 (A5), Archie\_56 (L2), Astro\_63 (A8), Baoshan\_54 (L2), Bazzle\_56 (L2), BigCheese\_56 (L2), Bluefalcon\_55 (A5), BobsGarage\_56 (L2), Bonamassa\_55 (A5), Breezonia\_56 (L2), Bromden\_55 (L4), Chaser\_52 (L4), Claus\_56 (L2), Conspiracy\_58 (A5), Crossroads\_56 (L2), Cuco\_57 (A5), Danforth\_63 (A8), Discoknowium\_56 (A5), Dixon\_62 (A8), DrSeegs\_56 (L2), Dublin\_57 (A5), Expelliarmus\_60 (A8), Faith1\_56 (L2), Finemlucis\_56 (L2), ForGetIt\_58 (A5), Gabriela\_53 (L2), Gardann\_57 (L2), George\_54 (A5), Ghouboy\_59 (A5), Groundhog\_62 (A8), GuuellaD\_55 (L2), Hafay\_57 (L2), HuhtaEnerson15\_56 (A5), Itos\_55 (L2), Jovo\_58 (A5), Kahlid\_56 (L2), Lev2\_58 (A5), Lewan\_57 (L2), LilDestine\_56 (L2), LittleCherry\_56 (A5), Loadrie\_55 (L2), MarysWell\_57 (A5), Micasa\_55 (A5), Milcery\_56 (A5), Miley16\_56 (L2), MkaliMitinis3\_57 (L2), NearlyHeadless\_63 (A8), Netyap\_57 (L2), Nicholasp3\_56 (L2), Phillis\_60 (A8), Phlorence\_56 (A5), PickleBack\_58 (A5), Roary\_64 (A8), Rumpelstiltskin\_55 (L2), Saintus\_58 (A8), Stephig9\_62 (A8), Swirley\_58 (A5), SydNat\_59 (A5), Tarynearal\_54 (A5), Theia\_56 (A5), Tiger\_57 (A5), Tourach\_55 (L2), Vetrix\_56 (L2), Wigglewiggles\_56 (L2), Wilder\_57 (L2), Winky\_56 (L2), Zakai\_57 (L2), ZhongYanYuan\_54 (L2), Zolita\_58 (A5),

Start 9:

- Found in 75 of 75 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 69
- Called 2.7% of time when present
- Phage (with cluster) where this start called: Douge\_54 (L4), DyoEdafos\_56 (L4),

### Summary by clusters:

There are 5 clusters represented in this pham: A8, L4, A5, L2, L1,

Info for manual annotations of cluster A5:

- Start number 8 was manually annotated 26 times for cluster A5.

Info for manual annotations of cluster A8:

- Start number 5 was manually annotated 1 time for cluster A8.
- Start number 8 was manually annotated 10 times for cluster A8.

Info for manual annotations of cluster L1:

- Start number 8 was manually annotated 1 time for cluster L1.

Info for manual annotations of cluster L2:

- Start number 8 was manually annotated 28 times for cluster L2.

Info for manual annotations of cluster L4:

- Start number 8 was manually annotated 2 times for cluster L4.
- Start number 9 was manually annotated 1 time for cluster L4.

### ***Gene Information:***

Gene: AgentM\_57 Start: 39179, Stop: 39045, Start Num: 8

Candidate Starts for AgentM\_57:

(Start: 8 @39179 has 67 MA's), (Start: 9 @39167 has 1 MA's), (12, 39083),

Gene: Appletree2\_53 Start: 40440, Stop: 40571, Start Num: 8

Candidate Starts for Appletree2\_53:

(3, 40398), (4, 40416), (Start: 8 @40440 has 67 MA's), (Start: 9 @40452 has 1 MA's), (10, 40485), (11, 40533), (12, 40536),

Gene: Aragog\_57 Start: 39199, Stop: 39065, Start Num: 8

Candidate Starts for Aragog\_57:

(Start: 8 @39199 has 67 MA's), (Start: 9 @39187 has 1 MA's), (12, 39103),

Gene: Archetta\_57 Start: 39609, Stop: 39475, Start Num: 8

Candidate Starts for Archetta\_57:

(Start: 8 @39609 has 67 MA's), (Start: 9 @39597 has 1 MA's), (12, 39513),

Gene: Archie\_56 Start: 42579, Stop: 42710, Start Num: 8

Candidate Starts for Archie\_56:

(Start: 8 @42579 has 67 MA's), (Start: 9 @42591 has 1 MA's), (12, 42675),

Gene: Astro\_63 Start: 38975, Stop: 38853, Start Num: 8

Candidate Starts for Astro\_63:

(Start: 5 @38999 has 1 MA's), (Start: 8 @38975 has 67 MA's), (Start: 9 @38963 has 1 MA's),

Gene: Baoshan\_54 Start: 42253, Stop: 42384, Start Num: 8

Candidate Starts for Baoshan\_54:

(Start: 8 @42253 has 67 MA's), (Start: 9 @42265 has 1 MA's), (12, 42349),

Gene: Bazzle\_56 Start: 42649, Stop: 42780, Start Num: 8

Candidate Starts for Bazzle\_56:

(Start: 8 @42649 has 67 MA's), (Start: 9 @42661 has 1 MA's), (12, 42745),

Gene: BigCheese\_56 Start: 42319, Stop: 42450, Start Num: 8

Candidate Starts for BigCheese\_56:

(Start: 8 @42319 has 67 MA's), (Start: 9 @42331 has 1 MA's), (12, 42415),

Gene: Bluefalcon\_55 Start: 39629, Stop: 39492, Start Num: 8

Candidate Starts for Bluefalcon\_55:

(Start: 8 @39629 has 67 MA's), (Start: 9 @39617 has 1 MA's), (12, 39533),

Gene: BobsGarage\_56 Start: 42319, Stop: 42450, Start Num: 8

Candidate Starts for BobsGarage\_56:

(Start: 8 @42319 has 67 MA's), (Start: 9 @42331 has 1 MA's), (12, 42415),

Gene: Bonamassa\_55 Start: 39021, Stop: 38887, Start Num: 8

Candidate Starts for Bonamassa\_55:

(Start: 8 @39021 has 67 MA's), (Start: 9 @39009 has 1 MA's), (12, 38925),

Gene: Breezona\_56 Start: 42319, Stop: 42450, Start Num: 8

Candidate Starts for Breezona\_56:

(Start: 8 @42319 has 67 MA's), (Start: 9 @42331 has 1 MA's), (12, 42415),

Gene: Bromden\_55 Start: 41859, Stop: 41984, Start Num: 8

Candidate Starts for Bromden\_55:

(Start: 8 @41859 has 67 MA's), (Start: 9 @41871 has 1 MA's), (10, 41904), (12, 41955),

Gene: Chaser\_52 Start: 40944, Stop: 41069, Start Num: 8

Candidate Starts for Chaser\_52:

(1, 40815), (2, 40860), (3, 40902), (Start: 8 @40944 has 67 MA's), (Start: 9 @40956 has 1 MA's), (10, 40989), (12, 41040),

Gene: Claus\_56 Start: 42400, Stop: 42531, Start Num: 8

Candidate Starts for Claus\_56:

(Start: 8 @42400 has 67 MA's), (Start: 9 @42412 has 1 MA's), (12, 42496),

Gene: Conspiracy\_58 Start: 39421, Stop: 39287, Start Num: 8

Candidate Starts for Conspiracy\_58:

(Start: 8 @39421 has 67 MA's), (Start: 9 @39409 has 1 MA's), (12, 39325),

Gene: Crossroads\_56 Start: 42397, Stop: 42528, Start Num: 8

Candidate Starts for Crossroads\_56:

(Start: 8 @42397 has 67 MA's), (Start: 9 @42409 has 1 MA's), (12, 42493),

Gene: Cuco\_57 Start: 39245, Stop: 39111, Start Num: 8

Candidate Starts for Cuco\_57:

(Start: 8 @39245 has 67 MA's), (Start: 9 @39233 has 1 MA's), (12, 39149),

Gene: Danforth\_63 Start: 39038, Stop: 38916, Start Num: 8

Candidate Starts for Danforth\_63:

(Start: 5 @39062 has 1 MA's), (Start: 8 @39038 has 67 MA's), (Start: 9 @39026 has 1 MA's),

Gene: Discoknowium\_56 Start: 39088, Stop: 38954, Start Num: 8

Candidate Starts for Discoknowium\_56:

(Start: 8 @39088 has 67 MA's), (Start: 9 @39076 has 1 MA's), (12, 38992),

Gene: Dixon\_62 Start: 38558, Stop: 38436, Start Num: 8

Candidate Starts for Dixon\_62:

(Start: 5 @38582 has 1 MA's), (Start: 8 @38558 has 67 MA's), (Start: 9 @38546 has 1 MA's),

Gene: Douge\_54 Start: 40950, Stop: 41063, Start Num: 9

Candidate Starts for Douge\_54:

(Start: 8 @40938 has 67 MA's), (Start: 9 @40950 has 1 MA's), (10, 40983), (12, 41034),

Gene: DrSeegs\_56 Start: 42319, Stop: 42450, Start Num: 8

Candidate Starts for DrSeegs\_56:

(Start: 8 @42319 has 67 MA's), (Start: 9 @42331 has 1 MA's), (12, 42415),

Gene: Dublin\_57 Start: 39321, Stop: 39184, Start Num: 8

Candidate Starts for Dublin\_57:

(Start: 8 @39321 has 67 MA's), (Start: 9 @39309 has 1 MA's), (12, 39225),

Gene: DyoEdafos\_56 Start: 41232, Stop: 41345, Start Num: 9

Candidate Starts for DyoEdafos\_56:

(6, 41202), (Start: 8 @41220 has 67 MA's), (Start: 9 @41232 has 1 MA's), (10, 41265), (12, 41316),

Gene: Expelliarmus\_60 Start: 38762, Stop: 38640, Start Num: 8

Candidate Starts for Expelliarmus\_60:

(Start: 5 @38786 has 1 MA's), (Start: 8 @38762 has 67 MA's), (Start: 9 @38750 has 1 MA's),

Gene: Faith1\_56 Start: 42319, Stop: 42450, Start Num: 8

Candidate Starts for Faith1\_56:

(Start: 8 @42319 has 67 MA's), (Start: 9 @42331 has 1 MA's), (12, 42415),

Gene: Finemlucis\_56 Start: 42640, Stop: 42771, Start Num: 8

Candidate Starts for Finemlucis\_56:

(Start: 8 @42640 has 67 MA's), (Start: 9 @42652 has 1 MA's), (12, 42736),

Gene: ForGetIt\_58 Start: 39446, Stop: 39312, Start Num: 8

Candidate Starts for ForGetIt\_58:

(Start: 8 @39446 has 67 MA's), (Start: 9 @39434 has 1 MA's), (12, 39350),

Gene: Gabriela\_53 Start: 40769, Stop: 40900, Start Num: 8

Candidate Starts for Gabriela\_53:

(Start: 8 @40769 has 67 MA's), (Start: 9 @40781 has 1 MA's), (12, 40865),

Gene: Gardann\_57 Start: 42355, Stop: 42486, Start Num: 8

Candidate Starts for Gardann\_57:

(Start: 8 @42355 has 67 MA's), (Start: 9 @42367 has 1 MA's), (12, 42451),

Gene: George\_54 Start: 38915, Stop: 38781, Start Num: 8

Candidate Starts for George\_54:

(Start: 8 @38915 has 67 MA's), (Start: 9 @38903 has 1 MA's), (12, 38819),

Gene: Ghouboy\_59 Start: 39883, Stop: 39746, Start Num: 8

Candidate Starts for Ghouboy\_59:

(Start: 8 @39883 has 67 MA's), (Start: 9 @39871 has 1 MA's), (12, 39787),

Gene: Groundhog\_62 Start: 38953, Stop: 38831, Start Num: 8  
Candidate Starts for Groundhog\_62:  
(Start: 5 @38977 has 1 MA's), (Start: 8 @38953 has 67 MA's), (Start: 9 @38941 has 1 MA's),

Gene: GuuelaD\_55 Start: 42434, Stop: 42565, Start Num: 8  
Candidate Starts for GuuelaD\_55:  
(Start: 8 @42434 has 67 MA's), (Start: 9 @42446 has 1 MA's), (12, 42530),

Gene: Hafay\_57 Start: 42423, Stop: 42554, Start Num: 8  
Candidate Starts for Hafay\_57:  
(Start: 8 @42423 has 67 MA's), (Start: 9 @42435 has 1 MA's), (12, 42519),

Gene: HuhtaEnerson15\_56 Start: 38915, Stop: 38781, Start Num: 8  
Candidate Starts for HuhtaEnerson15\_56:  
(Start: 8 @38915 has 67 MA's), (Start: 9 @38903 has 1 MA's), (12, 38819),

Gene: Itos\_55 Start: 41225, Stop: 41356, Start Num: 8  
Candidate Starts for Itos\_55:  
(Start: 8 @41225 has 67 MA's), (Start: 9 @41237 has 1 MA's), (12, 41321),

Gene: Jovo\_58 Start: 39702, Stop: 39568, Start Num: 8  
Candidate Starts for Jovo\_58:  
(Start: 8 @39702 has 67 MA's), (Start: 9 @39690 has 1 MA's), (12, 39606),

Gene: Kahlid\_56 Start: 42325, Stop: 42456, Start Num: 8  
Candidate Starts for Kahlid\_56:  
(Start: 8 @42325 has 67 MA's), (Start: 9 @42337 has 1 MA's), (12, 42421),

Gene: Lev2\_58 Start: 39334, Stop: 39200, Start Num: 8  
Candidate Starts for Lev2\_58:  
(Start: 8 @39334 has 67 MA's), (Start: 9 @39322 has 1 MA's), (12, 39238),

Gene: Lewan\_57 Start: 42379, Stop: 42510, Start Num: 8  
Candidate Starts for Lewan\_57:  
(Start: 8 @42379 has 67 MA's), (Start: 9 @42391 has 1 MA's), (12, 42475),

Gene: LilDestine\_56 Start: 42352, Stop: 42483, Start Num: 8  
Candidate Starts for LilDestine\_56:  
(Start: 8 @42352 has 67 MA's), (Start: 9 @42364 has 1 MA's), (12, 42448),

Gene: LittleCherry\_56 Start: 38935, Stop: 38801, Start Num: 8  
Candidate Starts for LittleCherry\_56:  
(Start: 8 @38935 has 67 MA's), (Start: 9 @38923 has 1 MA's), (12, 38839),

Gene: Loadrie\_55 Start: 42407, Stop: 42538, Start Num: 8  
Candidate Starts for Loadrie\_55:  
(Start: 8 @42407 has 67 MA's), (Start: 9 @42419 has 1 MA's), (12, 42503),

Gene: MarysWell\_57 Start: 39564, Stop: 39427, Start Num: 8  
Candidate Starts for MarysWell\_57:  
(Start: 8 @39564 has 67 MA's), (Start: 9 @39552 has 1 MA's), (12, 39468),

Gene: Micasa\_55 Start: 39286, Stop: 39134, Start Num: 8

Candidate Starts for Micasa\_55:

(Start: 8 @39286 has 67 MA's), (Start: 9 @39274 has 1 MA's), (12, 39190),

Gene: Milcery\_56 Start: 38883, Stop: 38749, Start Num: 8

Candidate Starts for Milcery\_56:

(Start: 8 @38883 has 67 MA's), (Start: 9 @38871 has 1 MA's), (12, 38787),

Gene: Miley16\_56 Start: 42319, Stop: 42450, Start Num: 8

Candidate Starts for Miley16\_56:

(Start: 8 @42319 has 67 MA's), (Start: 9 @42331 has 1 MA's), (12, 42415),

Gene: MkaliMitinis3\_57 Start: 42391, Stop: 42522, Start Num: 8

Candidate Starts for MkaliMitinis3\_57:

(Start: 8 @42391 has 67 MA's), (Start: 9 @42403 has 1 MA's), (12, 42487),

Gene: NearlyHeadless\_63 Start: 38804, Stop: 38682, Start Num: 8

Candidate Starts for NearlyHeadless\_63:

(Start: 5 @38828 has 1 MA's), (Start: 8 @38804 has 67 MA's), (Start: 9 @38792 has 1 MA's),

Gene: Netyap\_57 Start: 42320, Stop: 42451, Start Num: 8

Candidate Starts for Netyap\_57:

(Start: 8 @42320 has 67 MA's), (Start: 9 @42332 has 1 MA's), (12, 42416),

Gene: Nicholasp3\_56 Start: 42355, Stop: 42486, Start Num: 8

Candidate Starts for Nicholasp3\_56:

(Start: 8 @42355 has 67 MA's), (Start: 9 @42367 has 1 MA's), (12, 42451),

Gene: Phillis\_60 Start: 38282, Stop: 38160, Start Num: 8

Candidate Starts for Phillis\_60:

(Start: 5 @38306 has 1 MA's), (7, 38300), (Start: 8 @38282 has 67 MA's), (Start: 9 @38270 has 1 MA's),

Gene: Phlorence\_56 Start: 39079, Stop: 38945, Start Num: 8

Candidate Starts for Phlorence\_56:

(Start: 8 @39079 has 67 MA's), (Start: 9 @39067 has 1 MA's), (12, 38983),

Gene: PickleBack\_58 Start: 39256, Stop: 39122, Start Num: 8

Candidate Starts for PickleBack\_58:

(Start: 8 @39256 has 67 MA's), (Start: 9 @39244 has 1 MA's), (12, 39160),

Gene: Roary\_64 Start: 39023, Stop: 38901, Start Num: 8

Candidate Starts for Roary\_64:

(Start: 5 @39047 has 1 MA's), (Start: 8 @39023 has 67 MA's), (Start: 9 @39011 has 1 MA's),

Gene: Rumpelstiltskin\_55 Start: 41748, Stop: 41879, Start Num: 8

Candidate Starts for Rumpelstiltskin\_55:

(Start: 8 @41748 has 67 MA's), (Start: 9 @41760 has 1 MA's), (12, 41844),

Gene: Saintus\_58 Start: 35688, Stop: 35566, Start Num: 8

Candidate Starts for Saintus\_58:

(Start: 5 @35712 has 1 MA's), (Start: 8 @35688 has 67 MA's), (Start: 9 @35676 has 1 MA's),



Gene: Smeadley\_63 Start: 38908, Stop: 38762, Start Num: 5  
Candidate Starts for Smeadley\_63:  
(Start: 5 @38908 has 1 MA's), (Start: 8 @38884 has 67 MA's), (Start: 9 @38872 has 1 MA's),

Gene: Stephig9\_62 Start: 38845, Stop: 38723, Start Num: 8  
Candidate Starts for Stephig9\_62:  
(Start: 5 @38869 has 1 MA's), (Start: 8 @38845 has 67 MA's), (Start: 9 @38833 has 1 MA's),

Gene: Swirley\_58 Start: 39274, Stop: 39122, Start Num: 8  
Candidate Starts for Swirley\_58:  
(Start: 8 @39274 has 67 MA's), (Start: 9 @39262 has 1 MA's), (12, 39178),

Gene: SydNat\_59 Start: 39892, Stop: 39755, Start Num: 8  
Candidate Starts for SydNat\_59:  
(Start: 8 @39892 has 67 MA's), (Start: 9 @39880 has 1 MA's), (12, 39796),

Gene: Tarynearal\_54 Start: 38719, Stop: 38567, Start Num: 8  
Candidate Starts for Tarynearal\_54:  
(Start: 8 @38719 has 67 MA's), (Start: 9 @38707 has 1 MA's), (12, 38623),

Gene: Theia\_56 Start: 39545, Stop: 39408, Start Num: 8  
Candidate Starts for Theia\_56:  
(Start: 8 @39545 has 67 MA's), (Start: 9 @39533 has 1 MA's), (12, 39449),

Gene: Tiger\_57 Start: 39000, Stop: 38866, Start Num: 8  
Candidate Starts for Tiger\_57:  
(Start: 8 @39000 has 67 MA's), (Start: 9 @38988 has 1 MA's), (12, 38904),

Gene: Tourach\_55 Start: 42404, Stop: 42535, Start Num: 8  
Candidate Starts for Tourach\_55:  
(Start: 8 @42404 has 67 MA's), (Start: 9 @42416 has 1 MA's), (12, 42500),

Gene: Vetrix\_56 Start: 42359, Stop: 42490, Start Num: 8  
Candidate Starts for Vetrix\_56:  
(Start: 8 @42359 has 67 MA's), (Start: 9 @42371 has 1 MA's), (12, 42455),

Gene: Wigglewigggle\_56 Start: 42379, Stop: 42510, Start Num: 8  
Candidate Starts for Wigglewigggle\_56:  
(Start: 8 @42379 has 67 MA's), (Start: 9 @42391 has 1 MA's), (12, 42475),

Gene: Wilder\_57 Start: 42325, Stop: 42456, Start Num: 8  
Candidate Starts for Wilder\_57:  
(Start: 8 @42325 has 67 MA's), (Start: 9 @42337 has 1 MA's), (12, 42421),

Gene: Winky\_56 Start: 42319, Stop: 42450, Start Num: 8  
Candidate Starts for Winky\_56:  
(Start: 8 @42319 has 67 MA's), (Start: 9 @42331 has 1 MA's), (12, 42415),

Gene: Zakai\_57 Start: 42645, Stop: 42776, Start Num: 8  
Candidate Starts for Zakai\_57:  
(Start: 8 @42645 has 67 MA's), (Start: 9 @42657 has 1 MA's), (12, 42741),

Gene: ZhongYanYuan\_54 Start: 42214, Stop: 42345, Start Num: 8

Candidate Starts for ZhongYanYuan\_54:

(Start: 8 @42214 has 67 MA's), (Start: 9 @42226 has 1 MA's), (12, 42310),

Gene: Zolita\_58 Start: 39896, Stop: 39759, Start Num: 8

Candidate Starts for Zolita\_58:

(Start: 8 @39896 has 67 MA's), (Start: 9 @39884 has 1 MA's), (12, 39800),