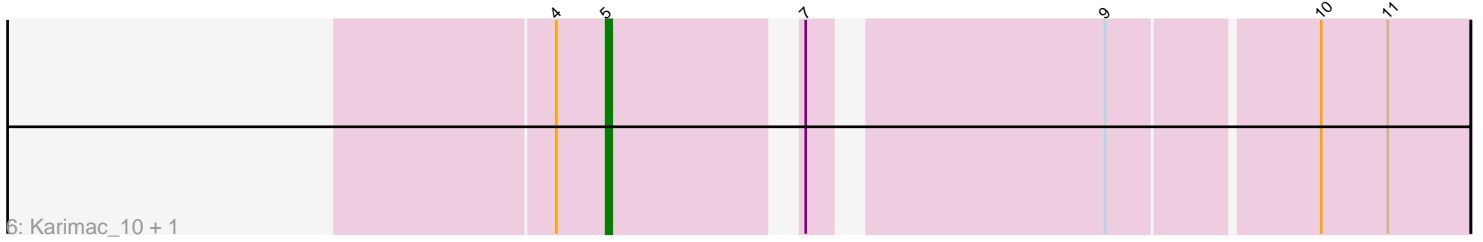
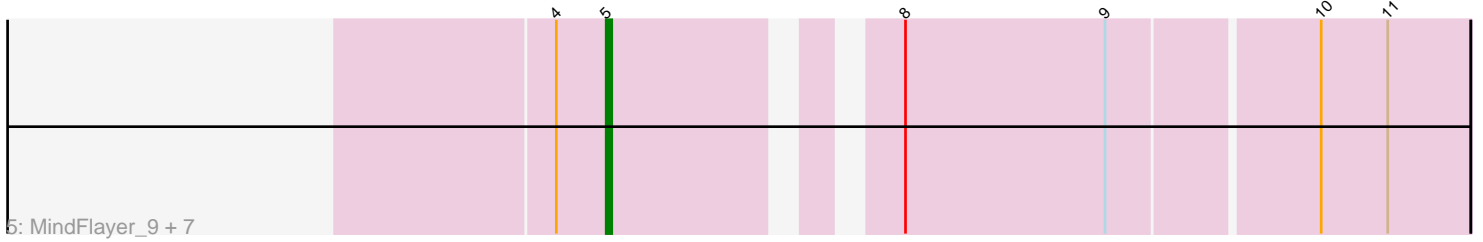
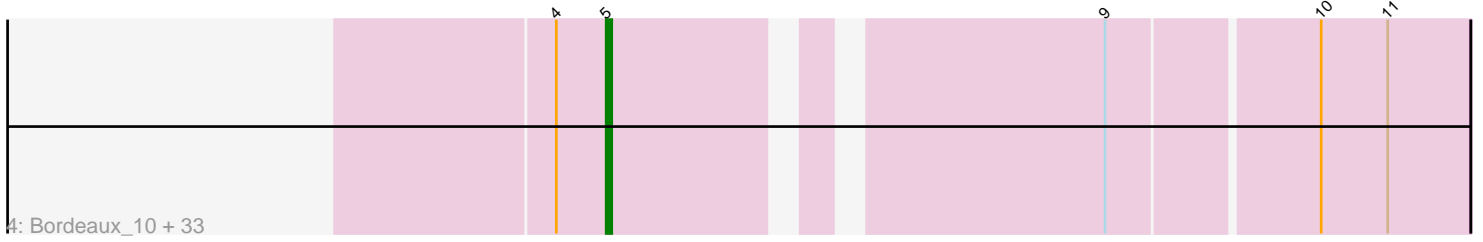
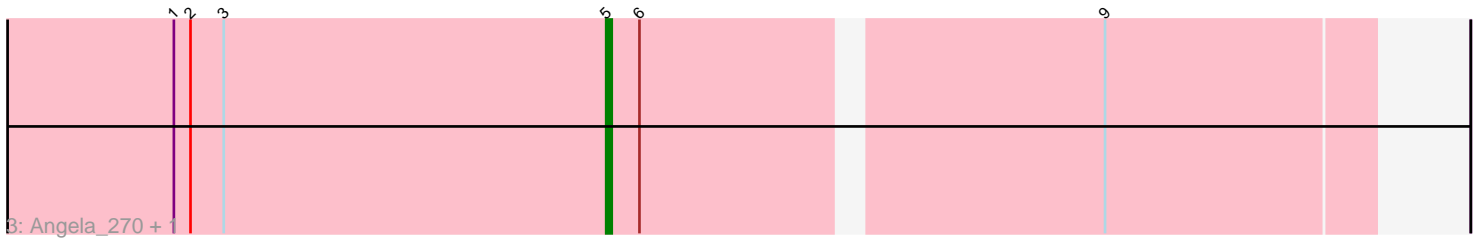
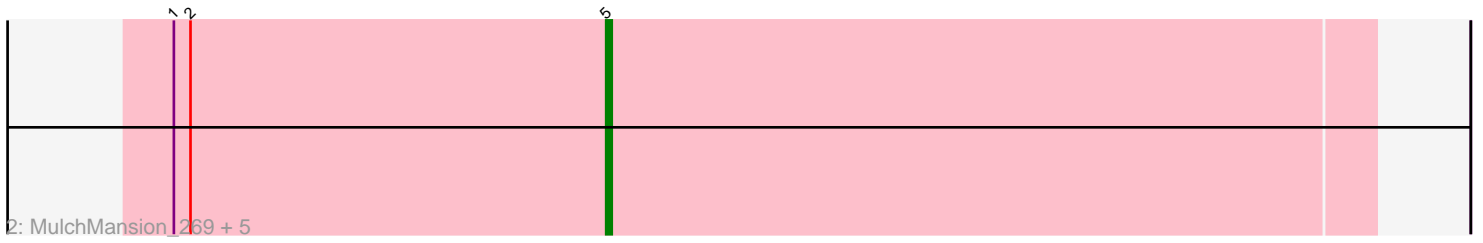
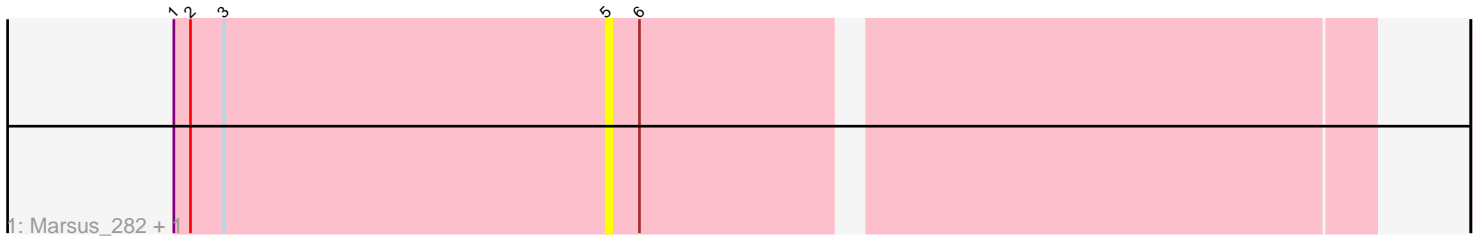


Pham 214344



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 214344 Report

This analysis was run 02/22/25 on database version 588.

Pham number 214344 has 54 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Marsus\_282, Marsus\_14
- Track 2 : MulchMansion\_269, LilMartin\_265, LilMartin\_13, Mildred21\_13, MulchMansion\_13, Mildred21\_276
- Track 3 : Angela\_270, Angela\_13
- Track 4 : Bordeaux\_10, Rikishi\_9, CeilingFan\_9, Gibbi\_9, Gibbi\_280, StarPlatinum\_279, JimJam\_278, Starbow\_10, TomSawyer\_10, Spilled\_277, Wipeout\_262, Quaran19\_271, JimJam\_10, Battuta\_10, Spelly\_10, Quaran19\_10, Starbow\_267, StarPlatinum\_9, Spelly\_276, Birchlyn\_267, TomSawyer\_275, Rikishi\_279, Birchlyn\_7, CeilingFan\_275, SaltySpitooon\_270, Jollison\_267, Jollison\_10, KentuckyRacer\_9, KentuckyRacer\_277, Wipeout\_9, Bordeaux\_267, Battuta\_267, SaltySpitooon\_10, Spilled\_9
- Track 5 : MindFlayer\_9, PumpkinSpice\_274, PumpkinSpice\_10, IchabodCrane\_9, IchabodCrane\_262, Amabiko\_274, Amabiko\_10, MindFlayer\_261
- Track 6 : Karimac\_10, Karimac\_268

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

The start number called the most often in the published annotations is 5, it was called in 48 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko\_10, Amabiko\_274, Angela\_13, Angela\_270, Battuta\_10, Battuta\_267, Birchlyn\_267, Birchlyn\_7, Bordeaux\_10, Bordeaux\_267, CeilingFan\_275, CeilingFan\_9, Gibbi\_280, Gibbi\_9, IchabodCrane\_262, IchabodCrane\_9, JimJam\_10, JimJam\_278, Jollison\_10, Jollison\_267, Karimac\_10, Karimac\_268, KentuckyRacer\_277, KentuckyRacer\_9, LilMartin\_13, LilMartin\_265, Marsus\_14, Marsus\_282, Mildred21\_13, Mildred21\_276, MindFlayer\_261, MindFlayer\_9, MulchMansion\_13, MulchMansion\_269, PumpkinSpice\_10, PumpkinSpice\_274, Quaran19\_10, Quaran19\_271, Rikishi\_279, Rikishi\_9, SaltySpitooon\_10, SaltySpitooon\_270, Spelly\_10, Spelly\_276, Spilled\_277, Spilled\_9, StarPlatinum\_279, StarPlatinum\_9, Starbow\_10, Starbow\_267, TomSawyer\_10, TomSawyer\_275, Wipeout\_262, Wipeout\_9,

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

- 

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

- 

### Summary by start number:

Start 5:

- Found in 54 of 54 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 48 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amabiko\_10 (BE2), Amabiko\_274 (BE2), Angela\_13 (BE1), Angela\_270 (BE1), Battuta\_10 (BE2), Battuta\_267 (BE2), Birchlyn\_267 (BE2), Birchlyn\_7 (BE2), Bordeaux\_10 (BE2), Bordeaux\_267 (BE2), CeilingFan\_275 (BE2), CeilingFan\_9 (BE2), Gibbi\_280 (BE2), Gibbi\_9 (BE2), IchabodCrane\_262 (BE2), IchabodCrane\_9 (BE2), JimJam\_10 (BE2), JimJam\_278 (BE2), Jollison\_10 (BE2), Jollison\_267 (BE2), Karimac\_10 (BE2), Karimac\_268 (BE2), KentuckyRacer\_277 (BE2), KentuckyRacer\_9 (BE2), LilMartin\_13 (BE1), LilMartin\_265 (BE1), Marsus\_14 (BE1), Marsus\_282 (BE1), Mildred21\_13 (BE1), Mildred21\_276 (BE1), MindFlayer\_261 (BE2), MindFlayer\_9 (BE2), MulchMansion\_13 (BE1), MulchMansion\_269 (BE1), PumpkinSpice\_10 (BE2), PumpkinSpice\_274 (BE2), Quaran19\_10 (BE2), Quaran19\_271 (BE2), Rikishi\_279 (BE2), Rikishi\_9 (BE2), SaltySpittoon\_10 (BE2), SaltySpittoon\_270 (BE2), Spelly\_10 (BE2), Spelly\_276 (BE2), Spilled\_277 (BE2), Spilled\_9 (BE2), StarPlatinum\_279 (BE2), StarPlatinum\_9 (BE2), Starbow\_10 (BE2), Starbow\_267 (BE2), TomSawyer\_10 (BE2), TomSawyer\_275 (BE2), Wipeout\_262 (BE2), Wipeout\_9 (BE2),

### Summary by clusters:

There are 2 clusters represented in this pham: BE2, BE1,

Info for manual annotations of cluster BE1:

- Start number 5 was manually annotated 8 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 5 was manually annotated 40 times for cluster BE2.

### Gene Information:

Gene: Amabiko\_274 Start: 124552, Stop: 124412, Start Num: 5

Candidate Starts for Amabiko\_274:

(4, 124561), (Start: 5 @124552 has 48 MA's), (8, 124510), (9, 124474), (10, 124438), (11, 124426),

Gene: Amabiko\_10 Start: 5726, Stop: 5586, Start Num: 5

Candidate Starts for Amabiko\_10:

(4, 5735), (Start: 5 @5726 has 48 MA's), (8, 5684), (9, 5648), (10, 5612), (11, 5600),

Gene: Angela\_270 Start: 129764, Stop: 129633, Start Num: 5

Candidate Starts for Angela\_270:

(1, 129842), (2, 129839), (3, 129833), (Start: 5 @129764 has 48 MA's), (6, 129758), (9, 129680),

Gene: Angela\_13 Start: 7361, Stop: 7230, Start Num: 5

Candidate Starts for Angela\_13:

(1, 7439), (2, 7436), (3, 7430), (Start: 5 @7361 has 48 MA's), (6, 7355), (9, 7277),

Gene: Battuta\_10 Start: 5726, Stop: 5586, Start Num: 5

Candidate Starts for Battuta\_10:

(4, 5735), (Start: 5 @5726 has 48 MA's), (9, 5648), (10, 5612), (11, 5600),

Gene: Battuta\_267 Start: 123881, Stop: 123741, Start Num: 5

Candidate Starts for Battuta\_267:

(4, 123890), (Start: 5 @123881 has 48 MA's), (9, 123803), (10, 123767), (11, 123755),

Gene: Birchlyn\_267 Start: 119670, Stop: 119530, Start Num: 5

Candidate Starts for Birchlyn\_267:

(4, 119679), (Start: 5 @119670 has 48 MA's), (9, 119592), (10, 119556), (11, 119544),

Gene: Birchlyn\_7 Start: 3579, Stop: 3439, Start Num: 5

Candidate Starts for Birchlyn\_7:

(4, 3588), (Start: 5 @3579 has 48 MA's), (9, 3501), (10, 3465), (11, 3453),

Gene: Bordeaux\_10 Start: 5726, Stop: 5586, Start Num: 5

Candidate Starts for Bordeaux\_10:

(4, 5735), (Start: 5 @5726 has 48 MA's), (9, 5648), (10, 5612), (11, 5600),

Gene: Bordeaux\_267 Start: 124464, Stop: 124324, Start Num: 5

Candidate Starts for Bordeaux\_267:

(4, 124473), (Start: 5 @124464 has 48 MA's), (9, 124386), (10, 124350), (11, 124338),

Gene: CeilingFan\_9 Start: 5337, Stop: 5197, Start Num: 5

Candidate Starts for CeilingFan\_9:

(4, 5346), (Start: 5 @5337 has 48 MA's), (9, 5259), (10, 5223), (11, 5211),

Gene: CeilingFan\_275 Start: 125944, Stop: 125804, Start Num: 5

Candidate Starts for CeilingFan\_275:

(4, 125953), (Start: 5 @125944 has 48 MA's), (9, 125866), (10, 125830), (11, 125818),

Gene: Gibbi\_9 Start: 5337, Stop: 5197, Start Num: 5

Candidate Starts for Gibbi\_9:

(4, 5346), (Start: 5 @5337 has 48 MA's), (9, 5259), (10, 5223), (11, 5211),

Gene: Gibbi\_280 Start: 125437, Stop: 125297, Start Num: 5

Candidate Starts for Gibbi\_280:

(4, 125446), (Start: 5 @125437 has 48 MA's), (9, 125359), (10, 125323), (11, 125311),

Gene: IchabodCrane\_9 Start: 5334, Stop: 5194, Start Num: 5

Candidate Starts for IchabodCrane\_9:

(4, 5343), (Start: 5 @5334 has 48 MA's), (8, 5292), (9, 5256), (10, 5220), (11, 5208),

Gene: IchabodCrane\_262 Start: 123877, Stop: 123737, Start Num: 5

Candidate Starts for IchabodCrane\_262:

(4, 123886), (Start: 5 @123877 has 48 MA's), (8, 123835), (9, 123799), (10, 123763), (11, 123751),

Gene: JimJam\_278 Start: 127261, Stop: 127121, Start Num: 5  
Candidate Starts for JimJam\_278:  
(4, 127270), (Start: 5 @127261 has 48 MA's), (9, 127183), (10, 127147), (11, 127135),

Gene: JimJam\_10 Start: 5725, Stop: 5585, Start Num: 5  
Candidate Starts for JimJam\_10:  
(4, 5734), (Start: 5 @5725 has 48 MA's), (9, 5647), (10, 5611), (11, 5599),

Gene: Jollison\_267 Start: 124401, Stop: 124261, Start Num: 5  
Candidate Starts for Jollison\_267:  
(4, 124410), (Start: 5 @124401 has 48 MA's), (9, 124323), (10, 124287), (11, 124275),

Gene: Jollison\_10 Start: 5726, Stop: 5586, Start Num: 5  
Candidate Starts for Jollison\_10:  
(4, 5735), (Start: 5 @5726 has 48 MA's), (9, 5648), (10, 5612), (11, 5600),

Gene: Karimac\_10 Start: 5728, Stop: 5588, Start Num: 5  
Candidate Starts for Karimac\_10:  
(4, 5737), (Start: 5 @5728 has 48 MA's), (7, 5698), (9, 5650), (10, 5614), (11, 5602),

Gene: Karimac\_268 Start: 125047, Stop: 124907, Start Num: 5  
Candidate Starts for Karimac\_268:  
(4, 125056), (Start: 5 @125047 has 48 MA's), (7, 125017), (9, 124969), (10, 124933), (11, 124921),

Gene: KentuckyRacer\_9 Start: 5338, Stop: 5198, Start Num: 5  
Candidate Starts for KentuckyRacer\_9:  
(4, 5347), (Start: 5 @5338 has 48 MA's), (9, 5260), (10, 5224), (11, 5212),

Gene: KentuckyRacer\_277 Start: 126789, Stop: 126649, Start Num: 5  
Candidate Starts for KentuckyRacer\_277:  
(4, 126798), (Start: 5 @126789 has 48 MA's), (9, 126711), (10, 126675), (11, 126663),

Gene: LilMartin\_265 Start: 128685, Stop: 128548, Start Num: 5  
Candidate Starts for LilMartin\_265:  
(1, 128763), (2, 128760), (Start: 5 @128685 has 48 MA's),

Gene: LilMartin\_13 Start: 7341, Stop: 7204, Start Num: 5  
Candidate Starts for LilMartin\_13:  
(1, 7419), (2, 7416), (Start: 5 @7341 has 48 MA's),

Gene: Marsus\_282 Start: 131042, Stop: 130911, Start Num: 5  
Candidate Starts for Marsus\_282:  
(1, 131120), (2, 131117), (3, 131111), (Start: 5 @131042 has 48 MA's), (6, 131036),

Gene: Marsus\_14 Start: 7338, Stop: 7207, Start Num: 5  
Candidate Starts for Marsus\_14:  
(1, 7416), (2, 7413), (3, 7407), (Start: 5 @7338 has 48 MA's), (6, 7332),

Gene: Mildred21\_13 Start: 6927, Stop: 6790, Start Num: 5  
Candidate Starts for Mildred21\_13:  
(1, 7005), (2, 7002), (Start: 5 @6927 has 48 MA's),

Gene: Mildred21\_276 Start: 128085, Stop: 127948, Start Num: 5

Candidate Starts for Mildred21\_276:  
(1, 128163), (2, 128160), (Start: 5 @128085 has 48 MA's),

Gene: MindFlayer\_9 Start: 5336, Stop: 5196, Start Num: 5  
Candidate Starts for MindFlayer\_9:  
(4, 5345), (Start: 5 @5336 has 48 MA's), (8, 5294), (9, 5258), (10, 5222), (11, 5210),

Gene: MindFlayer\_261 Start: 123396, Stop: 123256, Start Num: 5  
Candidate Starts for MindFlayer\_261:  
(4, 123405), (Start: 5 @123396 has 48 MA's), (8, 123354), (9, 123318), (10, 123282), (11, 123270),

Gene: MulchMansion\_269 Start: 130319, Stop: 130182, Start Num: 5  
Candidate Starts for MulchMansion\_269:  
(1, 130397), (2, 130394), (Start: 5 @130319 has 48 MA's),

Gene: MulchMansion\_13 Start: 7341, Stop: 7204, Start Num: 5  
Candidate Starts for MulchMansion\_13:  
(1, 7419), (2, 7416), (Start: 5 @7341 has 48 MA's),

Gene: PumpkinSpice\_274 Start: 125618, Stop: 125478, Start Num: 5  
Candidate Starts for PumpkinSpice\_274:  
(4, 125627), (Start: 5 @125618 has 48 MA's), (8, 125576), (9, 125540), (10, 125504), (11, 125492),

Gene: PumpkinSpice\_10 Start: 5726, Stop: 5586, Start Num: 5  
Candidate Starts for PumpkinSpice\_10:  
(4, 5735), (Start: 5 @5726 has 48 MA's), (8, 5684), (9, 5648), (10, 5612), (11, 5600),

Gene: Quaran19\_271 Start: 124908, Stop: 124768, Start Num: 5  
Candidate Starts for Quaran19\_271:  
(4, 124917), (Start: 5 @124908 has 48 MA's), (9, 124830), (10, 124794), (11, 124782),

Gene: Quaran19\_10 Start: 5726, Stop: 5586, Start Num: 5  
Candidate Starts for Quaran19\_10:  
(4, 5735), (Start: 5 @5726 has 48 MA's), (9, 5648), (10, 5612), (11, 5600),

Gene: Rikishi\_9 Start: 5336, Stop: 5196, Start Num: 5  
Candidate Starts for Rikishi\_9:  
(4, 5345), (Start: 5 @5336 has 48 MA's), (9, 5258), (10, 5222), (11, 5210),

Gene: Rikishi\_279 Start: 125409, Stop: 125269, Start Num: 5  
Candidate Starts for Rikishi\_279:  
(4, 125418), (Start: 5 @125409 has 48 MA's), (9, 125331), (10, 125295), (11, 125283),

Gene: SaltySpittoon\_270 Start: 123990, Stop: 123850, Start Num: 5  
Candidate Starts for SaltySpittoon\_270:  
(4, 123999), (Start: 5 @123990 has 48 MA's), (9, 123912), (10, 123876), (11, 123864),

Gene: SaltySpittoon\_10 Start: 5726, Stop: 5586, Start Num: 5  
Candidate Starts for SaltySpittoon\_10:  
(4, 5735), (Start: 5 @5726 has 48 MA's), (9, 5648), (10, 5612), (11, 5600),

Gene: Spelly\_10 Start: 5726, Stop: 5586, Start Num: 5  
Candidate Starts for Spelly\_10:

(4, 5735), (Start: 5 @5726 has 48 MA's), (9, 5648), (10, 5612), (11, 5600),

Gene: Spelly\_276 Start: 124530, Stop: 124390, Start Num: 5

Candidate Starts for Spelly\_276:

(4, 124539), (Start: 5 @124530 has 48 MA's), (9, 124452), (10, 124416), (11, 124404),

Gene: Spilled\_277 Start: 125805, Stop: 125665, Start Num: 5

Candidate Starts for Spilled\_277:

(4, 125814), (Start: 5 @125805 has 48 MA's), (9, 125727), (10, 125691), (11, 125679),

Gene: Spilled\_9 Start: 5336, Stop: 5196, Start Num: 5

Candidate Starts for Spilled\_9:

(4, 5345), (Start: 5 @5336 has 48 MA's), (9, 5258), (10, 5222), (11, 5210),

Gene: StarPlatinum\_279 Start: 127151, Stop: 127011, Start Num: 5

Candidate Starts for StarPlatinum\_279:

(4, 127160), (Start: 5 @127151 has 48 MA's), (9, 127073), (10, 127037), (11, 127025),

Gene: StarPlatinum\_9 Start: 5464, Stop: 5324, Start Num: 5

Candidate Starts for StarPlatinum\_9:

(4, 5473), (Start: 5 @5464 has 48 MA's), (9, 5386), (10, 5350), (11, 5338),

Gene: Starbow\_10 Start: 5726, Stop: 5586, Start Num: 5

Candidate Starts for Starbow\_10:

(4, 5735), (Start: 5 @5726 has 48 MA's), (9, 5648), (10, 5612), (11, 5600),

Gene: Starbow\_267 Start: 124574, Stop: 124434, Start Num: 5

Candidate Starts for Starbow\_267:

(4, 124583), (Start: 5 @124574 has 48 MA's), (9, 124496), (10, 124460), (11, 124448),

Gene: TomSawyer\_10 Start: 5320, Stop: 5180, Start Num: 5

Candidate Starts for TomSawyer\_10:

(4, 5329), (Start: 5 @5320 has 48 MA's), (9, 5242), (10, 5206), (11, 5194),

Gene: TomSawyer\_275 Start: 127099, Stop: 126959, Start Num: 5

Candidate Starts for TomSawyer\_275:

(4, 127108), (Start: 5 @127099 has 48 MA's), (9, 127021), (10, 126985), (11, 126973),

Gene: Wipeout\_262 Start: 126072, Stop: 125932, Start Num: 5

Candidate Starts for Wipeout\_262:

(4, 126081), (Start: 5 @126072 has 48 MA's), (9, 125994), (10, 125958), (11, 125946),

Gene: Wipeout\_9 Start: 5341, Stop: 5201, Start Num: 5

Candidate Starts for Wipeout\_9:

(4, 5350), (Start: 5 @5341 has 48 MA's), (9, 5263), (10, 5227), (11, 5215),