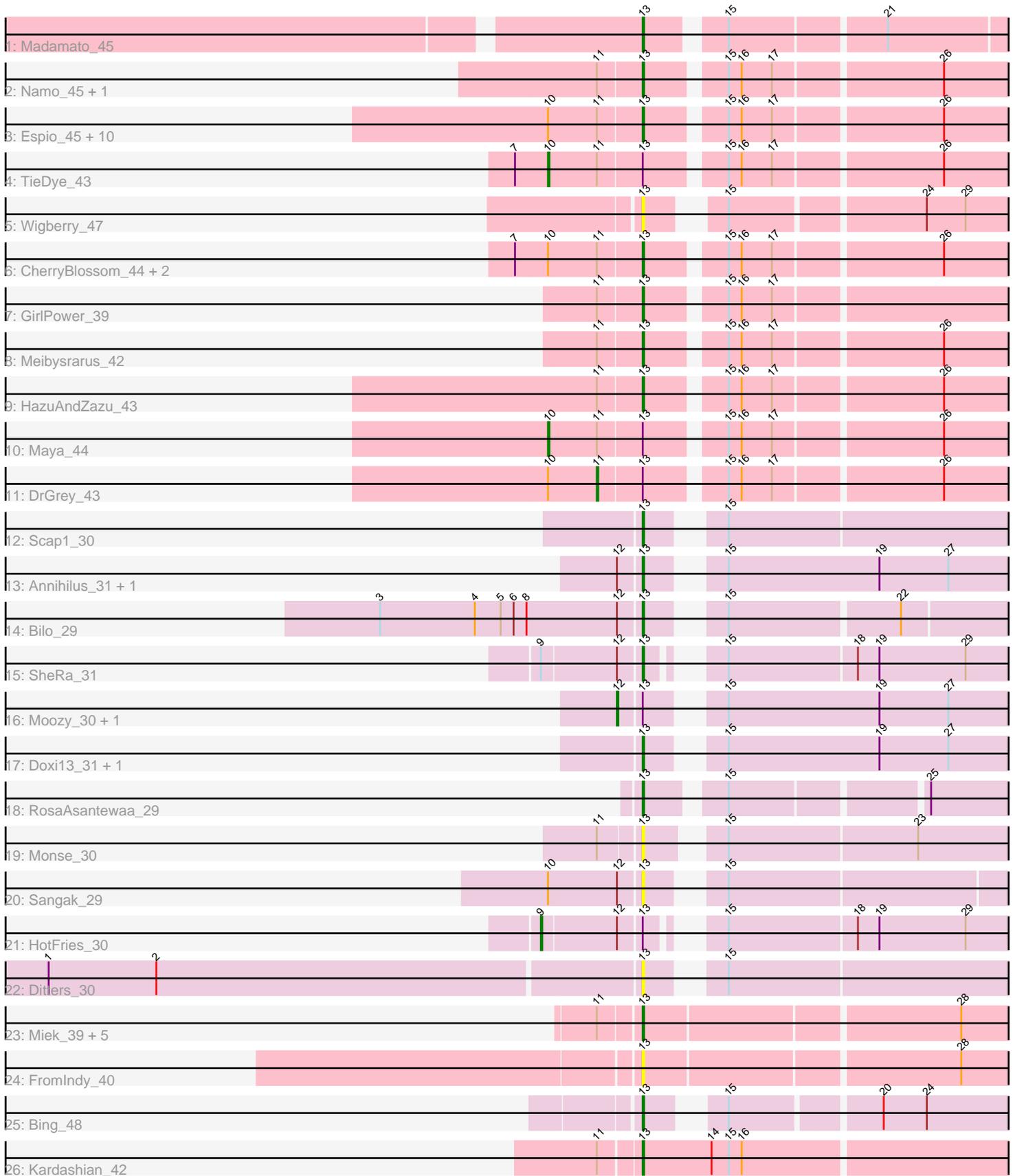


# Pham 285683



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 285683 Report

This analysis was run 03/28/26 on database version 641.

Pham number 285683 has 47 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Madamoto\_45
- Track 2 : Namu\_45, Rima\_45
- Track 3 : Espio\_45, OlympicHelado\_44, Indigenous\_44, Spectropatronm\_44, Jaylociraptor\_44, Popy\_44, IceWarrior\_43, Esketit\_44, FidgetOrca\_44, FrodoSwaggins\_44, Soshi\_43
- Track 4 : TieDye\_43
- Track 5 : Wigberry\_47
- Track 6 : CherryBlossom\_44, TaidaOne\_44, TonyStarch\_43
- Track 7 : GirlPower\_39
- Track 8 : Meibysrarus\_42
- Track 9 : HazuAndZazu\_43
- Track 10 : Maya\_44
- Track 11 : DrGrey\_43
- Track 12 : Scap1\_30
- Track 13 : Annihilus\_31, PherryCruz\_30
- Track 14 : Bilo\_29
- Track 15 : SheRa\_31
- Track 16 : Moozy\_30, RavenPuff\_30
- Track 17 : Doxi13\_31, GoblinVoyage\_31
- Track 18 : RosaAsantewaa\_29
- Track 19 : Monse\_30
- Track 20 : Sangak\_29
- Track 21 : HotFries\_30
- Track 22 : Ditters\_30
- Track 23 : Miek\_39, SendItCS\_38, CricKo\_40, Thiqqums\_40, Regigigas\_41, Rainydai\_39
- Track 24 : FromIndy\_40
- Track 25 : Bing\_48
- Track 26 : Kardashian\_42

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

The start number called the most often in the published annotations is 13, it was called in 34 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Annihilus\_31, Bilo\_29, Bing\_48, CherryBlossom\_44, CricKo\_40, Ditters\_30, Doxi13\_31, Esketit\_44, Espio\_45, FidgetOrca\_44, FrodoSwaggins\_44, FromIndy\_40, GirlPower\_39, GoblinVoyage\_31, HazuAndZazu\_43, IceWarrior\_43, Indigenous\_44, Jaylociraptor\_44, Kardashian\_42, Madamato\_45, Meibysrarus\_42, Miek\_39, Monse\_30, Namu\_45, OlympicHelado\_44, PherryCruz\_30, Popy\_44, Rainydai\_39, Regigigas\_41, Rima\_45, RosaAsantewaa\_29, Sangak\_29, Scap1\_30, SendItCS\_38, SheRa\_31, Soshi\_43, Spectropatronm\_44, TaidaOne\_44, Thiqqums\_40, TonyStarch\_43, Wigberry\_47,

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

- DrGrey\_43, HotFries\_30, Maya\_44, Moozy\_30, RavenPuff\_30, TieDye\_43,

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

- 

### Summary by start number:

Start 9:

- Found in 2 of 47 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 50.0% of time when present
- Phage (with cluster) where this start called: HotFries\_30 (BI2),

Start 10:

- Found in 18 of 47 ( 38.3% ) of genes in pham
- Manual Annotations of this start: 2 of 40
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Maya\_44 (BI1), TieDye\_43 (BI1),

Start 11:

- Found in 30 of 47 ( 63.8% ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 3.3% of time when present
- Phage (with cluster) where this start called: DrGrey\_43 (BI1),

Start 12:

- Found in 8 of 47 ( 17.0% ) of genes in pham
- Manual Annotations of this start: 2 of 40
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Moozy\_30 (BI2), RavenPuff\_30 (BI2),

Start 13:

- Found in 47 of 47 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 34 of 40
- Called 87.2% of time when present
- Phage (with cluster) where this start called: Annihilus\_31 (BI2), Bilo\_29 (BI2), Bing\_48 (BI5), CherryBlossom\_44 (BI1), CricKo\_40 (BI4), Ditters\_30 (BI2), Doxi13\_31 (BI2), Esketit\_44 (BI1), Espio\_45 (BI1), FidgetOrca\_44 (BI1), FrodoSwaggins\_44 (BI1), FromIndy\_40 (BI4), GirlPower\_39 (BI1), GoblinVoyage\_31 (BI2), HazuAndZazu\_43 (BI1), IceWarrior\_43 (BI1), Indigenous\_44 (BI1), Jaylociraptor\_44 (BI1), Kardashian\_42 (BI6), Madamato\_45 (BI1), Meibysrarus\_42

(BI1), Miek\_39 (BI4), Monse\_30 (BI2), Namo\_45 (BI1), OlympicHelado\_44 (BI1), PherryCruz\_30 (BI2), Popy\_44 (BI1), Rainydai\_39 (BI4), Regigigas\_41 (BI4), Rima\_45 (BI1), RosaAsantewaa\_29 (BI2), Sangak\_29 (BI2), Scap1\_30 (BI2), SendItCS\_38 (BI4), SheRa\_31 (BI2), Soshi\_43 (BI1), SpectroPatronm\_44 (BI1), TaidaOne\_44 (BI1), Thiqqums\_40 (BI4), TonyStarch\_43 (BI1), Wigberry\_47 (BI1),

### **Summary by clusters:**

There are 5 clusters represented in this pham: BI6, BI4, BI5, BI2, BI1,

Info for manual annotations of cluster BI1:

- Start number 10 was manually annotated 2 times for cluster BI1.
- Start number 11 was manually annotated 1 time for cluster BI1.
- Start number 13 was manually annotated 19 times for cluster BI1.

Info for manual annotations of cluster BI2:

- Start number 9 was manually annotated 1 time for cluster BI2.
- Start number 12 was manually annotated 2 times for cluster BI2.
- Start number 13 was manually annotated 8 times for cluster BI2.

Info for manual annotations of cluster BI4:

- Start number 13 was manually annotated 5 times for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 13 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI6:

- Start number 13 was manually annotated 1 time for cluster BI6.

### **Gene Information:**

Gene: Annihilus\_31 Start: 24324, Stop: 24563, Start Num: 13

Candidate Starts for Annihilus\_31:

(Start: 12 @24309 has 2 MA's), (Start: 13 @24324 has 34 MA's), (15, 24360), (19, 24465), (27, 24513),

Gene: Bilo\_29 Start: 24475, Stop: 24705, Start Num: 13

Candidate Starts for Bilo\_29:

(3, 24295), (4, 24361), (5, 24379), (6, 24388), (8, 24397), (Start: 12 @24460 has 2 MA's), (Start: 13 @24475 has 34 MA's), (15, 24511), (22, 24625),

Gene: Bing\_48 Start: 31061, Stop: 31282, Start Num: 13

Candidate Starts for Bing\_48:

(Start: 13 @31061 has 34 MA's), (15, 31097), (20, 31193), (24, 31223),

Gene: CherryBlossom\_44 Start: 29980, Stop: 30258, Start Num: 13

Candidate Starts for CherryBlossom\_44:

(7, 29896), (Start: 10 @29917 has 2 MA's), (Start: 11 @29950 has 1 MA's), (Start: 13 @29980 has 34 MA's), (15, 30028), (16, 30037), (17, 30058), (26, 30169),

Gene: CricKo\_40 Start: 28217, Stop: 28486, Start Num: 13

Candidate Starts for CricKo\_40:

(Start: 11 @28190 has 1 MA's), (Start: 13 @28217 has 34 MA's), (28, 28427),

Gene: Ditters\_30 Start: 24742, Stop: 24978, Start Num: 13

Candidate Starts for Ditters\_30:

(1, 24337), (2, 24412), (Start: 13 @24742 has 34 MA's), (15, 24778),

Gene: Doxi13\_31 Start: 24287, Stop: 24526, Start Num: 13

Candidate Starts for Doxi13\_31:

(Start: 13 @24287 has 34 MA's), (15, 24323), (19, 24428), (27, 24476),

Gene: DrGrey\_43 Start: 30291, Stop: 30599, Start Num: 11

Candidate Starts for DrGrey\_43:

(Start: 10 @30258 has 2 MA's), (Start: 11 @30291 has 1 MA's), (Start: 13 @30321 has 34 MA's), (15, 30369), (16, 30378), (17, 30399), (26, 30510),

Gene: Esketit\_44 Start: 30058, Stop: 30336, Start Num: 13

Candidate Starts for Esketit\_44:

(Start: 10 @29995 has 2 MA's), (Start: 11 @30028 has 1 MA's), (Start: 13 @30058 has 34 MA's), (15, 30106), (16, 30115), (17, 30136), (26, 30247),

Gene: Espio\_45 Start: 30716, Stop: 30994, Start Num: 13

Candidate Starts for Espio\_45:

(Start: 10 @30653 has 2 MA's), (Start: 11 @30686 has 1 MA's), (Start: 13 @30716 has 34 MA's), (15, 30764), (16, 30773), (17, 30794), (26, 30905),

Gene: FidgetOrca\_44 Start: 30063, Stop: 30341, Start Num: 13

Candidate Starts for FidgetOrca\_44:

(Start: 10 @30000 has 2 MA's), (Start: 11 @30033 has 1 MA's), (Start: 13 @30063 has 34 MA's), (15, 30111), (16, 30120), (17, 30141), (26, 30252),

Gene: FrodoSwaggins\_44 Start: 30715, Stop: 30993, Start Num: 13

Candidate Starts for FrodoSwaggins\_44:

(Start: 10 @30652 has 2 MA's), (Start: 11 @30685 has 1 MA's), (Start: 13 @30715 has 34 MA's), (15, 30763), (16, 30772), (17, 30793), (26, 30904),

Gene: FromIndy\_40 Start: 27820, Stop: 28089, Start Num: 13

Candidate Starts for FromIndy\_40:

(Start: 13 @27820 has 34 MA's), (28, 28030),

Gene: GirlPower\_39 Start: 30530, Stop: 30808, Start Num: 13

Candidate Starts for GirlPower\_39:

(Start: 11 @30500 has 1 MA's), (Start: 13 @30530 has 34 MA's), (15, 30578), (16, 30587), (17, 30608),

Gene: GoblinVoyage\_31 Start: 24287, Stop: 24526, Start Num: 13

Candidate Starts for GoblinVoyage\_31:

(Start: 13 @24287 has 34 MA's), (15, 24323), (19, 24428), (27, 24476),

Gene: HazuAndZazu\_43 Start: 30317, Stop: 30595, Start Num: 13

Candidate Starts for HazuAndZazu\_43:

(Start: 11 @30287 has 1 MA's), (Start: 13 @30317 has 34 MA's), (15, 30365), (16, 30374), (17, 30395), (26, 30506),

Gene: HotFries\_30 Start: 24286, Stop: 24582, Start Num: 9

Candidate Starts for HotFries\_30:

(Start: 9 @24286 has 1 MA's), (Start: 12 @24337 has 2 MA's), (Start: 13 @24352 has 34 MA's), (15, 24382), (18, 24469), (19, 24484), (29, 24544),

Gene: IceWarrior\_43 Start: 29758, Stop: 30036, Start Num: 13

Candidate Starts for IceWarrior\_43:

(Start: 10 @29695 has 2 MA's), (Start: 11 @29728 has 1 MA's), (Start: 13 @29758 has 34 MA's), (15, 29806), (16, 29815), (17, 29836), (26, 29947),

Gene: Indigenous\_44 Start: 30058, Stop: 30336, Start Num: 13

Candidate Starts for Indigenous\_44:

(Start: 10 @29995 has 2 MA's), (Start: 11 @30028 has 1 MA's), (Start: 13 @30058 has 34 MA's), (15, 30106), (16, 30115), (17, 30136), (26, 30247),

Gene: Jaylociraptor\_44 Start: 30058, Stop: 30336, Start Num: 13

Candidate Starts for Jaylociraptor\_44:

(Start: 10 @29995 has 2 MA's), (Start: 11 @30028 has 1 MA's), (Start: 13 @30058 has 34 MA's), (15, 30106), (16, 30115), (17, 30136), (26, 30247),

Gene: Kardashian\_42 Start: 29744, Stop: 30022, Start Num: 13

Candidate Starts for Kardashian\_42:

(Start: 11 @29717 has 1 MA's), (Start: 13 @29744 has 34 MA's), (14, 29792), (15, 29804), (16, 29813),

Gene: Madamoto\_45 Start: 30215, Stop: 30487, Start Num: 13

Candidate Starts for Madamoto\_45:

(Start: 13 @30215 has 34 MA's), (15, 30260), (21, 30362),

Gene: Maya\_44 Start: 30009, Stop: 30350, Start Num: 10

Candidate Starts for Maya\_44:

(Start: 10 @30009 has 2 MA's), (Start: 11 @30042 has 1 MA's), (Start: 13 @30072 has 34 MA's), (15, 30120), (16, 30129), (17, 30150), (26, 30261),

Gene: Meibysrurus\_42 Start: 29435, Stop: 29713, Start Num: 13

Candidate Starts for Meibysrurus\_42:

(Start: 11 @29405 has 1 MA's), (Start: 13 @29435 has 34 MA's), (15, 29483), (16, 29492), (17, 29513), (26, 29624),

Gene: Miek\_39 Start: 27833, Stop: 28102, Start Num: 13

Candidate Starts for Miek\_39:

(Start: 11 @27806 has 1 MA's), (Start: 13 @27833 has 34 MA's), (28, 28043),

Gene: Monse\_30 Start: 24196, Stop: 24438, Start Num: 13

Candidate Starts for Monse\_30:

(Start: 11 @24169 has 1 MA's), (Start: 13 @24196 has 34 MA's), (15, 24235), (23, 24364),

Gene: Moozy\_30 Start: 24296, Stop: 24550, Start Num: 12

Candidate Starts for Moozy\_30:

(Start: 12 @24296 has 2 MA's), (Start: 13 @24311 has 34 MA's), (15, 24347), (19, 24452), (27, 24500),

Gene: Namo\_45 Start: 30403, Stop: 30681, Start Num: 13

Candidate Starts for Namo\_45:

(Start: 11 @30373 has 1 MA's), (Start: 13 @30403 has 34 MA's), (15, 30451), (16, 30460), (17, 30481), (26, 30592),

Gene: OlympicHelado\_44 Start: 30079, Stop: 30357, Start Num: 13

Candidate Starts for OlympicHelado\_44:

(Start: 10 @30016 has 2 MA's), (Start: 11 @30049 has 1 MA's), (Start: 13 @30079 has 34 MA's), (15, 30127), (16, 30136), (17, 30157), (26, 30268),

Gene: PherryCruz\_30 Start: 24283, Stop: 24522, Start Num: 13

Candidate Starts for PherryCruz\_30:

(Start: 12 @24268 has 2 MA's), (Start: 13 @24283 has 34 MA's), (15, 24319), (19, 24424), (27, 24472),

Gene: Popy\_44 Start: 30715, Stop: 30993, Start Num: 13

Candidate Starts for Popy\_44:

(Start: 10 @30652 has 2 MA's), (Start: 11 @30685 has 1 MA's), (Start: 13 @30715 has 34 MA's), (15, 30763), (16, 30772), (17, 30793), (26, 30904),

Gene: Rainydai\_39 Start: 28217, Stop: 28486, Start Num: 13

Candidate Starts for Rainydai\_39:

(Start: 11 @28190 has 1 MA's), (Start: 13 @28217 has 34 MA's), (28, 28427),

Gene: RavenPuff\_30 Start: 24268, Stop: 24522, Start Num: 12

Candidate Starts for RavenPuff\_30:

(Start: 12 @24268 has 2 MA's), (Start: 13 @24283 has 34 MA's), (15, 24319), (19, 24424), (27, 24472),

Gene: Regigigas\_41 Start: 28217, Stop: 28486, Start Num: 13

Candidate Starts for Regigigas\_41:

(Start: 11 @28190 has 1 MA's), (Start: 13 @28217 has 34 MA's), (28, 28427),

Gene: Rima\_45 Start: 30403, Stop: 30681, Start Num: 13

Candidate Starts for Rima\_45:

(Start: 11 @30373 has 1 MA's), (Start: 13 @30403 has 34 MA's), (15, 30451), (16, 30460), (17, 30481), (26, 30592),

Gene: RosaAsantewaa\_29 Start: 23959, Stop: 24210, Start Num: 13

Candidate Starts for RosaAsantewaa\_29:

(Start: 13 @23959 has 34 MA's), (15, 24004), (25, 24130),

Gene: Sangak\_29 Start: 23868, Stop: 24101, Start Num: 13

Candidate Starts for Sangak\_29:

(Start: 10 @23805 has 2 MA's), (Start: 12 @23853 has 2 MA's), (Start: 13 @23868 has 34 MA's), (15, 23904),

Gene: Scap1\_30 Start: 24113, Stop: 24349, Start Num: 13

Candidate Starts for Scap1\_30:

(Start: 13 @24113 has 34 MA's), (15, 24149),

Gene: SendItCS\_38 Start: 27833, Stop: 28090, Start Num: 13

Candidate Starts for SendItCS\_38:

(Start: 11 @27806 has 1 MA's), (Start: 13 @27833 has 34 MA's), (28, 28031),

Gene: SheRa\_31 Start: 24353, Stop: 24583, Start Num: 13

Candidate Starts for SheRa\_31:

(Start: 9 @24287 has 1 MA's), (Start: 12 @24338 has 2 MA's), (Start: 13 @24353 has 34 MA's), (15, 24383), (18, 24470), (19, 24485), (29, 24545),

Gene: Soshi\_43 Start: 30327, Stop: 30605, Start Num: 13

Candidate Starts for Soshi\_43:

(Start: 10 @30264 has 2 MA's), (Start: 11 @30297 has 1 MA's), (Start: 13 @30327 has 34 MA's), (15, 30375), (16, 30384), (17, 30405), (26, 30516),

Gene: Spectropatronm\_44 Start: 30058, Stop: 30336, Start Num: 13

Candidate Starts for Spectropatronm\_44:

(Start: 10 @29995 has 2 MA's), (Start: 11 @30028 has 1 MA's), (Start: 13 @30058 has 34 MA's), (15, 30106), (16, 30115), (17, 30136), (26, 30247),

Gene: TaidaOne\_44 Start: 30611, Stop: 30889, Start Num: 13

Candidate Starts for TaidaOne\_44:

(7, 30527), (Start: 10 @30548 has 2 MA's), (Start: 11 @30581 has 1 MA's), (Start: 13 @30611 has 34 MA's), (15, 30659), (16, 30668), (17, 30689), (26, 30800),

Gene: Thiqqums\_40 Start: 28217, Stop: 28486, Start Num: 13

Candidate Starts for Thiqqums\_40:

(Start: 11 @28190 has 1 MA's), (Start: 13 @28217 has 34 MA's), (28, 28427),

Gene: TieDye\_43 Start: 29592, Stop: 29933, Start Num: 10

Candidate Starts for TieDye\_43:

(7, 29571), (Start: 10 @29592 has 2 MA's), (Start: 11 @29625 has 1 MA's), (Start: 13 @29655 has 34 MA's), (15, 29703), (16, 29712), (17, 29733), (26, 29844),

Gene: TonyStarch\_43 Start: 29760, Stop: 30038, Start Num: 13

Candidate Starts for TonyStarch\_43:

(7, 29676), (Start: 10 @29697 has 2 MA's), (Start: 11 @29730 has 1 MA's), (Start: 13 @29760 has 34 MA's), (15, 29808), (16, 29817), (17, 29838), (26, 29949),

Gene: Wigberry\_47 Start: 30307, Stop: 30528, Start Num: 13

Candidate Starts for Wigberry\_47:

(Start: 13 @30307 has 34 MA's), (15, 30343), (24, 30469), (29, 30496),