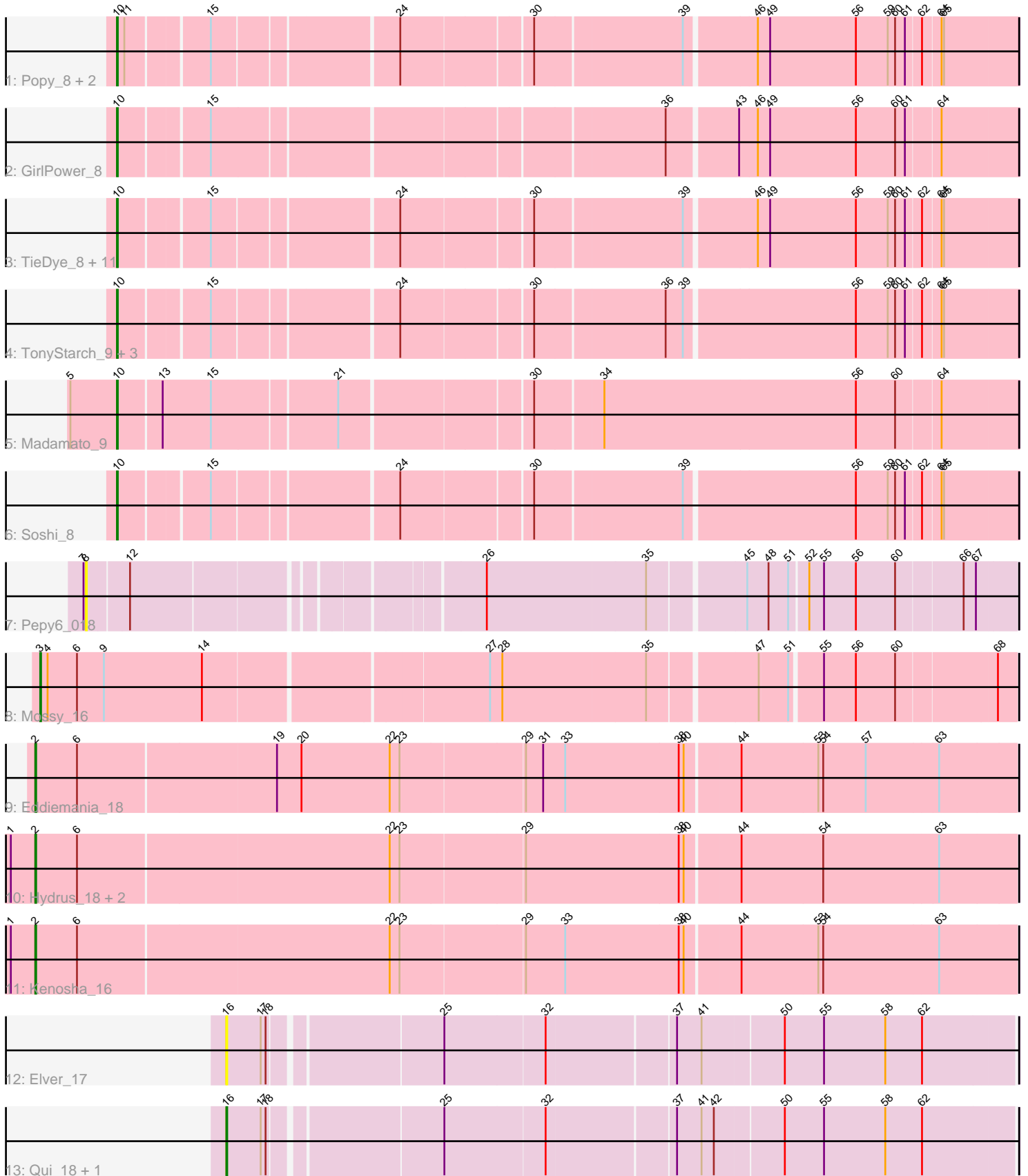


Pham 192774



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 192774 Report

This analysis was run 11/02/24 on database version 579.

Pham number 192774 has 32 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Popy\_8, FrodoSwaggins\_8, DrGrey\_8
- Track 2 : GirlPower\_8
- Track 3 : TieDye\_8, Spectropatronm\_9, TaidaOne\_9, Esketit\_9, Maya\_9, Hoshi\_9, CherryBlossom\_9, Jaylociraptor\_9, FidgetOrca\_9, Meibysrarus\_9, IceWarrior\_9, Indigenous\_9
- Track 4 : TonyStarch\_9, Rima\_9, OlympicHelado\_9, NamO\_9
- Track 5 : Madamato\_9
- Track 6 : Soshi\_8
- Track 7 : Pepy6\_018
- Track 8 : Mossy\_16
- Track 9 : Eddiemania\_18
- Track 10 : Hydrus\_18, Arataki\_15, Zeph\_18
- Track 11 : Kenosha\_16
- Track 12 : Elver\_17
- Track 13 : Qui\_18, Paella\_18

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

The start number called the most often in the published annotations is 10, it was called in 22 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- CherryBlossom\_9, DrGrey\_8, Esketit\_9, FidgetOrca\_9, FrodoSwaggins\_8, GirlPower\_8, Hoshi\_9, IceWarrior\_9, Indigenous\_9, Jaylociraptor\_9, Madamato\_9, Maya\_9, Meibysrarus\_9, NamO\_9, OlympicHelado\_9, Popy\_8, Rima\_9, Soshi\_8, Spectropatronm\_9, TaidaOne\_9, TieDye\_8, TonyStarch\_9,

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

- 

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

- Arataki\_15, Eddiemania\_18, Elver\_17, Hydrus\_18, Kenosha\_16, Mossy\_16, Paella\_18, Pepy6\_018, Qui\_18, Zeph\_18,

## Summary by start number:

### Start 2:

- Found in 5 of 32 ( 15.6% ) of genes in pham
- Manual Annotations of this start: 4 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arataki\_15 (DJ), Eddiemania\_18 (DJ), Hydrus\_18 (DJ), Kenosha\_16 (DJ), Zeph\_18 (DJ),

### Start 3:

- Found in 1 of 32 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mossy\_16 (DJ),

### Start 8:

- Found in 1 of 32 ( 3.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pepy6\_018 (CC),

### Start 10:

- Found in 22 of 32 ( 68.8% ) of genes in pham
- Manual Annotations of this start: 22 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CherryBlossom\_9 (BI1), DrGrey\_8 (BI1), Esketit\_9 (BI1), FidgetOrca\_9 (BI1), FrodoSwaggins\_8 (BI1), GirlPower\_8 (BI1), Hoshi\_9 (BI1), IceWarrior\_9 (BI1), Indigenous\_9 (BI1), Jaylociraptor\_9 (BI1), Madamoto\_9 (BI1), Maya\_9 (BI1), Meibysrarus\_9 (BI1), Namo\_9 (BI1), OlympicHelado\_9 (BI1), Popy\_8 (BI1), Rima\_9 (BI1), Soshi\_8 (BI1), Spectropatronm\_9 (BI1), TaidaOne\_9 (BI1), TieDye\_8 (BI1), TonyStarch\_9 (BI1),

### Start 16:

- Found in 3 of 32 ( 9.4% ) of genes in pham
- Manual Annotations of this start: 2 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elver\_17 (FK), Paella\_18 (FK), Qui\_18 (FK),

## Summary by clusters:

There are 4 clusters represented in this pham: CC, FK, DJ, BI1,

Info for manual annotations of cluster BI1:

- Start number 10 was manually annotated 22 times for cluster BI1.

Info for manual annotations of cluster DJ:

- Start number 2 was manually annotated 4 times for cluster DJ.
- Start number 3 was manually annotated 1 time for cluster DJ.

Info for manual annotations of cluster FK:

- Start number 16 was manually annotated 2 times for cluster FK.

**Gene Information:**

Gene: Arataki\_15 Start: 10224, Stop: 11393, Start Num: 2

Candidate Starts for Arataki\_15:

(1, 10194), (Start: 2 @10224 has 4 MA's), (6, 10275), (22, 10650), (23, 10662), (29, 10809), (38, 10995), (40, 11001), (44, 11064), (54, 11163), (63, 11301),

Gene: CherryBlossom\_9 Start: 4921, Stop: 5949, Start Num: 10

Candidate Starts for CherryBlossom\_9:

(Start: 10 @4921 has 22 MA's), (15, 5023), (24, 5233), (30, 5383), (39, 5557), (46, 5638), (49, 5653), (56, 5758), (59, 5797), (60, 5806), (61, 5818), (62, 5836), (64, 5857), (65, 5860),

Gene: DrGrey\_8 Start: 4608, Stop: 5636, Start Num: 10

Candidate Starts for DrGrey\_8:

(Start: 10 @4608 has 22 MA's), (11, 4617), (15, 4710), (24, 4920), (30, 5070), (39, 5244), (46, 5325), (49, 5340), (56, 5445), (59, 5484), (60, 5493), (61, 5505), (62, 5523), (64, 5544), (65, 5547),

Gene: Eddiemania\_18 Start: 11823, Stop: 12992, Start Num: 2

Candidate Starts for Eddiemania\_18:

(Start: 2 @11823 has 4 MA's), (6, 11874), (19, 12111), (20, 12141), (22, 12249), (23, 12261), (29, 12408), (31, 12429), (33, 12456), (38, 12594), (40, 12600), (44, 12663), (53, 12756), (54, 12762), (57, 12813), (63, 12900),

Gene: Elver\_17 Start: 9747, Stop: 10661, Start Num: 16

Candidate Starts for Elver\_17:

(Start: 16 @9747 has 2 MA's), (17, 9789), (18, 9795), (25, 9990), (32, 10110), (37, 10260), (41, 10290), (50, 10386), (55, 10434), (58, 10509), (62, 10554),

Gene: Esketit\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for Esketit\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (39, 5540), (46, 5621), (49, 5636), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: FidgetOrca\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for FidgetOrca\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (39, 5540), (46, 5621), (49, 5636), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: FrodoSwaggins\_8 Start: 4608, Stop: 5636, Start Num: 10

Candidate Starts for FrodoSwaggins\_8:

(Start: 10 @4608 has 22 MA's), (11, 4617), (15, 4710), (24, 4920), (30, 5070), (39, 5244), (46, 5325), (49, 5340), (56, 5445), (59, 5484), (60, 5493), (61, 5505), (62, 5523), (64, 5544), (65, 5547),

Gene: GirlPower\_8 Start: 5473, Stop: 6504, Start Num: 10

Candidate Starts for GirlPower\_8:

(Start: 10 @5473 has 22 MA's), (15, 5575), (36, 6091), (43, 6172), (46, 6193), (49, 6208), (56, 6313), (60, 6361), (61, 6373), (64, 6412),

Gene: Hoshi\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for Hoshi\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (39, 5540), (46, 5621), (49, 5636), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: Hydrus\_18 Start: 11639, Stop: 12808, Start Num: 2

Candidate Starts for Hydrus\_18:

(1, 11609), (Start: 2 @11639 has 4 MA's), (6, 11690), (22, 12065), (23, 12077), (29, 12224), (38, 12410), (40, 12416), (44, 12479), (54, 12578), (63, 12716),

Gene: IceWarrior\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for IceWarrior\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (39, 5540), (46, 5621), (49, 5636), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: Indigenous\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for Indigenous\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (39, 5540), (46, 5621), (49, 5636), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: Jaylociraptor\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for Jaylociraptor\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (39, 5540), (46, 5621), (49, 5636), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: Kenosha\_16 Start: 10240, Stop: 11409, Start Num: 2

Candidate Starts for Kenosha\_16:

(1, 10210), (Start: 2 @10240 has 4 MA's), (6, 10291), (22, 10666), (23, 10678), (29, 10825), (33, 10873), (38, 11011), (40, 11017), (44, 11080), (53, 11173), (54, 11179), (63, 11317),

Gene: Madamoto\_9 Start: 4879, Stop: 5925, Start Num: 10

Candidate Starts for Madamoto\_9:

(5, 4822), (Start: 10 @4879 has 22 MA's), (13, 4930), (15, 4987), (21, 5131), (30, 5350), (34, 5428), (56, 5734), (60, 5782), (64, 5833),

Gene: Maya\_9 Start: 4912, Stop: 5940, Start Num: 10

Candidate Starts for Maya\_9:

(Start: 10 @4912 has 22 MA's), (15, 5014), (24, 5224), (30, 5374), (39, 5548), (46, 5629), (49, 5644), (56, 5749), (59, 5788), (60, 5797), (61, 5809), (62, 5827), (64, 5848), (65, 5851),

Gene: Meibysrarus\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for Meibysrarus\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (39, 5540), (46, 5621), (49, 5636), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: Mossy\_16 Start: 10528, Stop: 11652, Start Num: 3

Candidate Starts for Mossy\_16:

(Start: 3 @10528 has 1 MA's), (4, 10537), (6, 10573), (9, 10606), (14, 10726), (27, 11053), (28, 11068), (35, 11239), (47, 11359), (51, 11392), (55, 11428), (56, 11467), (60, 11515), (68, 11632),

Gene: Namo\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for Namo\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (36, 5519), (39, 5540), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: OlympicHelado\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for OlympicHelado\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (36, 5519), (39, 5540), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: Paella\_18 Start: 9746, Stop: 10660, Start Num: 16

Candidate Starts for Paella\_18:

(Start: 16 @9746 has 2 MA's), (17, 9788), (18, 9794), (25, 9989), (32, 10109), (37, 10259), (41, 10289), (42, 10304), (50, 10385), (55, 10433), (58, 10508), (62, 10553),

Gene: Pepy6\_018 Start: 16104, Stop: 17147, Start Num: 8

Candidate Starts for Pepy6\_018:

(7, 16101), (8, 16104), (12, 16152), (26, 16536), (35, 16728), (45, 16836), (48, 16860), (51, 16884), (52, 16905), (55, 16923), (56, 16962), (60, 17010), (66, 17088), (67, 17103),

Gene: Popy\_8 Start: 4608, Stop: 5636, Start Num: 10

Candidate Starts for Popy\_8:

(Start: 10 @4608 has 22 MA's), (11, 4617), (15, 4710), (24, 4920), (30, 5070), (39, 5244), (46, 5325), (49, 5340), (56, 5445), (59, 5484), (60, 5493), (61, 5505), (62, 5523), (64, 5544), (65, 5547),

Gene: Qui\_18 Start: 9746, Stop: 10660, Start Num: 16

Candidate Starts for Qui\_18:

(Start: 16 @9746 has 2 MA's), (17, 9788), (18, 9794), (25, 9989), (32, 10109), (37, 10259), (41, 10289), (42, 10304), (50, 10385), (55, 10433), (58, 10508), (62, 10553),

Gene: Rima\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for Rima\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (36, 5519), (39, 5540), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: Soshi\_8 Start: 4608, Stop: 5636, Start Num: 10

Candidate Starts for Soshi\_8:

(Start: 10 @4608 has 22 MA's), (15, 4710), (24, 4920), (30, 5070), (39, 5244), (56, 5445), (59, 5484), (60, 5493), (61, 5505), (62, 5523), (64, 5544), (65, 5547),

Gene: Spectropatronm\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for Spectropatronm\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (39, 5540), (46, 5621), (49, 5636), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: TaidaOne\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for TaidaOne\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (39, 5540), (46, 5621), (49, 5636), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: TieDye\_8 Start: 4614, Stop: 5642, Start Num: 10

Candidate Starts for TieDye\_8:

(Start: 10 @4614 has 22 MA's), (15, 4716), (24, 4926), (30, 5076), (39, 5250), (46, 5331), (49, 5346), (56, 5451), (59, 5490), (60, 5499), (61, 5511), (62, 5529), (64, 5550), (65, 5553),

Gene: TonyStarch\_9 Start: 4904, Stop: 5932, Start Num: 10

Candidate Starts for TonyStarch\_9:

(Start: 10 @4904 has 22 MA's), (15, 5006), (24, 5216), (30, 5366), (36, 5519), (39, 5540), (56, 5741), (59, 5780), (60, 5789), (61, 5801), (62, 5819), (64, 5840), (65, 5843),

Gene: Zeph\_18 Start: 11621, Stop: 12790, Start Num: 2

Candidate Starts for Zeph\_18:

(1, 11591), (Start: 2 @11621 has 4 MA's), (6, 11672), (22, 12047), (23, 12059), (29, 12206), (38, 12392), (40, 12398), (44, 12461), (54, 12560), (63, 12698),