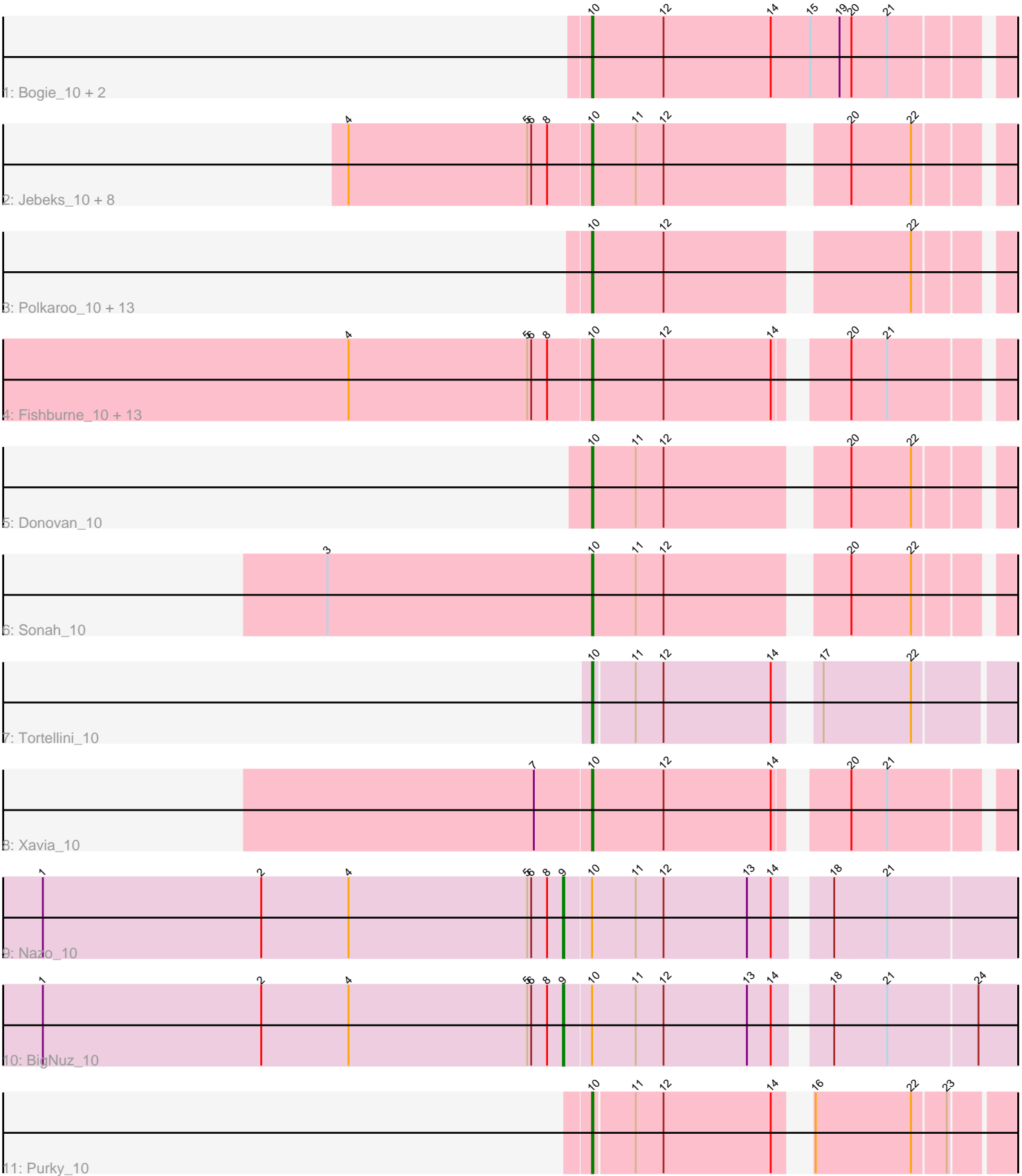


Pham 85827



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 85827 Report

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

Pham number 85827 has 47 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Bogie\_10, Pygmy\_10, Jung\_10
- Track 2 : Jebeks\_10, Phegasus\_10, Juniormint\_10, Langerak\_10, Techage\_10, Majeke\_10, Shipwreck\_10, Arib1\_10, Mangethe\_10
- Track 3 : Polkaroo\_10, Brusacoram\_10, CactusJack\_10, KilKor\_10, Phalm\_10, Ksquared\_10, Willsammy\_10, Atcoo\_10, Bunnies\_10, Thespis\_10, StressBall\_10, Glaske\_10, Megiddo\_10, Malithi\_10
- Track 4 : Fishburne\_10, Dynamo\_10, Zilizebeth\_10, GreaseLightnin\_10, Necropolis\_10, Phineas\_10, StevieRay\_10, Camster\_10, HUHilltop\_10, Vidya\_10, Kari\_10, FirstPlacePfu\_10, Bartholomew\_10, Venti\_10
- Track 5 : Donovan\_10
- Track 6 : Sonah\_10
- Track 7 : Tortellini\_10
- Track 8 : Xavia\_10
- Track 9 : Nazo\_10
- Track 10 : BigNuz\_10
- Track 11 : Purky\_10

### ***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 41 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arib1\_10, Atcoo\_10, Bartholomew\_10, Bogie\_10, Brusacoram\_10, Bunnies\_10, CactusJack\_10, Camster\_10, Donovan\_10, Dynamo\_10, FirstPlacePfu\_10, Fishburne\_10, Glaske\_10, GreaseLightnin\_10, HUHilltop\_10, Jebeks\_10, Jung\_10, Juniormint\_10, Kari\_10, KilKor\_10, Ksquared\_10, Langerak\_10, Majeke\_10, Malithi\_10, Mangethe\_10, Megiddo\_10, Necropolis\_10, Phalm\_10, Phegasus\_10, Phineas\_10, Polkaroo\_10, Purky\_10, Pygmy\_10, Shipwreck\_10, Sonah\_10, StevieRay\_10, StressBall\_10, Techage\_10, Thespis\_10, Tortellini\_10, Venti\_10, Vidya\_10, Willsammy\_10, Xavia\_10, Zilizebeth\_10,

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

- BigNuz\_10, Nazo\_10,

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: 2 of 43
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigNuz\_10 (P4), Nazo\_10 (P4),

Start 10:

- Found in 47 of 47 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 41 of 43
- Called 95.7% of time when present
- Phage (with cluster) where this start called: Arib1\_10 (P1), Atcoo\_10 (P1), Bartholomew\_10 (P1), Bogie\_10 (P1), Brusacoram\_10 (P1), Bunnies\_10 (P1), CactusJack\_10 (P1), Camster\_10 (P1), Donovan\_10 (P1), Dynamo\_10 (P1), FirstPlacePfu\_10 (P1), Fishburne\_10 (P1), Glaske\_10 (P1), GreaseLightnin\_10 (P1), HUHilltop\_10 (P1), Jebeks\_10 (P1), Jung\_10 (P1), Juniormint\_10 (P1), Kari\_10 (P1), KilKor\_10 (P1), Ksquared\_10 (P1), Langerak\_10 (P1), Majeke\_10 (P1), Malithi\_10 (P1), Mangethe\_10 (P1), Megiddo\_10 (P1), Necropolis\_10 (P1), Phalm\_10 (P1), Phegasus\_10 (P1), Phineas\_10 (P1), Polkaroo\_10 (P1), Purky\_10 (P6), Pygmy\_10 (P1), Shipwreck\_10 (P1), Sonah\_10 (P1), StevieRay\_10 (P1), StressBall\_10 (P1), Techage\_10 (P1), Thespis\_10 (P1), Tortellini\_10 (P2), Venti\_10 (P1), Vidya\_10 (P1), Willsammy\_10 (P1), Xavia\_10 (P3), Zilizebeth\_10 (P1),

### Summary by clusters:

There are 5 clusters represented in this pham: P2, P3, P1, P6, P4,

Info for manual annotations of cluster P1:

- Start number 10 was manually annotated 38 times for cluster P1.

Info for manual annotations of cluster P2:

- Start number 10 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:

- Start number 10 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:

- Start number 9 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P6:

- Start number 10 was manually annotated 1 time for cluster P6.

### Gene Information:

Gene: Arib1\_10 Start: 7321, Stop: 7644, Start Num: 10

Candidate Starts for Arib1\_10:

(4, 7141), (5, 7276), (6, 7279), (8, 7291), (Start: 10 @7321 has 41 MA's), (11, 7354), (12, 7375), (20, 7495), (22, 7540),

Gene: Atcoo\_10 Start: 7308, Stop: 7631, Start Num: 10

Candidate Starts for Atcoo\_10:

(Start: 10 @7308 has 41 MA's), (12, 7362), (22, 7527),

Gene: Bartholomew\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for Bartholomew\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: BigNuz\_10 Start: 7270, Stop: 7647, Start Num: 9

Candidate Starts for BigNuz\_10:

(1, 6877), (2, 7042), (4, 7108), (5, 7243), (6, 7246), (8, 7258), (Start: 9 @7270 has 2 MA's), (Start: 10 @7288 has 41 MA's), (11, 7321), (12, 7342), (13, 7405), (14, 7423), (18, 7453), (21, 7492), (24, 7558),

Gene: Bogie\_10 Start: 7308, Stop: 7652, Start Num: 10

Candidate Starts for Bogie\_10:

(Start: 10 @7308 has 41 MA's), (12, 7362), (14, 7443), (15, 7473), (19, 7494), (20, 7503), (21, 7530),

Gene: Brusacoram\_10 Start: 7307, Stop: 7630, Start Num: 10

Candidate Starts for Brusacoram\_10:

(Start: 10 @7307 has 41 MA's), (12, 7361), (22, 7526),

Gene: Bunnies\_10 Start: 7320, Stop: 7643, Start Num: 10

Candidate Starts for Bunnies\_10:

(Start: 10 @7320 has 41 MA's), (12, 7374), (22, 7539),

Gene: CactusJack\_10 Start: 7307, Stop: 7630, Start Num: 10

Candidate Starts for CactusJack\_10:

(Start: 10 @7307 has 41 MA's), (12, 7361), (22, 7526),

Gene: Camster\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for Camster\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: Donovan\_10 Start: 7322, Stop: 7645, Start Num: 10

Candidate Starts for Donovan\_10:

(Start: 10 @7322 has 41 MA's), (11, 7355), (12, 7376), (20, 7496), (22, 7541),

Gene: Dynamo\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for Dynamo\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: FirstPlacePfu\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for FirstPlacePfu\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: Fishburne\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for Fishburne\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: Glaske\_10 Start: 7307, Stop: 7630, Start Num: 10

Candidate Starts for Glaske\_10:

(Start: 10 @7307 has 41 MA's), (12, 7361), (22, 7526),

Gene: GreaseLightnin\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for GreaseLightnin\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: HUHilltop\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for HUHilltop\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: Jebeks\_10 Start: 7321, Stop: 7644, Start Num: 10

Candidate Starts for Jebeks\_10:

(4, 7141), (5, 7276), (6, 7279), (8, 7291), (Start: 10 @7321 has 41 MA's), (11, 7354), (12, 7375), (20, 7495), (22, 7540),

Gene: Jung\_10 Start: 7307, Stop: 7654, Start Num: 10

Candidate Starts for Jung\_10:

(Start: 10 @7307 has 41 MA's), (12, 7361), (14, 7442), (15, 7472), (19, 7493), (20, 7502), (21, 7529),

Gene: Juniormint\_10 Start: 7324, Stop: 7647, Start Num: 10

Candidate Starts for Juniormint\_10:

(4, 7144), (5, 7279), (6, 7282), (8, 7294), (Start: 10 @7324 has 41 MA's), (11, 7357), (12, 7378), (20, 7498), (22, 7543),

Gene: Kari\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for Kari\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: KilKor\_10 Start: 7307, Stop: 7630, Start Num: 10

Candidate Starts for KilKor\_10:

(Start: 10 @7307 has 41 MA's), (12, 7361), (22, 7526),

Gene: Ksquared\_10 Start: 7320, Stop: 7643, Start Num: 10

Candidate Starts for Ksquared\_10:

(Start: 10 @7320 has 41 MA's), (12, 7374), (22, 7539),

Gene: Langerak\_10 Start: 7321, Stop: 7644, Start Num: 10

Candidate Starts for Langerak\_10:

(4, 7141), (5, 7276), (6, 7279), (8, 7291), (Start: 10 @7321 has 41 MA's), (11, 7354), (12, 7375), (20, 7495), (22, 7540),

Gene: Majeke\_10 Start: 7321, Stop: 7644, Start Num: 10

Candidate Starts for Majeke\_10:

(4, 7141), (5, 7276), (6, 7279), (8, 7291), (Start: 10 @7321 has 41 MA's), (11, 7354), (12, 7375), (20, 7495), (22, 7540),

Gene: Malithi\_10 Start: 7320, Stop: 7673, Start Num: 10

Candidate Starts for Malithi\_10:

(Start: 10 @7320 has 41 MA's), (12, 7374), (22, 7539),

Gene: Mangethe\_10 Start: 7321, Stop: 7644, Start Num: 10

Candidate Starts for Mangethe\_10:

(4, 7141), (5, 7276), (6, 7279), (8, 7291), (Start: 10 @7321 has 41 MA's), (11, 7354), (12, 7375), (20, 7495), (22, 7540),

Gene: Megiddo\_10 Start: 7307, Stop: 7630, Start Num: 10

Candidate Starts for Megiddo\_10:

(Start: 10 @7307 has 41 MA's), (12, 7361), (22, 7526),

Gene: Nazo\_10 Start: 7270, Stop: 7647, Start Num: 9

Candidate Starts for Nazo\_10:

(1, 6877), (2, 7042), (4, 7108), (5, 7243), (6, 7246), (8, 7258), (Start: 9 @7270 has 2 MA's), (Start: 10 @7288 has 41 MA's), (11, 7321), (12, 7342), (13, 7405), (14, 7423), (18, 7453), (21, 7492),

Gene: Necropolis\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for Necropolis\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: Phalm\_10 Start: 7307, Stop: 7630, Start Num: 10

Candidate Starts for Phalm\_10:

(Start: 10 @7307 has 41 MA's), (12, 7361), (22, 7526),

Gene: Phegasus\_10 Start: 7321, Stop: 7644, Start Num: 10

Candidate Starts for Phegasus\_10:

(4, 7141), (5, 7276), (6, 7279), (8, 7291), (Start: 10 @7321 has 41 MA's), (11, 7354), (12, 7375), (20, 7495), (22, 7540),

Gene: Phineas\_10 Start: 7307, Stop: 7651, Start Num: 10

Candidate Starts for Phineas\_10:

(4, 7127), (5, 7262), (6, 7265), (8, 7277), (Start: 10 @7307 has 41 MA's), (12, 7361), (14, 7442), (20, 7481), (21, 7508),

Gene: Polkaroo\_10 Start: 7320, Stop: 7643, Start Num: 10

Candidate Starts for Polkaroo\_10:

(Start: 10 @7320 has 41 MA's), (12, 7374), (22, 7539),

Gene: Purky\_10 Start: 7323, Stop: 7613, Start Num: 10

Candidate Starts for Purky\_10:

(Start: 10 @7323 has 41 MA's), (11, 7353), (12, 7374), (14, 7455), (16, 7467), (22, 7539), (23, 7563),

Gene: Pygmy\_10 Start: 7308, Stop: 7652, Start Num: 10

Candidate Starts for Pygmy\_10:

(Start: 10 @7308 has 41 MA's), (12, 7362), (14, 7443), (15, 7473), (19, 7494), (20, 7503), (21, 7530),

Gene: Shipwreck\_10 Start: 7307, Stop: 7630, Start Num: 10

Candidate Starts for Shipwreck\_10:

(4, 7127), (5, 7262), (6, 7265), (8, 7277), (Start: 10 @7307 has 41 MA's), (11, 7340), (12, 7361), (20, 7481), (22, 7526),

Gene: Sonah\_10 Start: 7323, Stop: 7646, Start Num: 10

Candidate Starts for Sonah\_10:

(3, 7125), (Start: 10 @7323 has 41 MA's), (11, 7356), (12, 7377), (20, 7497), (22, 7542),

Gene: StevieRay\_10 Start: 7310, Stop: 7654, Start Num: 10

Candidate Starts for StevieRay\_10:

(4, 7130), (5, 7265), (6, 7268), (8, 7280), (Start: 10 @7310 has 41 MA's), (12, 7364), (14, 7445), (20, 7484), (21, 7511),

Gene: StressBall\_10 Start: 7307, Stop: 7630, Start Num: 10

Candidate Starts for StressBall\_10:

(Start: 10 @7307 has 41 MA's), (12, 7361), (22, 7526),

Gene: Techage\_10 Start: 7324, Stop: 7647, Start Num: 10

Candidate Starts for Techage\_10:

(4, 7144), (5, 7279), (6, 7282), (8, 7294), (Start: 10 @7324 has 41 MA's), (11, 7357), (12, 7378), (20, 7498), (22, 7543),

Gene: Thespis\_10 Start: 7307, Stop: 7630, Start Num: 10

Candidate Starts for Thespis\_10:

(Start: 10 @7307 has 41 MA's), (12, 7361), (22, 7526),

Gene: Tortellini\_10 Start: 7265, Stop: 7594, Start Num: 10

Candidate Starts for Tortellini\_10:

(Start: 10 @7265 has 41 MA's), (11, 7295), (12, 7316), (14, 7397), (17, 7415), (22, 7481),

Gene: Venti\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for Venti\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: Vidya\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for Vidya\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),

Gene: Willsammy\_10 Start: 7310, Stop: 7633, Start Num: 10

Candidate Starts for Willsammy\_10:

(Start: 10 @7310 has 41 MA's), (12, 7364), (22, 7529),

Gene: Xavia\_10 Start: 7323, Stop: 7667, Start Num: 10

Candidate Starts for Xavia\_10:

(7, 7281), (Start: 10 @7323 has 41 MA's), (12, 7377), (14, 7458), (20, 7497), (21, 7524),

Gene: Zilizebeth\_10 Start: 7319, Stop: 7663, Start Num: 10

Candidate Starts for Zilizebeth\_10:

(4, 7139), (5, 7274), (6, 7277), (8, 7289), (Start: 10 @7319 has 41 MA's), (12, 7373), (14, 7454), (20, 7493), (21, 7520),