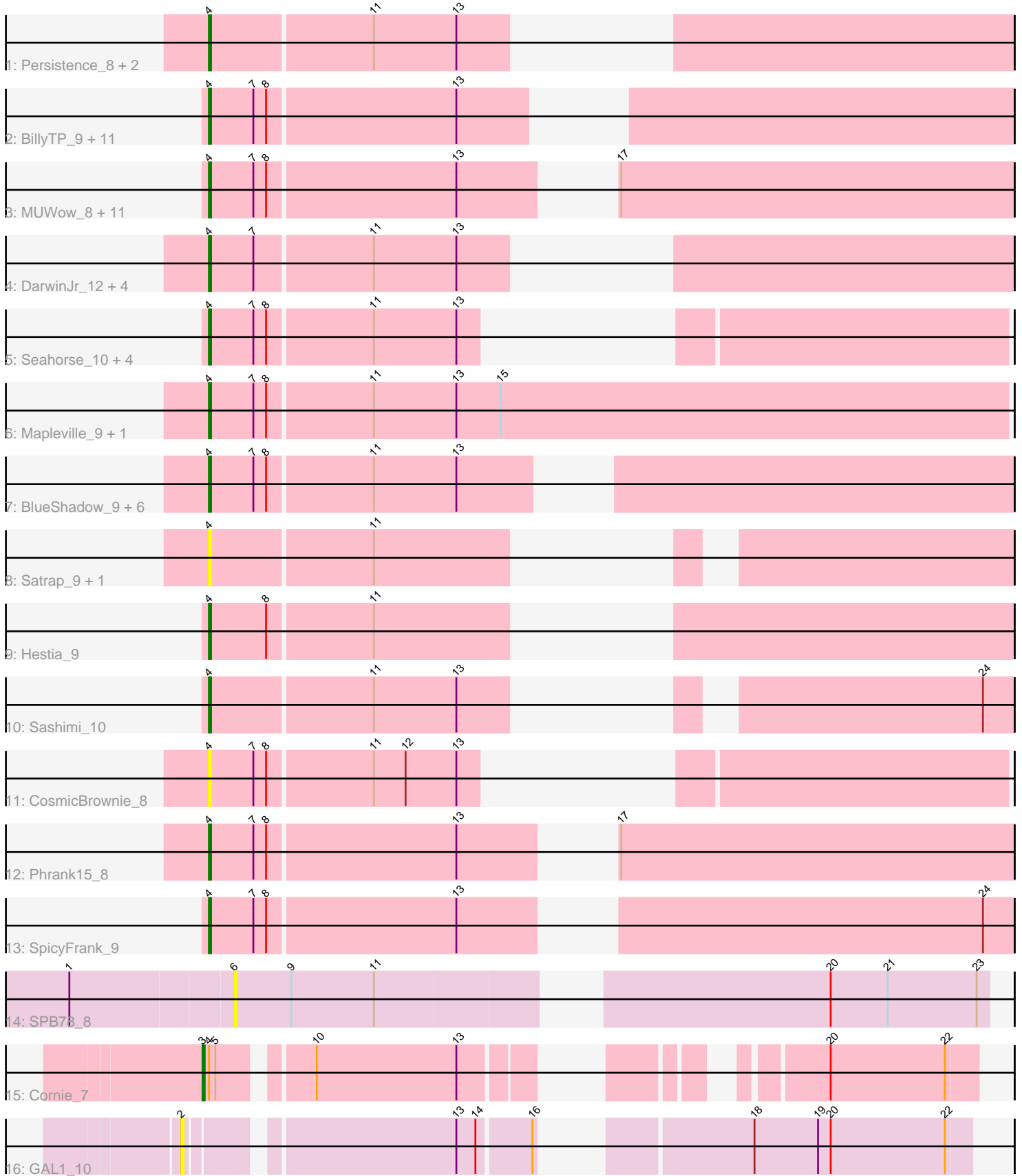


Pham 294769



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 294769 Report

This analysis was run 04/18/26 on database version 643.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 294769 has 56 members, 22 are drafts.

Phages represented in each track:

- Track 1 : Persistence\_8, Ding\_9, JakeTheSnake\_9
- Track 2 : BillyTP\_9, Auxilium\_9, Bhageatrice\_11, Faja\_9, EvePickles\_9, JellyBread\_9, AdaS\_9, Raphaella\_9, NewKitty\_10, Sporco\_10, Windest\_10, CookieBear\_9
- Track 3 : MUWow\_8, BenchScraper\_9, BasketStar\_9, YoungHarleezy\_9, Gorpy\_9, Vopal\_10, Lasker\_9, MaterMagnus\_9, Aikyam\_9, Sakai\_9, SonDevVon\_8, Richie\_9
- Track 4 : DarwinJr\_12, Crescenzo\_9, MurphyJoseph\_9, GumGum\_9, Anekin\_8
- Track 5 : Seahorse\_10, Isolde\_10, Nyilah\_8, Tiff81\_10, Kabloowy\_9
- Track 6 : Mapleville\_9, Lawnathon\_9
- Track 7 : BlueShadow\_9, Globfish\_9, MidnightRain\_9, LeBruni\_10, RadFad\_9, ThayneTheZag\_9, Hillester\_9
- Track 8 : Satrap\_9, Shukran\_9
- Track 9 : Hestia\_9
- Track 10 : Sashimi\_10
- Track 11 : CosmicBrownie\_8
- Track 12 : Phrank15\_8
- Track 13 : SpicyFrank\_9
- Track 14 : SPB78\_8
- Track 15 : Cornie\_7
- Track 16 : GAL1\_10

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

The start number called the most often in the published annotations is 4, it was called in 33 of the 34 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS\_9, Aikyam\_9, Anekin\_8, Auxilium\_9, BasketStar\_9, BenchScraper\_9, Bhageatrice\_11, BillyTP\_9, BlueShadow\_9, CookieBear\_9, CosmicBrownie\_8, Crescenzo\_9, DarwinJr\_12, Ding\_9, EvePickles\_9, Faja\_9, Globfish\_9, Gorpy\_9,

GumGum\_9, Hestia\_9, Hillester\_9, Isolde\_10, JakeTheSnake\_9, JellyBread\_9, Kabloowy\_9, Lasker\_9, Lawnathon\_9, LeBruni\_10, MUWow\_8, Mapleville\_9, MaterMagnus\_9, MidnightRain\_9, MurphyJoseph\_9, NewKitty\_10, Nyilah\_8, Persistence\_8, Phrank15\_8, RadFad\_9, Raphaella\_9, Richie\_9, Sakai\_9, Sashimi\_10, Satrap\_9, Seahorse\_10, Shukran\_9, SonDevVon\_8, SpicyFrank\_9, Sporco\_10, ThayneTheZag\_9, Tiff81\_10, Vopal\_10, Windest\_10, YoungHarleezy\_9,

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

- Cornie\_7,

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

- GAL1\_10, SPB78\_8,

### Summary by start number:

Start 2:

- Found in 1 of 56 ( 1.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GAL1\_10 (singleton),

Start 3:

- Found in 1 of 56 ( 1.8% ) of genes in pham
- Manual Annotations of this start: 1 of 34
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cornie\_7 (F5),

Start 4:

- Found in 54 of 56 ( 96.4% ) of genes in pham
- Manual Annotations of this start: 33 of 34
- Called 98.1% of time when present
- Phage (with cluster) where this start called: AdaS\_9 (AY), Aikyam\_9 (AY), Anekin\_8 (AY), Auxilium\_9 (AY), BasketStar\_9 (AY), BenchScraper\_9 (AY), Bhageatrice\_11 (AY), BillyTP\_9 (AY), BlueShadow\_9 (AY), CookieBear\_9 (AY), CosmicBrownie\_8 (AY), Crescenzo\_9 (AY), DarwinJr\_12 (AY), Ding\_9 (AY), EvePickles\_9 (AY), Faja\_9 (AY), Globfish\_9 (AY), Gorpy\_9 (AY), GumGum\_9 (AY), Hestia\_9 (AY), Hillester\_9 (AY), Isolde\_10 (AY), JakeTheSnake\_9 (AY), JellyBread\_9 (AY), Kabloowy\_9 (AY), Lasker\_9 (AY), Lawnathon\_9 (AY), LeBruni\_10 (AY), MUWow\_8 (AY), Mapleville\_9 (AY), MaterMagnus\_9 (AY), MidnightRain\_9 (AY), MurphyJoseph\_9 (AY), NewKitty\_10 (AY), Nyilah\_8 (AY), Persistence\_8 (AY), Phrank15\_8 (AY), RadFad\_9 (AY), Raphaella\_9 (AY), Richie\_9 (AY), Sakai\_9 (AY), Sashimi\_10 (AY), Satrap\_9 (AY), Seahorse\_10 (AY), Shukran\_9 (AY), SonDevVon\_8 (AY), SpicyFrank\_9 (AY), Sporco\_10 (AY), ThayneTheZag\_9 (AY), Tiff81\_10 (AY), Vopal\_10 (AY), Windest\_10 (AY), YoungHarleezy\_9 (AY),

Start 6:

- Found in 1 of 56 ( 1.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SPB78\_8 (BA),

### Summary by clusters:

There are 4 clusters represented in this pham: AY, singleton, BA, F5,

Info for manual annotations of cluster AY:

•Start number 4 was manually annotated 33 times for cluster AY.

Info for manual annotations of cluster F5:

•Start number 3 was manually annotated 1 time for cluster F5.

**Gene Information:**

Gene: AdaS\_9 Start: 6955, Stop: 7278, Start Num: 4

Candidate Starts for AdaS\_9:

(Start: 4 @6955 has 33 MA's), (7, 6976), (8, 6982), (13, 7069),

Gene: Aikyam\_9 Start: 6941, Stop: 7279, Start Num: 4

Candidate Starts for Aikyam\_9:

(Start: 4 @6941 has 33 MA's), (7, 6962), (8, 6968), (13, 7055), (17, 7094),

Gene: Anekin\_8 Start: 7092, Stop: 7391, Start Num: 4

Candidate Starts for Anekin\_8:

(Start: 4 @7092 has 33 MA's), (7, 7113), (11, 7167), (13, 7206),

Gene: Auxilium\_9 Start: 6955, Stop: 7278, Start Num: 4

Candidate Starts for Auxilium\_9:

(Start: 4 @6955 has 33 MA's), (7, 6976), (8, 6982), (13, 7069),

Gene: BasketStar\_9 Start: 6994, Stop: 7332, Start Num: 4

Candidate Starts for BasketStar\_9:

(Start: 4 @6994 has 33 MA's), (7, 7015), (8, 7021), (13, 7108), (17, 7147),

Gene: BenchScraper\_9 Start: 6955, Stop: 7293, Start Num: 4

Candidate Starts for BenchScraper\_9:

(Start: 4 @6955 has 33 MA's), (7, 6976), (8, 6982), (13, 7069), (17, 7108),

Gene: Bhageatrice\_11 Start: 8150, Stop: 8488, Start Num: 4

Candidate Starts for Bhageatrice\_11:

(Start: 4 @8150 has 33 MA's), (7, 8171), (8, 8177), (13, 8264),

Gene: BillyTP\_9 Start: 6949, Stop: 7278, Start Num: 4

Candidate Starts for BillyTP\_9:

(Start: 4 @6949 has 33 MA's), (7, 6970), (8, 6976), (13, 7063),

Gene: BlueShadow\_9 Start: 6939, Stop: 7277, Start Num: 4

Candidate Starts for BlueShadow\_9:

(Start: 4 @6939 has 33 MA's), (7, 6960), (8, 6966), (11, 7014), (13, 7053),

Gene: CookieBear\_9 Start: 6955, Stop: 7278, Start Num: 4

Candidate Starts for CookieBear\_9:

(Start: 4 @6955 has 33 MA's), (7, 6976), (8, 6982), (13, 7069),

Gene: Cornie\_7 Start: 5933, Stop: 6220, Start Num: 3  
Candidate Starts for Cornie\_7:  
(Start: 3 @5933 has 1 MA's), (Start: 4 @5936 has 33 MA's), (5, 5939), (10, 5975), (13, 6041), (20, 6152), (22, 6206),

Gene: CosmicBrownie\_8 Start: 7070, Stop: 7348, Start Num: 4  
Candidate Starts for CosmicBrownie\_8:  
(Start: 4 @7070 has 33 MA's), (7, 7091), (8, 7097), (11, 7145), (12, 7160), (13, 7184),

Gene: Crescenzo\_9 Start: 7020, Stop: 7319, Start Num: 4  
Candidate Starts for Crescenzo\_9:  
(Start: 4 @7020 has 33 MA's), (7, 7041), (11, 7095), (13, 7134),

Gene: DarwinJr\_12 Start: 8323, Stop: 8622, Start Num: 4  
Candidate Starts for DarwinJr\_12:  
(Start: 4 @8323 has 33 MA's), (7, 8344), (11, 8398), (13, 8437),

Gene: Ding\_9 Start: 6965, Stop: 7249, Start Num: 4  
Candidate Starts for Ding\_9:  
(Start: 4 @6965 has 33 MA's), (11, 7040), (13, 7079),

Gene: EvePickles\_9 Start: 6997, Stop: 7335, Start Num: 4  
Candidate Starts for EvePickles\_9:  
(Start: 4 @6997 has 33 MA's), (7, 7018), (8, 7024), (13, 7111),

Gene: Faja\_9 Start: 6941, Stop: 7279, Start Num: 4  
Candidate Starts for Faja\_9:  
(Start: 4 @6941 has 33 MA's), (7, 6962), (8, 6968), (13, 7055),

Gene: GAL1\_10 Start: 7852, Stop: 8169, Start Num: 2  
Candidate Starts for GAL1\_10:  
(2, 7852), (13, 7966), (14, 7975), (16, 7999), (18, 8068), (19, 8098), (20, 8104), (22, 8158),

Gene: Globfish\_9 Start: 6999, Stop: 7322, Start Num: 4  
Candidate Starts for Globfish\_9:  
(Start: 4 @6999 has 33 MA's), (7, 7020), (8, 7026), (11, 7074), (13, 7113),

Gene: Gorpy\_9 Start: 6949, Stop: 7287, Start Num: 4  
Candidate Starts for Gorpy\_9:  
(Start: 4 @6949 has 33 MA's), (7, 6970), (8, 6976), (13, 7063), (17, 7102),

Gene: GumGum\_9 Start: 7024, Stop: 7323, Start Num: 4  
Candidate Starts for GumGum\_9:  
(Start: 4 @7024 has 33 MA's), (7, 7045), (11, 7099), (13, 7138),

Gene: Hestia\_9 Start: 7089, Stop: 7388, Start Num: 4  
Candidate Starts for Hestia\_9:  
(Start: 4 @7089 has 33 MA's), (8, 7116), (11, 7164),

Gene: Hillester\_9 Start: 6939, Stop: 7277, Start Num: 4  
Candidate Starts for Hillester\_9:  
(Start: 4 @6939 has 33 MA's), (7, 6960), (8, 6966), (11, 7014), (13, 7053),

Gene: Isolde\_10 Start: 7012, Stop: 7350, Start Num: 4  
Candidate Starts for Isolde\_10:  
(Start: 4 @7012 has 33 MA's), (7, 7033), (8, 7039), (11, 7087), (13, 7126),

Gene: JakeTheSnake\_9 Start: 6979, Stop: 7278, Start Num: 4  
Candidate Starts for JakeTheSnake\_9:  
(Start: 4 @6979 has 33 MA's), (11, 7054), (13, 7093),

Gene: JellyBread\_9 Start: 6948, Stop: 7271, Start Num: 4  
Candidate Starts for JellyBread\_9:  
(Start: 4 @6948 has 33 MA's), (7, 6969), (8, 6975), (13, 7062),

Gene: Kabloowy\_9 Start: 7022, Stop: 7366, Start Num: 4  
Candidate Starts for Kabloowy\_9:  
(Start: 4 @7022 has 33 MA's), (7, 7043), (8, 7049), (11, 7097), (13, 7136),

Gene: Lasker\_9 Start: 6948, Stop: 7286, Start Num: 4  
Candidate Starts for Lasker\_9:  
(Start: 4 @6948 has 33 MA's), (7, 6969), (8, 6975), (13, 7062), (17, 7101),

Gene: Lawnathon\_9 Start: 7023, Stop: 7397, Start Num: 4  
Candidate Starts for Lawnathon\_9:  
(Start: 4 @7023 has 33 MA's), (7, 7044), (8, 7050), (11, 7098), (13, 7137), (15, 7158),

Gene: LeBruni\_10 Start: 6994, Stop: 7302, Start Num: 4  
Candidate Starts for LeBruni\_10:  
(Start: 4 @6994 has 33 MA's), (7, 7015), (8, 7021), (11, 7069), (13, 7108),

Gene: MUWow\_8 Start: 7027, Stop: 7365, Start Num: 4  
Candidate Starts for MUWow\_8:  
(Start: 4 @7027 has 33 MA's), (7, 7048), (8, 7054), (13, 7141), (17, 7180),

Gene: Mapleville\_9 Start: 7093, Stop: 7467, Start Num: 4  
Candidate Starts for Mapleville\_9:  
(Start: 4 @7093 has 33 MA's), (7, 7114), (8, 7120), (11, 7168), (13, 7207), (15, 7228),

Gene: MaterMagnus\_9 Start: 6941, Stop: 7279, Start Num: 4  
Candidate Starts for MaterMagnus\_9:  
(Start: 4 @6941 has 33 MA's), (7, 6962), (8, 6968), (13, 7055), (17, 7094),

Gene: MidnightRain\_9 Start: 6939, Stop: 7277, Start Num: 4  
Candidate Starts for MidnightRain\_9:  
(Start: 4 @6939 has 33 MA's), (7, 6960), (8, 6966), (11, 7014), (13, 7053),

Gene: MurphyJoseph\_9 Start: 6950, Stop: 7249, Start Num: 4  
Candidate Starts for MurphyJoseph\_9:  
(Start: 4 @6950 has 33 MA's), (7, 6971), (11, 7025), (13, 7064),

Gene: NewKitty\_10 Start: 7170, Stop: 7508, Start Num: 4  
Candidate Starts for NewKitty\_10:  
(Start: 4 @7170 has 33 MA's), (7, 7191), (8, 7197), (13, 7284),

Gene: Nyilah\_8 Start: 7024, Stop: 7368, Start Num: 4

Candidate Starts for Nyilah\_8:  
(Start: 4 @7024 has 33 MA's), (7, 7045), (8, 7051), (11, 7099), (13, 7138),

Gene: Persistence\_8 Start: 7047, Stop: 7346, Start Num: 4  
Candidate Starts for Persistence\_8:  
(Start: 4 @7047 has 33 MA's), (11, 7122), (13, 7161),

Gene: Phrank15\_8 Start: 7093, Stop: 7431, Start Num: 4  
Candidate Starts for Phrank15\_8:  
(Start: 4 @7093 has 33 MA's), (7, 7114), (8, 7120), (13, 7207), (17, 7246),

Gene: RadFad\_9 Start: 6939, Stop: 7277, Start Num: 4  
Candidate Starts for RadFad\_9:  
(Start: 4 @6939 has 33 MA's), (7, 6960), (8, 6966), (11, 7014), (13, 7053),

Gene: Raphaella\_9 Start: 6955, Stop: 7278, Start Num: 4  
Candidate Starts for Raphaella\_9:  
(Start: 4 @6955 has 33 MA's), (7, 6976), (8, 6982), (13, 7069),

Gene: Richie\_9 Start: 6955, Stop: 7293, Start Num: 4  
Candidate Starts for Richie\_9:  
(Start: 4 @6955 has 33 MA's), (7, 6976), (8, 6982), (13, 7069), (17, 7108),

Gene: SPB78\_8 Start: 6623, Stop: 6946, Start Num: 6  
Candidate Starts for SPB78\_8:  
(1, 6548), (6, 6623), (9, 6650), (11, 6689), (20, 6872), (21, 6899), (23, 6941),

Gene: Sakai\_9 Start: 6949, Stop: 7287, Start Num: 4  
Candidate Starts for Sakai\_9:  
(Start: 4 @6949 has 33 MA's), (7, 6970), (8, 6976), (13, 7063), (17, 7102),

Gene: Sashimi\_10 Start: 7112, Stop: 7393, Start Num: 4  
Candidate Starts for Sashimi\_10:  
(Start: 4 @7112 has 33 MA's), (11, 7187), (13, 7226), (24, 7379),

Gene: Satrap\_9 Start: 6950, Stop: 7231, Start Num: 4  
Candidate Starts for Satrap\_9:  
(Start: 4 @6950 has 33 MA's), (11, 7025),

Gene: Seahorse\_10 Start: 7220, Stop: 7498, Start Num: 4  
Candidate Starts for Seahorse\_10:  
(Start: 4 @7220 has 33 MA's), (7, 7241), (8, 7247), (11, 7295), (13, 7334),

Gene: Shukran\_9 Start: 6950, Stop: 7231, Start Num: 4  
Candidate Starts for Shukran\_9:  
(Start: 4 @6950 has 33 MA's), (11, 7025),

Gene: SonDevVon\_8 Start: 6942, Stop: 7280, Start Num: 4  
Candidate Starts for SonDevVon\_8:  
(Start: 4 @6942 has 33 MA's), (7, 6963), (8, 6969), (13, 7056), (17, 7095),

Gene: SpicyFrank\_9 Start: 7003, Stop: 7341, Start Num: 4  
Candidate Starts for SpicyFrank\_9:

(Start: 4 @7003 has 33 MA's), (7, 7024), (8, 7030), (13, 7117), (24, 7327),

Gene: Sporco\_10 Start: 7000, Stop: 7329, Start Num: 4

Candidate Starts for Sporco\_10:

(Start: 4 @7000 has 33 MA's), (7, 7021), (8, 7027), (13, 7114),

Gene: ThayneTheZag\_9 Start: 6976, Stop: 7314, Start Num: 4

Candidate Starts for ThayneTheZag\_9:

(Start: 4 @6976 has 33 MA's), (7, 6997), (8, 7003), (11, 7051), (13, 7090),

Gene: Tiff81\_10 Start: 7112, Stop: 7456, Start Num: 4

Candidate Starts for Tiff81\_10:

(Start: 4 @7112 has 33 MA's), (7, 7133), (8, 7139), (11, 7187), (13, 7226),

Gene: Vopal\_10 Start: 7012, Stop: 7350, Start Num: 4

Candidate Starts for Vopal\_10:

(Start: 4 @7012 has 33 MA's), (7, 7033), (8, 7039), (13, 7126), (17, 7165),

Gene: Windest\_10 Start: 7012, Stop: 7335, Start Num: 4

Candidate Starts for Windest\_10:

(Start: 4 @7012 has 33 MA's), (7, 7033), (8, 7039), (13, 7126),

Gene: YoungHarleezy\_9 Start: 6953, Stop: 7291, Start Num: 4

Candidate Starts for YoungHarleezy\_9:

(Start: 4 @6953 has 33 MA's), (7, 6974), (8, 6980), (13, 7067), (17, 7106),