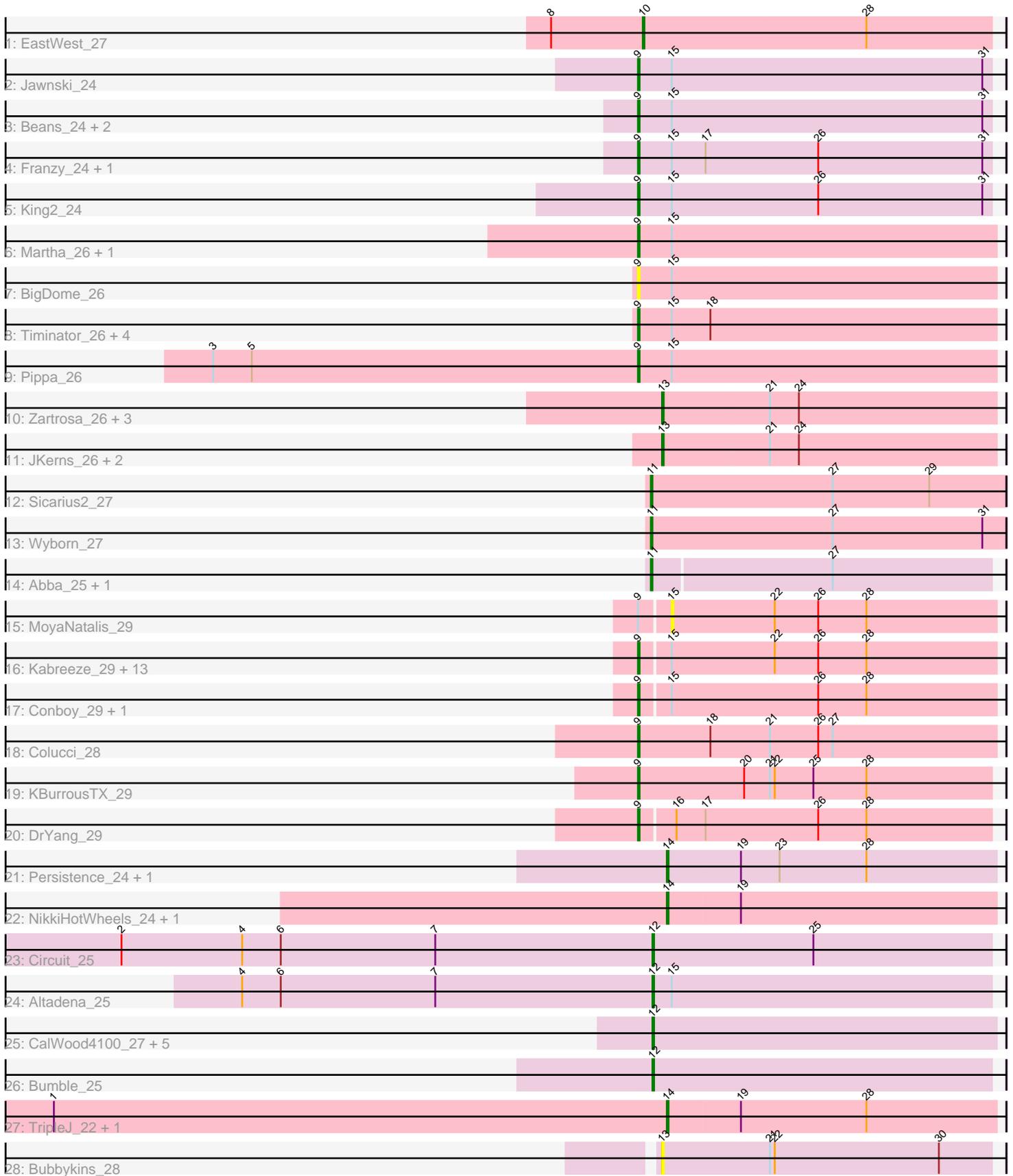


Pham 287895



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 287895 Report

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

Pham number 287895 has 64 members, 8 are drafts.

Phages represented in each track:

- Track 1 : EastWest\_27
- Track 2 : Jawnski\_24
- Track 3 : Beans\_24, Piccoletto\_24, NathanVaag\_24
- Track 4 : Franzy\_24, Brent\_24
- Track 5 : King2\_24
- Track 6 : Martha\_26, BossLady\_26
- Track 7 : BigDome\_26
- Track 8 : Timinator\_26, BarretLemon\_26, LeeroyJ\_26, GravityBall\_26, StevieBAY\_26
- Track 9 : Pippa\_26
- Track 10 : Zartrosa\_26, TaeYoung\_26, Grekaycon\_26, Shade\_26
- Track 11 : JKerns\_26, Sonny\_26, Jordan\_26
- Track 12 : Sicarius2\_27
- Track 13 : Wyborn\_27
- Track 14 : Abba\_25, Nostromo\_25
- Track 15 : MoyaNatalis\_29
- Track 16 : Kabreeze\_29, Chocolat\_29, Lymara\_29, Scavito\_29, Chipper1996\_290, PrincessTrina\_29, Chubster\_29, JaNo\_29, RosiePosie\_29, Mordred\_29, Tophat\_29, Linus\_29, JayCookie\_29, HumptyDumpty\_29
- Track 17 : Conboy\_29, EdgarPoe\_29
- Track 18 : Colucci\_28
- Track 19 : KBurrousTX\_29
- Track 20 : DrYang\_29
- Track 21 : Persistence\_24, JakeTheSnake\_25
- Track 22 : NikkiHotWheels\_24, GlobiWarming\_24
- Track 23 : Circuit\_25
- Track 24 : Altadena\_25
- Track 25 : CalWood4100\_27, Nandito\_25, Prairie\_25, Bolt007\_26, Lilmac1015\_27, Klevey\_26
- Track 26 : Bumble\_25
- Track 27 : TripleJ\_22, PetriParty\_21
- Track 28 : Bubbykins\_28

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

The start number called the most often in the published annotations is 9, it was called in 34 of the 56 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BarretLemon\_26, Beans\_24, BigDome\_26, BossLady\_26, Brent\_24, Chipper1996\_290, Chocolat\_29, Chubster\_29, Colucci\_28, Conboy\_29, DrYang\_29, EdgarPoe\_29, Franzy\_24, GravityBall\_26, HumptyDumpty\_29, JaNo\_29, Jawnski\_24, JayCookie\_29, KBurrousTX\_29, Kabreeze\_29, King2\_24, LeeroyJ\_26, Linus\_29, Lymara\_29, Martha\_26, Mordred\_29, NathanVaag\_24, Piccoletto\_24, Pippa\_26, PrincessTrina\_29, RosiePosie\_29, Scavito\_29, StevieBAY\_26, Timinator\_26, Tophat\_29,

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

- MoyaNatalis\_29,

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

- Abba\_25, Altadena\_25, Bolt007\_26, Bubbykins\_28, Bumble\_25, CalWood4100\_27, Circuit\_25, EastWest\_27, GlobiWarming\_24, Grekaycon\_26, JKerns\_26, JakeTheSnake\_25, Jordan\_26, Klevey\_26, Lilmac1015\_27, Nandito\_25, NikkiHotWheels\_24, Nostromo\_25, Persistence\_24, PetriParty\_21, Prairie\_25, Shade\_26, Sicarius2\_27, Sonny\_26, TaeYoung\_26, TripleJ\_22, Wyborn\_27, Zartrosa\_26,

### Summary by start number:

Start 9:

- Found in 36 of 64 ( 56.2% ) of genes in pham
- Manual Annotations of this start: 34 of 56
- Called 97.2% of time when present
- Phage (with cluster) where this start called: BarretLemon\_26 (AO2), Beans\_24 (AO1), BigDome\_26 (AO2), BossLady\_26 (AO2), Brent\_24 (AO1), Chipper1996\_290 (AR), Chocolat\_29 (AR), Chubster\_29 (AR), Colucci\_28 (AR), Conboy\_29 (AR), DrYang\_29 (AR), EdgarPoe\_29 (AR), Franzy\_24 (AO1), GravityBall\_26 (AO2), HumptyDumpty\_29 (AR), JaNo\_29 (AR), Jawnski\_24 (AO1), JayCookie\_29 (AR), KBurrousTX\_29 (AR), Kabreeze\_29 (AR), King2\_24 (AO1), LeeroyJ\_26 (AO2), Linus\_29 (AR), Lymara\_29 (AR), Martha\_26 (AO2), Mordred\_29 (AR), NathanVaag\_24 (AO1), Piccoletto\_24 (AO1), Pippa\_26 (AO2), PrincessTrina\_29 (AR), RosiePosie\_29 (AR), Scavito\_29 (AR), StevieBAY\_26 (AO2), Timinator\_26 (AO2), Tophat\_29 (AR),

Start 10:

- Found in 1 of 64 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 1 of 56
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EastWest\_27 (AO),

Start 11:

- Found in 4 of 64 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 4 of 56
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abba\_25 (AO3), Nostromo\_25 (AO3), Sicarius2\_27 (AO2), Wyborn\_27 (AO2),

Start 12:

- Found in 9 of 64 ( 14.1% ) of genes in pham
- Manual Annotations of this start: 7 of 56
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Altadena\_25 (FH), Bolt007\_26 (FH), Bumble\_25 (FH), CalWood4100\_27 (FH), Circuit\_25 (FH), Klevey\_26 (FH), Lilmac1015\_27 (FH), Nandito\_25 (FH), Prairie\_25 (FH),

Start 13:

- Found in 8 of 64 ( 12.5% ) of genes in pham
- Manual Annotations of this start: 7 of 56
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bubbykins\_28 (UNK), Grekaycon\_26 (AO2), JKerns\_26 (AO2), Jordan\_26 (AO2), Shade\_26 (AO2), Sonny\_26 (AO2), TaeYoung\_26 (AO2), Zartrosa\_26 (AO2),

Start 14:

- Found in 6 of 64 ( 9.4% ) of genes in pham
- Manual Annotations of this start: 3 of 56
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GlobiWarming\_24 (FA), JakeTheSnake\_25 (AY), NikkiHotWheels\_24 (FA), Persistence\_24 (AY), PetriParty\_21 (FJ), TripleJ\_22 (FJ),

Start 15:

- Found in 34 of 64 ( 53.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 2.9% of time when present
- Phage (with cluster) where this start called: MoyaNatalis\_29 (AR),

**Summary by clusters:**

There are 10 clusters represented in this pham: AO, FA, AR, AY, AO2, AO1, FH, AO3, FJ, UNK,

Info for manual annotations of cluster AO:

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

Info for manual annotations of cluster AO1:

- Start number 9 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 9 was manually annotated 8 times for cluster AO2.
- Start number 11 was manually annotated 2 times for cluster AO2.
- Start number 13 was manually annotated 7 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 11 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster AR:

- Start number 9 was manually annotated 19 times for cluster AR.

Info for manual annotations of cluster AY:

- Start number 14 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FA:

- Start number 14 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FH:

- Start number 12 was manually annotated 7 times for cluster FH.

Info for manual annotations of cluster FJ:

- Start number 14 was manually annotated 1 time for cluster FJ.

### ***Gene Information:***

Gene: Abba\_25 Start: 22963, Stop: 23169, Start Num: 11

Candidate Starts for Abba\_25:

(Start: 11 @22963 has 4 MA's), (27, 23071),

Gene: Altadena\_25 Start: 22149, Stop: 22358, Start Num: 12

Candidate Starts for Altadena\_25:

(4, 21900), (6, 21924), (7, 22020), (Start: 12 @22149 has 7 MA's), (15, 22161),

Gene: BarretLemon\_26 Start: 23109, Stop: 23330, Start Num: 9

Candidate Starts for BarretLemon\_26:

(Start: 9 @23109 has 34 MA's), (15, 23130), (18, 23154),

Gene: Beans\_24 Start: 22775, Stop: 22993, Start Num: 9

Candidate Starts for Beans\_24:

(Start: 9 @22775 has 34 MA's), (15, 22796), (31, 22988),

Gene: BigDome\_26 Start: 23098, Stop: 23319, Start Num: 9

Candidate Starts for BigDome\_26:

(Start: 9 @23098 has 34 MA's), (15, 23119),

Gene: Bolt007\_26 Start: 21191, Stop: 21403, Start Num: 12

Candidate Starts for Bolt007\_26:

(Start: 12 @21191 has 7 MA's),

Gene: BossLady\_26 Start: 23086, Stop: 23307, Start Num: 9

Candidate Starts for BossLady\_26:

(Start: 9 @23086 has 34 MA's), (15, 23107),

Gene: Brent\_24 Start: 22757, Stop: 22975, Start Num: 9

Candidate Starts for Brent\_24:

(Start: 9 @22757 has 34 MA's), (15, 22778), (17, 22799), (26, 22868), (31, 22970),

Gene: Bubbykins\_28 Start: 23366, Stop: 23569, Start Num: 13

Candidate Starts for Bubbykins\_28:

(Start: 13 @23366 has 7 MA's), (21, 23432), (22, 23435), (30, 23537),

Gene: Bumble\_25 Start: 22023, Stop: 22232, Start Num: 12

Candidate Starts for Bumble\_25:

(Start: 12 @22023 has 7 MA's),

Gene: CalWood4100\_27 Start: 21181, Stop: 21393, Start Num: 12

Candidate Starts for CalWood4100\_27:

(Start: 12 @21181 has 7 MA's),

Gene: Chipper1996\_290 Start: 25931, Stop: 26149, Start Num: 9

Candidate Starts for Chipper1996\_290:

(Start: 9 @25931 has 34 MA's), (15, 25949), (22, 26012), (26, 26039), (28, 26069),

Gene: Chocolat\_29 Start: 25931, Stop: 26149, Start Num: 9

Candidate Starts for Chocolat\_29:

(Start: 9 @25931 has 34 MA's), (15, 25949), (22, 26012), (26, 26039), (28, 26069),

Gene: Chubster\_29 Start: 25702, Stop: 25920, Start Num: 9

Candidate Starts for Chubster\_29:

(Start: 9 @25702 has 34 MA's), (15, 25720), (22, 25783), (26, 25810), (28, 25840),

Gene: Circuit\_25 Start: 22085, Stop: 22294, Start Num: 12

Candidate Starts for Circuit\_25:

(2, 21761), (4, 21836), (6, 21860), (7, 21956), (Start: 12 @22085 has 7 MA's), (25, 22184),

Gene: Colucci\_28 Start: 25397, Stop: 25618, Start Num: 9

Candidate Starts for Colucci\_28:

(Start: 9 @25397 has 34 MA's), (18, 25442), (21, 25478), (26, 25508), (27, 25517),

Gene: Conboy\_29 Start: 25930, Stop: 26148, Start Num: 9

Candidate Starts for Conboy\_29:

(Start: 9 @25930 has 34 MA's), (15, 25948), (26, 26038), (28, 26068),

Gene: DrYang\_29 Start: 27022, Stop: 27237, Start Num: 9

Candidate Starts for DrYang\_29:

(Start: 9 @27022 has 34 MA's), (16, 27043), (17, 27061), (26, 27130), (28, 27160),

Gene: EastWest\_27 Start: 23044, Stop: 23259, Start Num: 10

Candidate Starts for EastWest\_27:

(8, 22987), (Start: 10 @23044 has 1 MA's), (28, 23182),

Gene: EdgarPoe\_29 Start: 25930, Stop: 26148, Start Num: 9

Candidate Starts for EdgarPoe\_29:

(Start: 9 @25930 has 34 MA's), (15, 25948), (26, 26038), (28, 26068),

Gene: Franzy\_24 Start: 22756, Stop: 22974, Start Num: 9

Candidate Starts for Franzy\_24:

(Start: 9 @22756 has 34 MA's), (15, 22777), (17, 22798), (26, 22867), (31, 22969),

Gene: GlobiWarming\_24 Start: 18834, Stop: 19037, Start Num: 14

Candidate Starts for GlobiWarming\_24:

(Start: 14 @18834 has 3 MA's), (19, 18879),

Gene: GravityBall\_26 Start: 23108, Stop: 23329, Start Num: 9

Candidate Starts for GravityBall\_26:  
(Start: 9 @23108 has 34 MA's), (15, 23129), (18, 23153),

Gene: Grekaycon\_26 Start: 23098, Stop: 23304, Start Num: 13  
Candidate Starts for Grekaycon\_26:  
(Start: 13 @23098 has 7 MA's), (21, 23164), (24, 23182),

Gene: HumptyDumpty\_29 Start: 25929, Stop: 26147, Start Num: 9  
Candidate Starts for HumptyDumpty\_29:  
(Start: 9 @25929 has 34 MA's), (15, 25947), (22, 26010), (26, 26037), (28, 26067),

Gene: JKerns\_26 Start: 23125, Stop: 23331, Start Num: 13  
Candidate Starts for JKerns\_26:  
(Start: 13 @23125 has 7 MA's), (21, 23191), (24, 23209),

Gene: JaNo\_29 Start: 25929, Stop: 26147, Start Num: 9  
Candidate Starts for JaNo\_29:  
(Start: 9 @25929 has 34 MA's), (15, 25947), (22, 26010), (26, 26037), (28, 26067),

Gene: JakeTheSnake\_25 Start: 18733, Stop: 18936, Start Num: 14  
Candidate Starts for JakeTheSnake\_25:  
(Start: 14 @18733 has 3 MA's), (19, 18778), (23, 18802), (28, 18856),

Gene: Jawnski\_24 Start: 22770, Stop: 22988, Start Num: 9  
Candidate Starts for Jawnski\_24:  
(Start: 9 @22770 has 34 MA's), (15, 22791), (31, 22983),

Gene: JayCookie\_29 Start: 25932, Stop: 26150, Start Num: 9  
Candidate Starts for JayCookie\_29:  
(Start: 9 @25932 has 34 MA's), (15, 25950), (22, 26013), (26, 26040), (28, 26070),

Gene: Jordan\_26 Start: 23095, Stop: 23301, Start Num: 13  
Candidate Starts for Jordan\_26:  
(Start: 13 @23095 has 7 MA's), (21, 23161), (24, 23179),

Gene: KBurrousTX\_29 Start: 26849, Stop: 27067, Start Num: 9  
Candidate Starts for KBurrousTX\_29:  
(Start: 9 @26849 has 34 MA's), (20, 26915), (21, 26930), (22, 26933), (25, 26957), (28, 26990),

Gene: Kabreeze\_29 Start: 25929, Stop: 26147, Start Num: 9  
Candidate Starts for Kabreeze\_29:  
(Start: 9 @25929 has 34 MA's), (15, 25947), (22, 26010), (26, 26037), (28, 26067),

Gene: King2\_24 Start: 22775, Stop: 22993, Start Num: 9  
Candidate Starts for King2\_24:  
(Start: 9 @22775 has 34 MA's), (15, 22796), (26, 22886), (31, 22988),

Gene: Klevey\_26 Start: 21191, Stop: 21403, Start Num: 12  
Candidate Starts for Klevey\_26:  
(Start: 12 @21191 has 7 MA's),

Gene: LeeroyJ\_26 Start: 23108, Stop: 23329, Start Num: 9  
Candidate Starts for LeeroyJ\_26:

(Start: 9 @23108 has 34 MA's), (15, 23129), (18, 23153),

Gene: Lilmac1015\_27 Start: 21181, Stop: 21393, Start Num: 12

Candidate Starts for Lilmac1015\_27:

(Start: 12 @21181 has 7 MA's),

Gene: Linus\_29 Start: 25929, Stop: 26147, Start Num: 9

Candidate Starts for Linus\_29:

(Start: 9 @25929 has 34 MA's), (15, 25947), (22, 26010), (26, 26037), (28, 26067),

Gene: Lymara\_29 Start: 25927, Stop: 26145, Start Num: 9

Candidate Starts for Lymara\_29:

(Start: 9 @25927 has 34 MA's), (15, 25945), (22, 26008), (26, 26035), (28, 26065),

Gene: Martha\_26 Start: 23033, Stop: 23254, Start Num: 9

Candidate Starts for Martha\_26:

(Start: 9 @23033 has 34 MA's), (15, 23054),

Gene: Mordred\_29 Start: 25929, Stop: 26147, Start Num: 9

Candidate Starts for Mordred\_29:

(Start: 9 @25929 has 34 MA's), (15, 25947), (22, 26010), (26, 26037), (28, 26067),

Gene: MoyaNatalis\_29 Start: 25950, Stop: 26150, Start Num: 15

Candidate Starts for MoyaNatalis\_29:

(Start: 9 @25932 has 34 MA's), (15, 25950), (22, 26013), (26, 26040), (28, 26070),

Gene: Nandito\_25 Start: 20176, Stop: 20388, Start Num: 12

Candidate Starts for Nandito\_25:

(Start: 12 @20176 has 7 MA's),

Gene: NathanVaag\_24 Start: 22751, Stop: 22969, Start Num: 9

Candidate Starts for NathanVaag\_24:

(Start: 9 @22751 has 34 MA's), (15, 22772), (31, 22964),

Gene: NikkiHotWheels\_24 Start: 18855, Stop: 19058, Start Num: 14

Candidate Starts for NikkiHotWheels\_24:

(Start: 14 @18855 has 3 MA's), (19, 18900),

Gene: Nostromo\_25 Start: 22814, Stop: 23020, Start Num: 11

Candidate Starts for Nostromo\_25:

(Start: 11 @22814 has 4 MA's), (27, 22922),

Gene: Persistence\_24 Start: 18756, Stop: 18959, Start Num: 14

Candidate Starts for Persistence\_24:

(Start: 14 @18756 has 3 MA's), (19, 18801), (23, 18825), (28, 18879),

Gene: PetriParty\_21 Start: 17740, Stop: 17943, Start Num: 14

Candidate Starts for PetriParty\_21:

(1, 17359), (Start: 14 @17740 has 3 MA's), (19, 17785), (28, 17863),

Gene: Piccoletto\_24 Start: 22750, Stop: 22968, Start Num: 9

Candidate Starts for Piccoletto\_24:

(Start: 9 @22750 has 34 MA's), (15, 22771), (31, 22963),

Gene: Pippa\_26 Start: 23131, Stop: 23352, Start Num: 9  
Candidate Starts for Pippa\_26:  
(3, 22867), (5, 22891), (Start: 9 @23131 has 34 MA's), (15, 23152),

Gene: Prairie\_25 Start: 21209, Stop: 21421, Start Num: 12  
Candidate Starts for Prairie\_25:  
(Start: 12 @21209 has 7 MA's),

Gene: PrincessTrina\_29 Start: 25932, Stop: 26150, Start Num: 9  
Candidate Starts for PrincessTrina\_29:  
(Start: 9 @25932 has 34 MA's), (15, 25950), (22, 26013), (26, 26040), (28, 26070),

Gene: RosiePosie\_29 Start: 25932, Stop: 26150, Start Num: 9  
Candidate Starts for RosiePosie\_29:  
(Start: 9 @25932 has 34 MA's), (15, 25950), (22, 26013), (26, 26040), (28, 26070),

Gene: Scavito\_29 Start: 25929, Stop: 26147, Start Num: 9  
Candidate Starts for Scavito\_29:  
(Start: 9 @25929 has 34 MA's), (15, 25947), (22, 26010), (26, 26037), (28, 26067),

Gene: Shade\_26 Start: 23074, Stop: 23280, Start Num: 13  
Candidate Starts for Shade\_26:  
(Start: 13 @23074 has 7 MA's), (21, 23140), (24, 23158),

Gene: Sicarius2\_27 Start: 23495, Stop: 23713, Start Num: 11  
Candidate Starts for Sicarius2\_27:  
(Start: 11 @23495 has 4 MA's), (27, 23606), (29, 23666),

Gene: Sonny\_26 Start: 23095, Stop: 23301, Start Num: 13  
Candidate Starts for Sonny\_26:  
(Start: 13 @23095 has 7 MA's), (21, 23161), (24, 23179),

Gene: StevieBAY\_26 Start: 23108, Stop: 23329, Start Num: 9  
Candidate Starts for StevieBAY\_26:  
(Start: 9 @23108 has 34 MA's), (15, 23129), (18, 23153),

Gene: TaeYoung\_26 Start: 23099, Stop: 23305, Start Num: 13  
Candidate Starts for TaeYoung\_26:  
(Start: 13 @23099 has 7 MA's), (21, 23165), (24, 23183),

Gene: Timinator\_26 Start: 23108, Stop: 23329, Start Num: 9  
Candidate Starts for Timinator\_26:  
(Start: 9 @23108 has 34 MA's), (15, 23129), (18, 23153),

Gene: Tophat\_29 Start: 25931, Stop: 26149, Start Num: 9  
Candidate Starts for Tophat\_29:  
(Start: 9 @25931 has 34 MA's), (15, 25949), (22, 26012), (26, 26039), (28, 26069),

Gene: TripleJ\_22 Start: 17757, Stop: 17960, Start Num: 14  
Candidate Starts for TripleJ\_22:  
(1, 17376), (Start: 14 @17757 has 3 MA's), (19, 17802), (28, 17880),

Gene: Wyborn\_27 Start: 23470, Stop: 23688, Start Num: 11  
Candidate Starts for Wyborn\_27:  
(Start: 11 @23470 has 4 MA's), (27, 23581), (31, 23674),

Gene: Zartrosa\_26 Start: 23098, Stop: 23304, Start Num: 13  
Candidate Starts for Zartrosa\_26:  
(Start: 13 @23098 has 7 MA's), (21, 23164), (24, 23182),