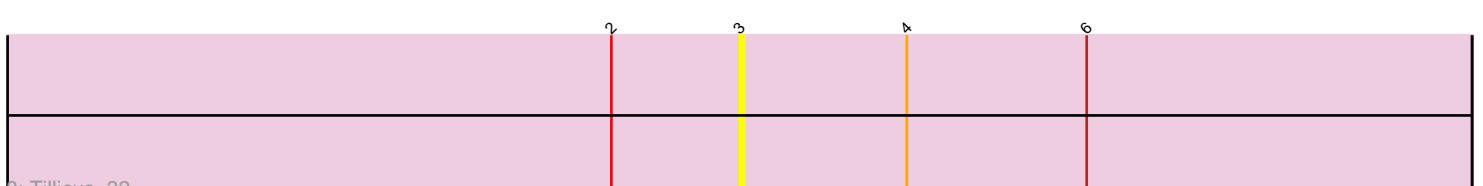
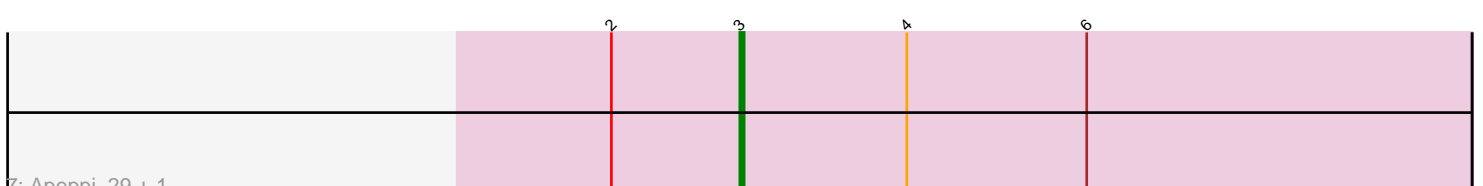
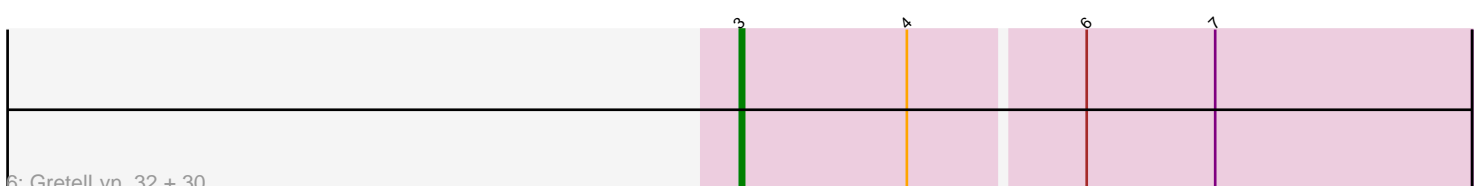
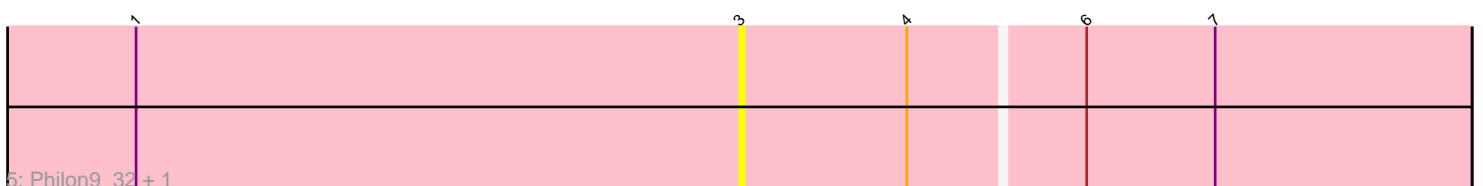
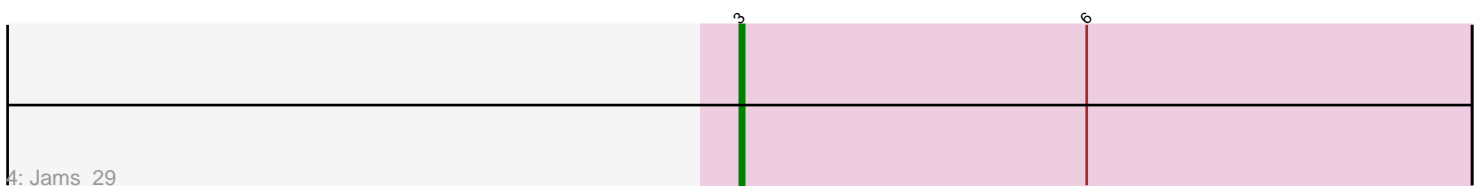
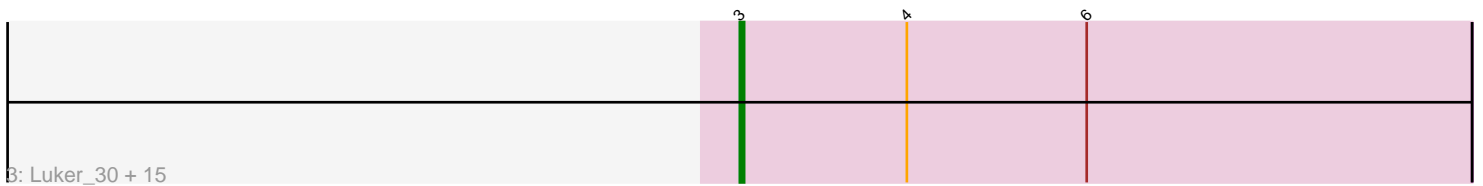
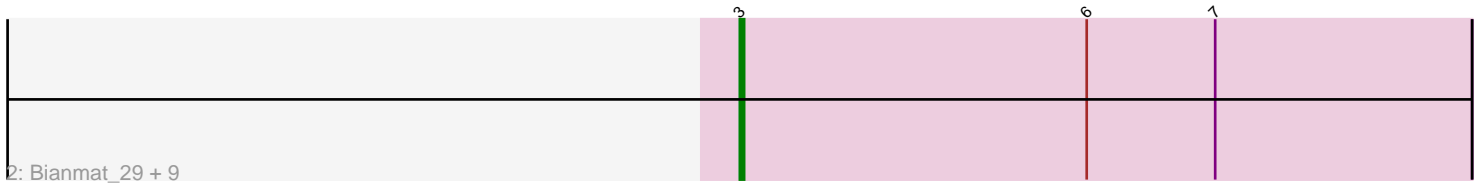
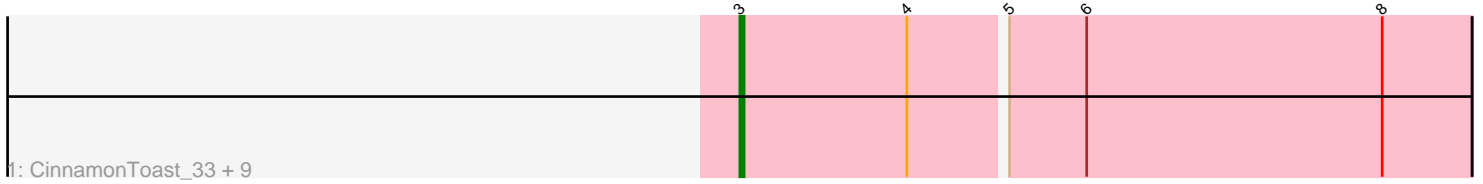


Pham 202906



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 202906 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202906 has 73 members, 11 are drafts.

Phages represented in each track:

- Track 1 : CinnamonToast\_33, Boneham\_32, Jellybones\_32, Butterball\_32, FelixAlejandro\_33, Msay19\_33, BirksAndSocks\_32, Poland\_33, John316\_32, Beaver\_32
- Track 2 : Bianmat\_29, Minos\_30, Lidong\_29, Charianelly\_29, Shelley\_29, Damp\_29, Woes\_29, Berries\_29, Kaseim\_30, MrWormie\_29
- Track 3 : Luker\_30, Harambe\_29, Lahirium\_29, Jormungandr\_29, Hail2Pitt\_29, Neoevie\_29, Anamika\_29, Nimi13\_29, ParvusTarda\_32, Newt\_30, Sticker17\_29, Diabla\_31, Guillaume\_29, Teal\_29, GalacticEye\_29, Hello\_29
- Track 4 : Jams\_29
- Track 5 : Philon9\_32, Vitaenoi\_32
- Track 6 : GretelLyn\_32, BirthdayBoy\_33, MoiGyank\_34, Jalebi\_31, Jamemuya19\_30, NorManre\_33, Sampudon\_32, Lambo\_32, Alyssamiracle\_32, Rumi\_31, Astralis\_30, OtterstedtS21\_32, Fulcrum\_33, GOATification\_33, DoobyDoo\_31, RazorC\_30, DaviePasture\_32, Erutan\_32, Patos\_33, Ranch\_32, Gibbin\_33, Zany\_31, Mima20\_32, Wojtek\_31, Yikes\_33, Genamy16\_32, Avian\_30, Lila22\_31, Sadboi\_32, Alephilan\_29, NovaSharks\_31
- Track 7 : Apeppi\_29, LuckyLeo\_31
- Track 8 : Tillicus\_32

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

The start number called the most often in the published annotations is 3, it was called in 62 of the 62 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alephilan\_29, Alyssamiracle\_32, Anamika\_29, Apeppi\_29, Astralis\_30, Avian\_30, Beaver\_32, Berries\_29, Bianmat\_29, BirksAndSocks\_32, BirthdayBoy\_33, Boneham\_32, Butterball\_32, Charianelly\_29, CinnamonToast\_33, Damp\_29, DaviePasture\_32, Diabla\_31, DoobyDoo\_31, Erutan\_32, FelixAlejandro\_33, Fulcrum\_33, GOATification\_33, GalacticEye\_29, Genamy16\_32, Gibbin\_33, GretelLyn\_32, Guillaume\_29, Hail2Pitt\_29, Harambe\_29, Hello\_29, Jalebi\_31, Jamemuya19\_30, Jams\_29, Jellybones\_32, John316\_32, Jormungandr\_29, Kaseim\_30, Lahirium\_29, Lambo\_32, Lidong\_29, Lila22\_31, LuckyLeo\_31, Luker\_30, Mima20\_32, Minos\_30, MoiGyank\_34, MrWormie\_29, Msay19\_33, Neoevie\_29,

Newt\_30, Nimi13\_29, NorManre\_33, NovaSharks\_31, OtterstedtS21\_32, ParvusTarda\_32, Patos\_33, Philon9\_32, Poland\_33, Ranch\_32, RazorC\_30, Rumi\_31, Sadboi\_32, Sampudon\_32, Shelley\_29, Sticker17\_29, Teal\_29, Tillicus\_32, Vitaenoi\_32, Woes\_29, Wojtek\_31, Yikes\_33, Zany\_31,

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

- 

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

- 

### Summary by start number:

Start 3:

- Found in 73 of 73 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 62 of 62
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alephilan\_29 (DV), Alyssamiracle\_32 (DV), Anamika\_29 (CS3), Apeppi\_29 (DV), Astralis\_30 (DV), Avian\_30 (DV), Beaver\_32 (CS2), Berries\_29 (CS3), Bianmat\_29 (CS3), BirksAndSocks\_32 (CS2), BirthdayBoy\_33 (DV), Boneham\_32 (CS2), Butterball\_32 (CS2), Charianelly\_29 (CS3), CinnamonToast\_33 (CS2), Damp\_29 (CS3), DaviePasture\_32 (DV), Diabla\_31 (CS2), DoobyDoo\_31 (DV), Erutan\_32 (DV), FelixAlejandro\_33 (CS2), Fulcrum\_33 (DV), GOATification\_33 (DV), GalacticEye\_29 (CS3), Genamy16\_32 (DV), Gibbin\_33 (DV), GretelLyn\_32 (DV), Guillaume\_29 (CS3), Hail2Pitt\_29 (CS3), Harambe\_29 (CS3), Hello\_29 (CS3), Jalebi\_31 (DV), Jamemuya19\_30 (DV), Jams\_29 (CS3), Jellybones\_32 (CS2), John316\_32 (CS2), Jormungandr\_29 (CS3), Kaseim\_30 (CS3), Lahirium\_29 (CS3), Lambo\_32 (DV), Lidong\_29 (CS3), Lila22\_31 (DV), LuckyLeo\_31 (DV), Luker\_30 (CS3), Mima20\_32 (DV), Minos\_30 (CS3), MoiGyank\_34 (DV), MrWormie\_29 (CS3), Msay19\_33 (CS2), Neoevie\_29 (CS3), Newt\_30 (CS3), Nimi13\_29 (CS3), NorManre\_33 (DV), NovaSharks\_31 (DV), OtterstedtS21\_32 (DV), ParvusTarda\_32 (DV), Patos\_33 (DV), Philon9\_32 (CS4), Poland\_33 (CS2), Ranch\_32 (DV), RazorC\_30 (DV), Rumi\_31 (DV), Sadboi\_32 (DV), Sampudon\_32 (DV), Shelley\_29 (CS3), Sticker17\_29 (CS3), Teal\_29 (CS3), Tillicus\_32 (DV), Vitaenoi\_32 (CS4), Woes\_29 (CS3), Wojtek\_31 (DV), Yikes\_33 (DV), Zany\_31 (DV),

### Summary by clusters:

There are 4 clusters represented in this pham: DV, CS4, CS3, CS2,

Info for manual annotations of cluster CS2:

- Start number 3 was manually annotated 10 times for cluster CS2.

Info for manual annotations of cluster CS3:

- Start number 3 was manually annotated 24 times for cluster CS3.

Info for manual annotations of cluster DV:

- Start number 3 was manually annotated 28 times for cluster DV.

**Gene Information:**

Gene: Alephilan\_29 Start: 28553, Stop: 28720, Start Num: 3  
Candidate Starts for Alephilan\_29:  
(Start: 3 @28553 has 62 MA's), (4, 28592), (6, 28631), (7, 28661),

Gene: Alyssamiracle\_32 Start: 27357, Stop: 27524, Start Num: 3  
Candidate Starts for Alyssamiracle\_32:  
(Start: 3 @27357 has 62 MA's), (4, 27396), (6, 27435), (7, 27465),

Gene: Anamika\_29 Start: 38219, Stop: 38389, Start Num: 3  
Candidate Starts for Anamika\_29:  
(Start: 3 @38219 has 62 MA's), (4, 38258), (6, 38300),

Gene: Apeppi\_29 Start: 28695, Stop: 28865, Start Num: 3  
Candidate Starts for Apeppi\_29:  
(2, 28665), (Start: 3 @28695 has 62 MA's), (4, 28734), (6, 28776),

Gene: Astralis\_30 Start: 26947, Stop: 27114, Start Num: 3  
Candidate Starts for Astralis\_30:  
(Start: 3 @26947 has 62 MA's), (4, 26986), (6, 27025), (7, 27055),

Gene: Avian\_30 Start: 27339, Stop: 27506, Start Num: 3  
Candidate Starts for Avian\_30:  
(Start: 3 @27339 has 62 MA's), (4, 27378), (6, 27417), (7, 27447),

Gene: Beaver\_32 Start: 37702, Stop: 37869, Start Num: 3  
Candidate Starts for Beaver\_32:  
(Start: 3 @37702 has 62 MA's), (4, 37741), (5, 37762), (6, 37780), (8, 37849),

Gene: Berries\_29 Start: 38189, Stop: 38359, Start Num: 3  
Candidate Starts for Berries\_29:  
(Start: 3 @38189 has 62 MA's), (6, 38270), (7, 38300),

Gene: Bianmat\_29 Start: 38229, Stop: 38399, Start Num: 3  
Candidate Starts for Bianmat\_29:  
(Start: 3 @38229 has 62 MA's), (6, 38310), (7, 38340),

Gene: BirksAndSocks\_32 Start: 37676, Stop: 37843, Start Num: 3  
Candidate Starts for BirksAndSocks\_32:  
(Start: 3 @37676 has 62 MA's), (4, 37715), (5, 37736), (6, 37754), (8, 37823),

Gene: BirthdayBoy\_33 Start: 29379, Stop: 29546, Start Num: 3  
Candidate Starts for BirthdayBoy\_33:  
(Start: 3 @29379 has 62 MA's), (4, 29418), (6, 29457), (7, 29487),

Gene: Boneham\_32 Start: 37675, Stop: 37842, Start Num: 3  
Candidate Starts for Boneham\_32:  
(Start: 3 @37675 has 62 MA's), (4, 37714), (5, 37735), (6, 37753), (8, 37822),

Gene: Butterball\_32 Start: 37675, Stop: 37842, Start Num: 3  
Candidate Starts for Butterball\_32:  
(Start: 3 @37675 has 62 MA's), (4, 37714), (5, 37735), (6, 37753), (8, 37822),

Gene: Charianelly\_29 Start: 37939, Stop: 38109, Start Num: 3  
Candidate Starts for Charianelly\_29:  
(Start: 3 @37939 has 62 MA's), (6, 38020), (7, 38050),

Gene: CinnamonToast\_33 Start: 37729, Stop: 37896, Start Num: 3  
Candidate Starts for CinnamonToast\_33:  
(Start: 3 @37729 has 62 MA's), (4, 37768), (5, 37789), (6, 37807), (8, 37876),

Gene: Damp\_29 Start: 37103, Stop: 37273, Start Num: 3  
Candidate Starts for Damp\_29:  
(Start: 3 @37103 has 62 MA's), (6, 37184), (7, 37214),

Gene: DaviePasture\_32 Start: 29178, Stop: 29345, Start Num: 3  
Candidate Starts for DaviePasture\_32:  
(Start: 3 @29178 has 62 MA's), (4, 29217), (6, 29256), (7, 29286),

Gene: Diabla\_31 Start: 37526, Stop: 37693, Start Num: 3  
Candidate Starts for Diabla\_31:  
(Start: 3 @37526 has 62 MA's), (4, 37565), (6, 37604),

Gene: DoobyDoo\_31 Start: 28328, Stop: 28495, Start Num: 3  
Candidate Starts for DoobyDoo\_31:  
(Start: 3 @28328 has 62 MA's), (4, 28367), (6, 28406), (7, 28436),

Gene: Erutan\_32 Start: 28838, Stop: 29005, Start Num: 3  
Candidate Starts for Erutan\_32:  
(Start: 3 @28838 has 62 MA's), (4, 28877), (6, 28916), (7, 28946),

Gene: FelixAlejandro\_33 Start: 37873, Stop: 38040, Start Num: 3  
Candidate Starts for FelixAlejandro\_33:  
(Start: 3 @37873 has 62 MA's), (4, 37912), (5, 37933), (6, 37951), (8, 38020),

Gene: Fulcrum\_33 Start: 29356, Stop: 29523, Start Num: 3  
Candidate Starts for Fulcrum\_33:  
(Start: 3 @29356 has 62 MA's), (4, 29395), (6, 29434), (7, 29464),

Gene: GOATification\_33 Start: 29356, Stop: 29523, Start Num: 3  
Candidate Starts for GOATification\_33:  
(Start: 3 @29356 has 62 MA's), (4, 29395), (6, 29434), (7, 29464),

Gene: GalacticEye\_29 Start: 37901, Stop: 38071, Start Num: 3  
Candidate Starts for GalacticEye\_29:  
(Start: 3 @37901 has 62 MA's), (4, 37940), (6, 37982),

Gene: Genamy16\_32 Start: 27357, Stop: 27524, Start Num: 3  
Candidate Starts for Genamy16\_32:  
(Start: 3 @27357 has 62 MA's), (4, 27396), (6, 27435), (7, 27465),

Gene: Gibbin\_33 Start: 29455, Stop: 29622, Start Num: 3  
Candidate Starts for Gibbin\_33:  
(Start: 3 @29455 has 62 MA's), (4, 29494), (6, 29533), (7, 29563),

Gene: GretellYn\_32 Start: 29714, Stop: 29881, Start Num: 3  
Candidate Starts for GretellYn\_32:  
(Start: 3 @29714 has 62 MA's), (4, 29753), (6, 29792), (7, 29822),

Gene: Guillaume\_29 Start: 37951, Stop: 38121, Start Num: 3  
Candidate Starts for Guillaume\_29:  
(Start: 3 @37951 has 62 MA's), (4, 37990), (6, 38032),

Gene: Hail2Pitt\_29 Start: 38428, Stop: 38598, Start Num: 3  
Candidate Starts for Hail2Pitt\_29:  
(Start: 3 @38428 has 62 MA's), (4, 38467), (6, 38509),

Gene: Harambe\_29 Start: 38218, Stop: 38388, Start Num: 3  
Candidate Starts for Harambe\_29:  
(Start: 3 @38218 has 62 MA's), (4, 38257), (6, 38299),

Gene: Hello\_29 Start: 38180, Stop: 38350, Start Num: 3  
Candidate Starts for Hello\_29:  
(Start: 3 @38180 has 62 MA's), (4, 38219), (6, 38261),

Gene: Jalebi\_31 Start: 29890, Stop: 30057, Start Num: 3  
Candidate Starts for Jalebi\_31:  
(Start: 3 @29890 has 62 MA's), (4, 29929), (6, 29968), (7, 29998),

Gene: Jamemuya19\_30 Start: 26947, Stop: 27114, Start Num: 3  
Candidate Starts for Jamemuya19\_30:  
(Start: 3 @26947 has 62 MA's), (4, 26986), (6, 27025), (7, 27055),

Gene: Jams\_29 Start: 37389, Stop: 37559, Start Num: 3  
Candidate Starts for Jams\_29:  
(Start: 3 @37389 has 62 MA's), (6, 37470),

Gene: Jellybones\_32 Start: 37734, Stop: 37901, Start Num: 3  
Candidate Starts for Jellybones\_32:  
(Start: 3 @37734 has 62 MA's), (4, 37773), (5, 37794), (6, 37812), (8, 37881),

Gene: John316\_32 Start: 37687, Stop: 37854, Start Num: 3  
Candidate Starts for John316\_32:  
(Start: 3 @37687 has 62 MA's), (4, 37726), (5, 37747), (6, 37765), (8, 37834),

Gene: Jormungandr\_29 Start: 37933, Stop: 38103, Start Num: 3  
Candidate Starts for Jormungandr\_29:  
(Start: 3 @37933 has 62 MA's), (4, 37972), (6, 38014),

Gene: Kaseim\_30 Start: 37374, Stop: 37544, Start Num: 3  
Candidate Starts for Kaseim\_30:  
(Start: 3 @37374 has 62 MA's), (6, 37455), (7, 37485),

Gene: Lahirium\_29 Start: 38455, Stop: 38625, Start Num: 3  
Candidate Starts for Lahirium\_29:  
(Start: 3 @38455 has 62 MA's), (4, 38494), (6, 38536),

Gene: Lambo\_32 Start: 29377, Stop: 29544, Start Num: 3

Candidate Starts for Lambo\_32:  
(Start: 3 @29377 has 62 MA's), (4, 29416), (6, 29455), (7, 29485),

Gene: Lidong\_29 Start: 38189, Stop: 38359, Start Num: 3  
Candidate Starts for Lidong\_29:  
(Start: 3 @38189 has 62 MA's), (6, 38270), (7, 38300),

Gene: Lila22\_31 Start: 29332, Stop: 29499, Start Num: 3  
Candidate Starts for Lila22\_31:  
(Start: 3 @29332 has 62 MA's), (4, 29371), (6, 29410), (7, 29440),

Gene: LuckyLeo\_31 Start: 28695, Stop: 28865, Start Num: 3  
Candidate Starts for LuckyLeo\_31:  
(2, 28665), (Start: 3 @28695 has 62 MA's), (4, 28734), (6, 28776),

Gene: Luker\_30 Start: 38408, Stop: 38578, Start Num: 3  
Candidate Starts for Luker\_30:  
(Start: 3 @38408 has 62 MA's), (4, 38447), (6, 38489),

Gene: Mima20\_32 Start: 29079, Stop: 29246, Start Num: 3  
Candidate Starts for Mima20\_32:  
(Start: 3 @29079 has 62 MA's), (4, 29118), (6, 29157), (7, 29187),

Gene: Minos\_30 Start: 37931, Stop: 38101, Start Num: 3  
Candidate Starts for Minos\_30:  
(Start: 3 @37931 has 62 MA's), (6, 38012), (7, 38042),

Gene: MoiGyank\_34 Start: 29760, Stop: 29927, Start Num: 3  
Candidate Starts for MoiGyank\_34:  
(Start: 3 @29760 has 62 MA's), (4, 29799), (6, 29838), (7, 29868),

Gene: MrWormie\_29 Start: 37092, Stop: 37262, Start Num: 3  
Candidate Starts for MrWormie\_29:  
(Start: 3 @37092 has 62 MA's), (6, 37173), (7, 37203),

Gene: Msay19\_33 Start: 37868, Stop: 38035, Start Num: 3  
Candidate Starts for Msay19\_33:  
(Start: 3 @37868 has 62 MA's), (4, 37907), (5, 37928), (6, 37946), (8, 38015),

Gene: Neoevie\_29 Start: 38195, Stop: 38365, Start Num: 3  
Candidate Starts for Neoevie\_29:  
(Start: 3 @38195 has 62 MA's), (4, 38234), (6, 38276),

Gene: Newt\_30 Start: 38422, Stop: 38592, Start Num: 3  
Candidate Starts for Newt\_30:  
(Start: 3 @38422 has 62 MA's), (4, 38461), (6, 38503),

Gene: Nimi13\_29 Start: 37940, Stop: 38110, Start Num: 3  
Candidate Starts for Nimi13\_29:  
(Start: 3 @37940 has 62 MA's), (4, 37979), (6, 38021),

Gene: NorManre\_33 Start: 28961, Stop: 29128, Start Num: 3  
Candidate Starts for NorManre\_33:

(Start: 3 @28961 has 62 MA's), (4, 29000), (6, 29039), (7, 29069),

Gene: NovaSharks\_31 Start: 26947, Stop: 27114, Start Num: 3

Candidate Starts for NovaSharks\_31:

(Start: 3 @26947 has 62 MA's), (4, 26986), (6, 27025), (7, 27055),

Gene: OtterstedtS21\_32 Start: 29036, Stop: 29203, Start Num: 3

Candidate Starts for OtterstedtS21\_32:

(Start: 3 @29036 has 62 MA's), (4, 29075), (6, 29114), (7, 29144),

Gene: ParvusTarda\_32 Start: 28506, Stop: 28673, Start Num: 3

Candidate Starts for ParvusTarda\_32:

(Start: 3 @28506 has 62 MA's), (4, 28545), (6, 28584),

Gene: Patos\_33 Start: 28961, Stop: 29128, Start Num: 3

Candidate Starts for Patos\_33:

(Start: 3 @28961 has 62 MA's), (4, 29000), (6, 29039), (7, 29069),

Gene: Philon9\_32 Start: 40001, Stop: 40168, Start Num: 3

Candidate Starts for Philon9\_32:

(1, 39860), (Start: 3 @40001 has 62 MA's), (4, 40040), (6, 40079), (7, 40109),

Gene: Poland\_33 Start: 37847, Stop: 38014, Start Num: 3

Candidate Starts for Poland\_33:

(Start: 3 @37847 has 62 MA's), (4, 37886), (5, 37907), (6, 37925), (8, 37994),

Gene: Ranch\_32 Start: 27860, Stop: 28027, Start Num: 3

Candidate Starts for Ranch\_32:

(Start: 3 @27860 has 62 MA's), (4, 27899), (6, 27938), (7, 27968),

Gene: RazorC\_30 Start: 27339, Stop: 27506, Start Num: 3

Candidate Starts for RazorC\_30:

(Start: 3 @27339 has 62 MA's), (4, 27378), (6, 27417), (7, 27447),

Gene: Rumi\_31 Start: 26950, Stop: 27117, Start Num: 3

Candidate Starts for Rumi\_31:

(Start: 3 @26950 has 62 MA's), (4, 26989), (6, 27028), (7, 27058),

Gene: Sadboi\_32 Start: 29714, Stop: 29881, Start Num: 3

Candidate Starts for Sadboi\_32:

(Start: 3 @29714 has 62 MA's), (4, 29753), (6, 29792), (7, 29822),

Gene: Sampudon\_32 Start: 29890, Stop: 30057, Start Num: 3

Candidate Starts for Sampudon\_32:

(Start: 3 @29890 has 62 MA's), (4, 29929), (6, 29968), (7, 29998),

Gene: Shelley\_29 Start: 37416, Stop: 37586, Start Num: 3

Candidate Starts for Shelley\_29:

(Start: 3 @37416 has 62 MA's), (6, 37497), (7, 37527),

Gene: Sticker17\_29 Start: 37931, Stop: 38101, Start Num: 3

Candidate Starts for Sticker17\_29:

(Start: 3 @37931 has 62 MA's), (4, 37970), (6, 38012),



Gene: Teal\_29 Start: 38399, Stop: 38569, Start Num: 3

Candidate Starts for Teal\_29:

(Start: 3 @38399 has 62 MA's), (4, 38438), (6, 38480),

Gene: Tillicus\_32 Start: 28289, Stop: 28459, Start Num: 3

Candidate Starts for Tillicus\_32:

(2, 28259), (Start: 3 @28289 has 62 MA's), (4, 28328), (6, 28370),

Gene: Vitaenoi\_32 Start: 40000, Stop: 40167, Start Num: 3

Candidate Starts for Vitaenoi\_32:

(1, 39859), (Start: 3 @40000 has 62 MA's), (4, 40039), (6, 40078), (7, 40108),

Gene: Woes\_29 Start: 38450, Stop: 38620, Start Num: 3

Candidate Starts for Woes\_29:

(Start: 3 @38450 has 62 MA's), (6, 38531), (7, 38561),

Gene: Wojtek\_31 Start: 28585, Stop: 28752, Start Num: 3

Candidate Starts for Wojtek\_31:

(Start: 3 @28585 has 62 MA's), (4, 28624), (6, 28663), (7, 28693),

Gene: Yikes\_33 Start: 29969, Stop: 30136, Start Num: 3

Candidate Starts for Yikes\_33:

(Start: 3 @29969 has 62 MA's), (4, 30008), (6, 30047), (7, 30077),

Gene: Zany\_31 Start: 29496, Stop: 29663, Start Num: 3

Candidate Starts for Zany\_31:

(Start: 3 @29496 has 62 MA's), (4, 29535), (6, 29574), (7, 29604),