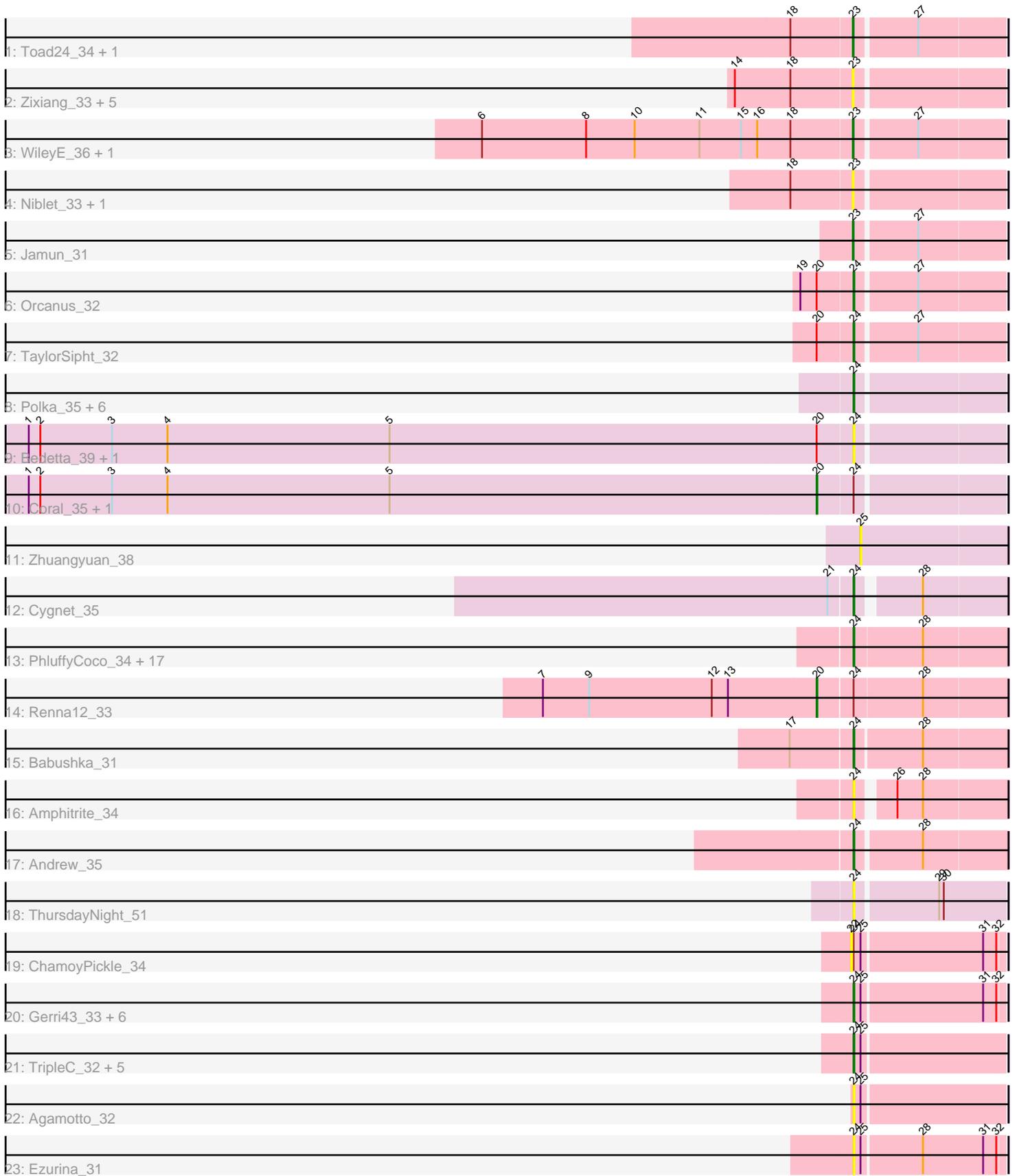


Pham 283785



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 283785 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283785 has 67 members, 37 are drafts.

Phages represented in each track:

- Track 1 : Toad24\_34, Eesa\_31
- Track 2 : Zixiang\_33, KendraB23\_39, Westrich\_37, Amanises\_39, Gravel\_38, Pelletreau\_38
- Track 3 : WileyE\_36, Chickaboom\_33
- Track 4 : Niblet\_33, Chicken\_31
- Track 5 : Jamun\_31
- Track 6 : Orcanus\_32
- Track 7 : TaylorSipht\_32
- Track 8 : Polka\_35, Daob\_37, Bibble12\_36, Jerole\_36, HannahPhantana\_36, Colusalem\_36, OtsoOtso\_36
- Track 9 : Bedetta\_39, Pineda\_37
- Track 10 : Coral\_35, Cote\_37
- Track 11 : Zhuangyuan\_38
- Track 12 : Cygnet\_35
- Track 13 : PhluffyCoco\_34, Fingolfin\_34, Juno112\_33, AmiCi24\_33, AdoptaAdorbs\_33, Atlantica\_34, Leona\_33, RedFox\_34, HamCheese\_34, KHumphrey\_34, Camara\_34, Oppalora\_33, Laphuphu24k\_33, Glotell\_35, Rattail\_34, Azaz\_35, AlexMinion\_36, DanHam62\_34
- Track 14 : Renna12\_33
- Track 15 : Babushka\_31
- Track 16 : Amphitrite\_34
- Track 17 : Andrew\_35
- Track 18 : ThursdayNight\_51
- Track 19 : ChamoyPickle\_34
- Track 20 : Gerri43\_33, Roberts\_32, Studio\_34, AnnabelLee\_32, CardboardBox\_33, Neuville\_32, ChipsNGuac\_33
- Track 21 : TripleC\_32, LastNadiia\_34, Makima\_32, TMaxx\_34, Mireles\_35, Audell\_31
- Track 22 : Agamoto\_32
- Track 23 : Ezurina\_31

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

The start number called the most often in the published annotations is 24, it was called in 23 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdoptaAdorbs\_33, Agamoto\_32, AlexMinion\_36, AmiCi24\_33, Amphitrite\_34, Andrew\_35, AnnabelLee\_32, Atlantica\_34, Audell\_31, Azaz\_35, Babushka\_31, Bedetta\_39, Bibble12\_36, Camara\_34, CardboardBox\_33, ChipsNGuac\_33, Colusalem\_36, Cygnet\_35, DanHam62\_34, Daob\_37, Ezurina\_31, Fingolfin\_34, Gerri43\_33, Glotell\_35, HamCheese\_34, HannahPhantana\_36, Jerole\_36, Juno112\_33, KHumphrey\_34, Laphuphu24k\_33, LastNadiia\_34, Leona\_33, Makima\_32, Mireles\_35, Neuville\_32, Oppalora\_33, Orcanus\_32, OtsoOtso\_36, PhuffyCoco\_34, Pineda\_37, Polka\_35, Rattail\_34, RedFox\_34, Roberts\_32, Studio\_34, TMaxx\_34, TaylorSipht\_32, ThursdayNight\_51, TripleC\_32,

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

- ChamoyPickle\_34, Coral\_35, Cote\_37, Renna12\_33,

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

- Amanises\_39, Chickaboom\_33, Chicken\_31, Eesa\_31, Gravel\_38, Jamun\_31, KendraB23\_39, Niblet\_33, Pelletreau\_38, Toad24\_34, Westrich\_37, WileyE\_36, Zhuangyuan\_38, Zixiang\_33,

### Summary by start number:

Start 20:

- Found in 7 of 67 ( 10.4% ) of genes in pham
- Manual Annotations of this start: 3 of 30
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Coral\_35 (AS2), Cote\_37 (AS2), Renna12\_33 (AS3),

Start 22:

- Found in 1 of 67 ( 1.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ChamoyPickle\_34 (FR),

Start 23:

- Found in 13 of 67 ( 19.4% ) of genes in pham
- Manual Annotations of this start: 4 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amanises\_39 (AS1), Chickaboom\_33 (AS1), Chicken\_31 (AS1), Eesa\_31 (AS1), Gravel\_38 (AS1), Jamun\_31 (AS1), KendraB23\_39 (AS1), Niblet\_33 (AS1), Pelletreau\_38 (AS1), Toad24\_34 (AS1), Westrich\_37 (AS1), WileyE\_36 (AS1), Zixiang\_33 (AS1),

Start 24:

- Found in 53 of 67 ( 79.1% ) of genes in pham
- Manual Annotations of this start: 23 of 30
- Called 92.5% of time when present
- Phage (with cluster) where this start called: AdoptaAdorbs\_33 (AS3), Agamoto\_32 (FR), AlexMinion\_36 (AS3), AmiCi24\_33 (AS3), Amphitrite\_34 (AS3), Andrew\_35 (AS3), AnnabelLee\_32 (FR), Atlantica\_34 (AS3), Audell\_31 (FR), Azaz\_35 (AS3),

Babushka\_31 (AS3), Bedetta\_39 (AS2), Bibble12\_36 (AS2), Camara\_34 (AS3), CardboardBox\_33 (FR), ChipsNGuac\_33 (FR), Colusalem\_36 (AS2), Cygnet\_35 (AS2), DanHam62\_34 (AS3), Daob\_37 (AS2), Ezurina\_31 (FR), Fingolfin\_34 (AS3), Gerri43\_33 (FR), Glotell\_35 (AS3), HamCheese\_34 (AS3), HannahPhantana\_36 (AS2), Jerole\_36 (AS2), Juno112\_33 (AS3), KHumphrey\_34 (AS3), Laphuphu24k\_33 (AS3), LastNadiia\_34 (FR), Leona\_33 (AS3), Makima\_32 (FR), Mireles\_35 (FR), Neuville\_32 (FR), Oppalora\_33 (AS3), Orcanus\_32 (AS1), OtsoOtso\_36 (AS2), PhluffyCoco\_34 (AS3), Pineda\_37 (AS2), Polka\_35 (AS2), Rattail\_34 (AS3), RedFox\_34 (AS3), Roberts\_32 (FR), Studio\_34 (FR), TMaxx\_34 (FR), TaylorSipt\_32 (AS1), ThursdayNight\_51 (AZ), TripleC\_32 (FR),

Start 25:

- Found in 17 of 67 ( 25.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Zhuangyuan\_38 (AS2),

### **Summary by clusters:**

There are 5 clusters represented in this pham: AS3, AS2, FR, AZ, AS1,

Info for manual annotations of cluster AS1:

- Start number 23 was manually annotated 4 times for cluster AS1.
- Start number 24 was manually annotated 2 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 20 was manually annotated 2 times for cluster AS2.
- Start number 24 was manually annotated 7 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 20 was manually annotated 1 time for cluster AS3.
- Start number 24 was manually annotated 12 times for cluster AS3.

Info for manual annotations of cluster FR:

- Start number 24 was manually annotated 2 times for cluster FR.

### **Gene Information:**

Gene: AdoptaAdorbs\_33 Start: 22211, Stop: 22032, Start Num: 24

Candidate Starts for AdoptaAdorbs\_33:

(Start: 24 @22211 has 23 MA's), (28, 22139),

Gene: Agamoto\_32 Start: 22084, Stop: 22272, Start Num: 24

Candidate Starts for Agamoto\_32:

(Start: 24 @22084 has 23 MA's), (25, 22093),

Gene: AlexMinion\_36 Start: 22394, Stop: 22215, Start Num: 24

Candidate Starts for AlexMinion\_36:

(Start: 24 @22394 has 23 MA's), (28, 22322),

Gene: Amanises\_39 Start: 23489, Stop: 23307, Start Num: 23  
Candidate Starts for Amanises\_39:  
(14, 23639), (18, 23567), (Start: 23 @23489 has 4 MA's),

Gene: AmiCi24\_33 Start: 22209, Stop: 22030, Start Num: 24  
Candidate Starts for AmiCi24\_33:  
(Start: 24 @22209 has 23 MA's), (28, 22137),

Gene: Amphitrite\_34 Start: 22210, Stop: 22031, Start Num: 24  
Candidate Starts for Amphitrite\_34:  
(Start: 24 @22210 has 23 MA's), (26, 22171), (28, 22138),

Gene: Andrew\_35 Start: 22183, Stop: 21995, Start Num: 24  
Candidate Starts for Andrew\_35:  
(Start: 24 @22183 has 23 MA's), (28, 22102),

Gene: AnnabelLee\_32 Start: 19282, Stop: 19467, Start Num: 24  
Candidate Starts for AnnabelLee\_32:  
(Start: 24 @19282 has 23 MA's), (25, 19291), (31, 19444), (32, 19459),

Gene: Atlantica\_34 Start: 22211, Stop: 22032, Start Num: 24  
Candidate Starts for Atlantica\_34:  
(Start: 24 @22211 has 23 MA's), (28, 22139),

Gene: Audell\_31 Start: 21717, Stop: 21905, Start Num: 24  
Candidate Starts for Audell\_31:  
(Start: 24 @21717 has 23 MA's), (25, 21726),

Gene: Azaz\_35 Start: 22280, Stop: 22101, Start Num: 24  
Candidate Starts for Azaz\_35:  
(Start: 24 @22280 has 23 MA's), (28, 22208),

Gene: Babushka\_31 Start: 22143, Stop: 21952, Start Num: 24  
Candidate Starts for Babushka\_31:  
(17, 22221), (Start: 24 @22143 has 23 MA's), (28, 22059),

Gene: Bedetta\_39 Start: 22863, Stop: 22681, Start Num: 24  
Candidate Starts for Bedetta\_39:  
(1, 23928), (2, 23913), (3, 23820), (4, 23748), (5, 23460), (Start: 20 @22908 has 3 MA's), (Start: 24 @22863 has 23 MA's),

Gene: Bible12\_36 Start: 22712, Stop: 22530, Start Num: 24  
Candidate Starts for Bible12\_36:  
(Start: 24 @22712 has 23 MA's),

Gene: Camara\_34 Start: 22213, Stop: 22034, Start Num: 24  
Candidate Starts for Camara\_34:  
(Start: 24 @22213 has 23 MA's), (28, 22141),

Gene: CardboardBox\_33 Start: 19285, Stop: 19470, Start Num: 24  
Candidate Starts for CardboardBox\_33:  
(Start: 24 @19285 has 23 MA's), (25, 19294), (31, 19447), (32, 19462),

Gene: ChamoyPickle\_34 Start: 19822, Stop: 20010, Start Num: 22  
Candidate Starts for ChamoyPickle\_34:  
(22, 19822), (Start: 24 @19825 has 23 MA's), (25, 19834), (31, 19987), (32, 20002),

Gene: Chickaboom\_33 Start: 22527, Stop: 22345, Start Num: 23  
Candidate Starts for Chickaboom\_33:  
(6, 23004), (8, 22869), (10, 22806), (11, 22722), (15, 22668), (16, 22647), (18, 22605), (Start: 23 @22527 has 4 MA's), (27, 22452),

Gene: Chicken\_31 Start: 22798, Stop: 22616, Start Num: 23  
Candidate Starts for Chicken\_31:  
(18, 22876), (Start: 23 @22798 has 4 MA's),

Gene: ChipsNGuac\_33 Start: 19285, Stop: 19470, Start Num: 24  
Candidate Starts for ChipsNGuac\_33:  
(Start: 24 @19285 has 23 MA's), (25, 19294), (31, 19447), (32, 19462),

Gene: Colusalem\_36 Start: 22693, Stop: 22511, Start Num: 24  
Candidate Starts for Colusalem\_36:  
(Start: 24 @22693 has 23 MA's),

Gene: Coral\_35 Start: 22609, Stop: 22382, Start Num: 20  
Candidate Starts for Coral\_35:  
(1, 23629), (2, 23614), (3, 23521), (4, 23449), (5, 23161), (Start: 20 @22609 has 3 MA's), (Start: 24 @22564 has 23 MA's),

Gene: Cote\_37 Start: 23086, Stop: 22859, Start Num: 20  
Candidate Starts for Cote\_37:  
(1, 24106), (2, 24091), (3, 23998), (4, 23926), (5, 23638), (Start: 20 @23086 has 3 MA's), (Start: 24 @23041 has 23 MA's),

Gene: Cygnet\_35 Start: 23502, Stop: 23323, Start Num: 24  
Candidate Starts for Cygnet\_35:  
(21, 23532), (Start: 24 @23502 has 23 MA's), (28, 23430),

Gene: DanHam62\_34 Start: 22210, Stop: 22031, Start Num: 24  
Candidate Starts for DanHam62\_34:  
(Start: 24 @22210 has 23 MA's), (28, 22138),

Gene: Daob\_37 Start: 23050, Stop: 22868, Start Num: 24  
Candidate Starts for Daob\_37:  
(Start: 24 @23050 has 23 MA's),

Gene: Eesa\_31 Start: 23331, Stop: 23149, Start Num: 23  
Candidate Starts for Eesa\_31:  
(18, 23409), (Start: 23 @23331 has 4 MA's), (27, 23256),

Gene: Ezurina\_31 Start: 20328, Stop: 20513, Start Num: 24  
Candidate Starts for Ezurina\_31:  
(Start: 24 @20328 has 23 MA's), (25, 20337), (28, 20412), (31, 20490), (32, 20505),

Gene: Fingolfin\_34 Start: 22213, Stop: 22034, Start Num: 24  
Candidate Starts for Fingolfin\_34:

(Start: 24 @22213 has 23 MA's), (28, 22141),

Gene: Gerri43\_33 Start: 19285, Stop: 19470, Start Num: 24

Candidate Starts for Gerri43\_33:

(Start: 24 @19285 has 23 MA's), (25, 19294), (31, 19447), (32, 19462),

Gene: Glotell\_35 Start: 22369, Stop: 22190, Start Num: 24

Candidate Starts for Glotell\_35:

(Start: 24 @22369 has 23 MA's), (28, 22297),

Gene: Gravel\_38 Start: 23301, Stop: 23119, Start Num: 23

Candidate Starts for Gravel\_38:

(14, 23451), (18, 23379), (Start: 23 @23301 has 4 MA's),

Gene: HamCheese\_34 Start: 22197, Stop: 22018, Start Num: 24

Candidate Starts for HamCheese\_34:

(Start: 24 @22197 has 23 MA's), (28, 22125),

Gene: HannahPhantana\_36 Start: 22712, Stop: 22530, Start Num: 24

Candidate Starts for HannahPhantana\_36:

(Start: 24 @22712 has 23 MA's),

Gene: Jamun\_31 Start: 22438, Stop: 22256, Start Num: 23

Candidate Starts for Jamun\_31:

(Start: 23 @22438 has 4 MA's), (27, 22363),

Gene: Jerole\_36 Start: 22835, Stop: 22653, Start Num: 24

Candidate Starts for Jerole\_36:

(Start: 24 @22835 has 23 MA's),

Gene: Juno112\_33 Start: 22213, Stop: 22034, Start Num: 24

Candidate Starts for Juno112\_33:

(Start: 24 @22213 has 23 MA's), (28, 22141),

Gene: KHumphrey\_34 Start: 22212, Stop: 22033, Start Num: 24

Candidate Starts for KHumphrey\_34:

(Start: 24 @22212 has 23 MA's), (28, 22140),

Gene: KendraB23\_39 Start: 23489, Stop: 23307, Start Num: 23

Candidate Starts for KendraB23\_39:

(14, 23639), (18, 23567), (Start: 23 @23489 has 4 MA's),

Gene: Laphuphu24k\_33 Start: 22197, Stop: 22018, Start Num: 24

Candidate Starts for Laphuphu24k\_33:

(Start: 24 @22197 has 23 MA's), (28, 22125),

Gene: LastNadiia\_34 Start: 21675, Stop: 21863, Start Num: 24

Candidate Starts for LastNadiia\_34:

(Start: 24 @21675 has 23 MA's), (25, 21684),

Gene: Leona\_33 Start: 22280, Stop: 22101, Start Num: 24

Candidate Starts for Leona\_33:

(Start: 24 @22280 has 23 MA's), (28, 22208),

Gene: Makima\_32 Start: 20784, Stop: 20972, Start Num: 24  
Candidate Starts for Makima\_32:  
(Start: 24 @20784 has 23 MA's), (25, 20793),

Gene: Mireles\_35 Start: 20340, Stop: 20528, Start Num: 24  
Candidate Starts for Mireles\_35:  
(Start: 24 @20340 has 23 MA's), (25, 20349),

Gene: Neuville\_32 Start: 19285, Stop: 19470, Start Num: 24  
Candidate Starts for Neuville\_32:  
(Start: 24 @19285 has 23 MA's), (25, 19294), (31, 19447), (32, 19462),

Gene: Niblet\_33 Start: 22885, Stop: 22703, Start Num: 23  
Candidate Starts for Niblet\_33:  
(18, 22963), (Start: 23 @22885 has 4 MA's),

Gene: Oppalora\_33 Start: 22210, Stop: 22031, Start Num: 24  
Candidate Starts for Oppalora\_33:  
(Start: 24 @22210 has 23 MA's), (28, 22138),

Gene: Orcanus\_32 Start: 23008, Stop: 22826, Start Num: 24  
Candidate Starts for Orcanus\_32:  
(19, 23074), (Start: 20 @23053 has 3 MA's), (Start: 24 @23008 has 23 MA's), (27, 22933),

Gene: OtsoOtso\_36 Start: 22566, Stop: 22384, Start Num: 24  
Candidate Starts for OtsoOtso\_36:  
(Start: 24 @22566 has 23 MA's),

Gene: Pelletreau\_38 Start: 23301, Stop: 23119, Start Num: 23  
Candidate Starts for Pelletreau\_38:  
(14, 23451), (18, 23379), (Start: 23 @23301 has 4 MA's),

Gene: PhluffyCoco\_34 Start: 22210, Stop: 22016, Start Num: 24  
Candidate Starts for PhluffyCoco\_34:  
(Start: 24 @22210 has 23 MA's), (28, 22123),

Gene: Pineda\_37 Start: 22861, Stop: 22679, Start Num: 24  
Candidate Starts for Pineda\_37:  
(1, 23926), (2, 23911), (3, 23818), (4, 23746), (5, 23458), (Start: 20 @22906 has 3 MA's), (Start: 24 @22861 has 23 MA's),

Gene: Polka\_35 Start: 22566, Stop: 22384, Start Num: 24  
Candidate Starts for Polka\_35:  
(Start: 24 @22566 has 23 MA's),

Gene: Rattail\_34 Start: 22294, Stop: 22115, Start Num: 24  
Candidate Starts for Rattail\_34:  
(Start: 24 @22294 has 23 MA's), (28, 22222),

Gene: RedFox\_34 Start: 22209, Stop: 22030, Start Num: 24  
Candidate Starts for RedFox\_34:  
(Start: 24 @22209 has 23 MA's), (28, 22137),

Gene: Renna12\_33 Start: 22293, Stop: 22057, Start Num: 20  
Candidate Starts for Renna12\_33:  
(7, 22647), (9, 22587), (12, 22428), (13, 22407), (Start: 20 @22293 has 3 MA's), (Start: 24 @22251 has 23 MA's), (28, 22164),

Gene: Roberts\_32 Start: 19285, Stop: 19470, Start Num: 24  
Candidate Starts for Roberts\_32:  
(Start: 24 @19285 has 23 MA's), (25, 19294), (31, 19447), (32, 19462),

Gene: Studio\_34 Start: 20654, Stop: 20839, Start Num: 24  
Candidate Starts for Studio\_34:  
(Start: 24 @20654 has 23 MA's), (25, 20663), (31, 20816), (32, 20831),

Gene: TMaxx\_34 Start: 19957, Stop: 20145, Start Num: 24  
Candidate Starts for TMaxx\_34:  
(Start: 24 @19957 has 23 MA's), (25, 19966),

Gene: TaylorSipht\_32 Start: 22421, Stop: 22239, Start Num: 24  
Candidate Starts for TaylorSipht\_32:  
(Start: 20 @22466 has 3 MA's), (Start: 24 @22421 has 23 MA's), (27, 22346),

Gene: ThursdayNight\_51 Start: 36229, Stop: 36414, Start Num: 24  
Candidate Starts for ThursdayNight\_51:  
(Start: 24 @36229 has 23 MA's), (29, 36331), (30, 36337),

Gene: Toad24\_34 Start: 23550, Stop: 23368, Start Num: 23  
Candidate Starts for Toad24\_34:  
(18, 23628), (Start: 23 @23550 has 4 MA's), (27, 23475),

Gene: TripleC\_32 Start: 22296, Stop: 22484, Start Num: 24  
Candidate Starts for TripleC\_32:  
(Start: 24 @22296 has 23 MA's), (25, 22305),

Gene: Westrich\_37 Start: 23225, Stop: 23043, Start Num: 23  
Candidate Starts for Westrich\_37:  
(14, 23375), (18, 23303), (Start: 23 @23225 has 4 MA's),

Gene: WileyE\_36 Start: 22527, Stop: 22345, Start Num: 23  
Candidate Starts for WileyE\_36:  
(6, 23004), (8, 22869), (10, 22806), (11, 22722), (15, 22668), (16, 22647), (18, 22605), (Start: 23 @22527 has 4 MA's), (27, 22452),

Gene: Zhuangyuan\_38 Start: 23402, Stop: 23214, Start Num: 25  
Candidate Starts for Zhuangyuan\_38:  
(25, 23402),

Gene: Zixiang\_33 Start: 22907, Stop: 22725, Start Num: 23  
Candidate Starts for Zixiang\_33:  
(14, 23057), (18, 22985), (Start: 23 @22907 has 4 MA's),