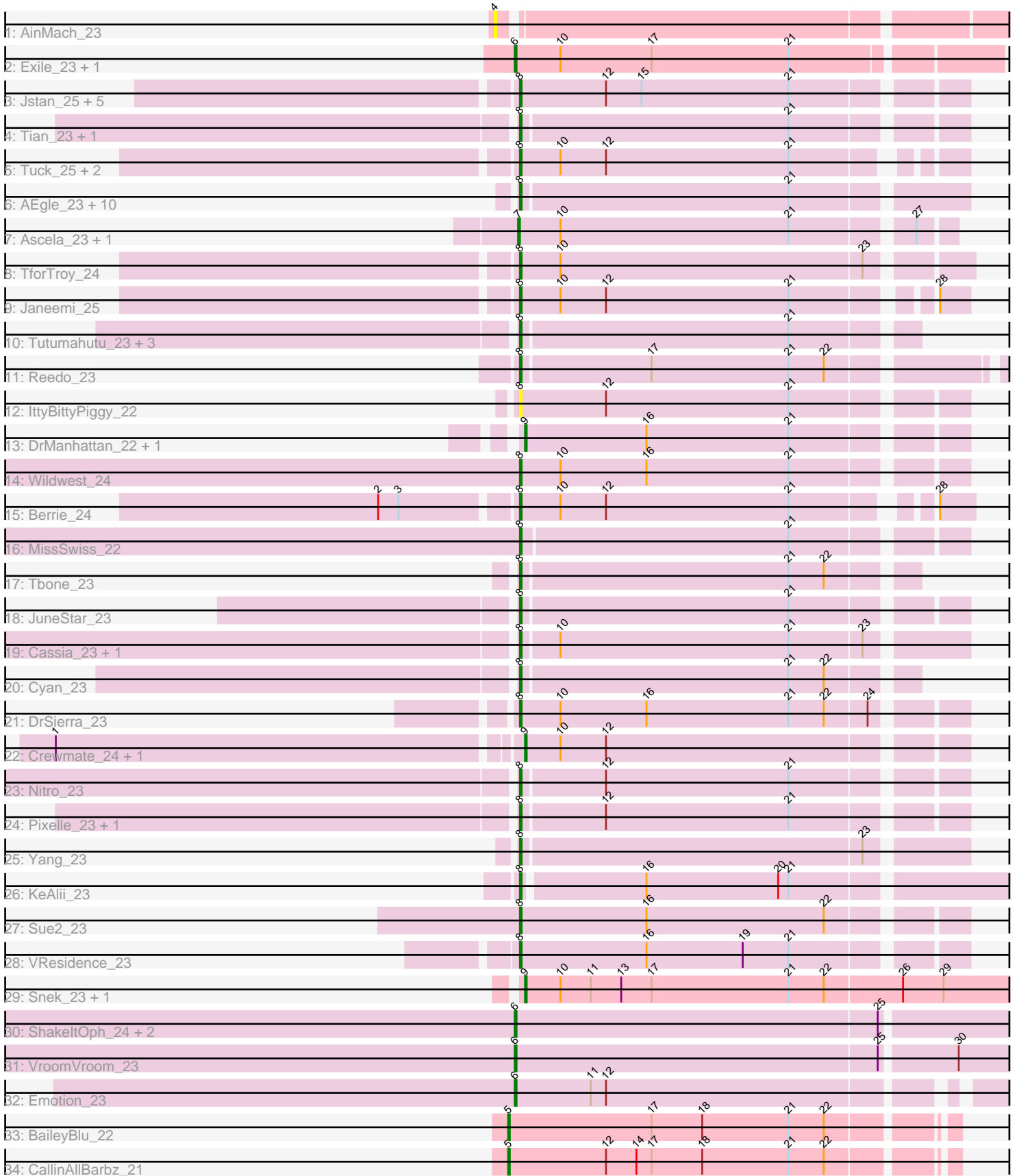


Pham 182271



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 182271 Report

This analysis was run 11/02/24 on database version 579.

Pham number 182271 has 64 members, 12 are drafts.

Phages represented in each track:

- Track 1 : AinMach\_23
- Track 2 : Exile\_23, Soondubu\_23
- Track 3 : Jstan\_25, Asa16\_24, Eraser\_24, London\_24, Niobe\_24, Elezi\_24
- Track 4 : Tian\_23, Amyev\_23
- Track 5 : Tuck\_25, Phives\_25, Community\_24
- Track 6 : AEgle\_23, Lego\_23, Joemato\_23, Lizalica\_23, Kaylissa\_23, Warda\_23, Mudpuppy\_23, Adumb2043\_23, JohnDoe\_23, Turab\_23, Simpson\_25
- Track 7 : Ascela\_23, Iter\_23
- Track 8 : TforTroy\_24
- Track 9 : Janeemi\_25
- Track 10 : Tutumahutu\_23, AGrandiflora\_24, YesChef\_23, Powerpuff\_23
- Track 11 : Reedo\_23
- Track 12 : IttyBittyPiggy\_22
- Track 13 : DrManhattan\_22, Adolin\_22
- Track 14 : Wildwest\_24
- Track 15 : Berrie\_24
- Track 16 : MissSwiss\_22
- Track 17 : Tbone\_23
- Track 18 : JuneStar\_23
- Track 19 : Cassia\_23, Pumpkins\_23
- Track 20 : Cyan\_23
- Track 21 : DrSierra\_23
- Track 22 : Crewmate\_24, ObiToo\_23
- Track 23 : Nitro\_23
- Track 24 : Pixelle\_23, Tallboi\_23
- Track 25 : Yang\_23
- Track 26 : KeAlii\_23
- Track 27 : Sue2\_23
- Track 28 : VResidence\_23
- Track 29 : Snek\_23, Tweety19\_23
- Track 30 : ShakeltOph\_24, JasmineDragon\_23, MiniMommy\_24
- Track 31 : VroomVroom\_23
- Track 32 : Emotion\_23
- Track 33 : BaileyBlu\_22
- Track 34 : CallinAllBarbz\_21

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

The start number called the most often in the published annotations is 8, it was called in 38 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AEgle\_23, AGrandiflora\_24, Adumb2043\_23, Amyev\_23, Asa16\_24, Berrie\_24, Cassia\_23, Community\_24, Cyan\_23, DrSierra\_23, Elezi\_24, Eraser\_24, IttyBittyPiggy\_22, Janeemi\_25, Joemato\_23, JohnDoe\_23, Jstan\_25, JuneStar\_23, Kaylissa\_23, KeAlii\_23, Lego\_23, Lizalica\_23, London\_24, MissSwiss\_22, Mudpuppy\_23, Niobe\_24, Nitro\_23, Phives\_25, Pixelle\_23, Powerpuff\_23, Pumpkins\_23, Reedo\_23, Simpson\_25, Sue2\_23, Tallboi\_23, Tbone\_23, TforTroy\_24, Tian\_23, Tuck\_25, Turab\_23, Tutumahutu\_23, VResidence\_23, Warda\_23, Wildwest\_24, Yang\_23, YesChef\_23,

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

- 

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

- Adolin\_22, AinMach\_23, Ascela\_23, BaileyBlu\_22, CallinAllBarbz\_21, Crewmate\_24, DrManhattan\_22, Emotion\_23, Exile\_23, Iter\_23, JasmineDragon\_23, MiniMommy\_24, ObiToo\_23, ShakeltOph\_24, Snek\_23, Soondubu\_23, Tweety19\_23, VroomVroom\_23,

### **Summary by start number:**

Start 4:

- Found in 1 of 64 ( 1.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AinMach\_23 (AZ),

Start 5:

- Found in 2 of 64 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 2 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaileyBlu\_22 (FP), CallinAllBarbz\_21 (FP),

Start 6:

- Found in 7 of 64 ( 10.9% ) of genes in pham
- Manual Annotations of this start: 4 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Emotion\_23 (AZ4), Exile\_23 (AZ), JasmineDragon\_23 (AZ4), MiniMommy\_24 (AZ4), ShakeltOph\_24 (AZ4), Soondubu\_23 (AZ), VroomVroom\_23 (AZ4),

Start 7:

- Found in 2 of 64 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 2 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ascela\_23 (AZ1), Iter\_23 (AZ1),

Start 8:

- Found in 46 of 64 ( 71.9% ) of genes in pham
- Manual Annotations of this start: 38 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle\_23 (AZ1), AGrandiflora\_24 (AZ1), Adumb2043\_23 (AZ1), Amyev\_23 (AZ1), Asa16\_24 (AZ1), Berrie\_24 (AZ1), Cassia\_23 (AZ1), Community\_24 (AZ1), Cyan\_23 (AZ1), DrSierra\_23 (AZ1), Elezi\_24 (AZ1), Eraser\_24 (AZ1), IttyBittyPiggy\_22 (AZ1), Janeemi\_25 (AZ1), Joemato\_23 (AZ1), JohnDoe\_23 (AZ1), Jstan\_25 (AZ1), JuneStar\_23 (AZ1), Kaylissa\_23 (AZ1), KeAlii\_23 (AZ1), Lego\_23 (AZ1), Lizalica\_23 (AZ1), London\_24 (AZ1), MissSwiss\_22 (AZ1), Mudpuppy\_23 (AZ1), Niobe\_24 (AZ1), Nitro\_23 (AZ1), Phives\_25 (AZ1), Pixelle\_23 (AZ1), Powerpuff\_23 (AZ1), Pumpkins\_23 (AZ1), Reedo\_23 (AZ1), Simpson\_25 (AZ1), Sue2\_23 (AZ1), Tallboi\_23 (AZ1), Tbone\_23 (AZ1), TforTroy\_24 (AZ1), Tian\_23 (AZ1), Tuck\_25 (AZ1), Turab\_23 (AZ1), Tutumahutu\_23 (AZ1), VResidence\_23 (AZ1), Warda\_23 (AZ1), Wildwest\_24 (AZ1), Yang\_23 (AZ1), YesChef\_23 (AZ1),

Start 9:

- Found in 6 of 64 ( 9.4% ) of genes in pham
- Manual Annotations of this start: 6 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adolin\_22 (AZ1), Crewmate\_24 (AZ1), DrManhattan\_22 (AZ1), ObiToo\_23 (AZ1), Snek\_23 (AZ3), Tweety19\_23 (AZ3),

**Summary by clusters:**

There are 5 clusters represented in this pham: FP, AZ1, AZ, AZ4, AZ3,

Info for manual annotations of cluster AZ:

- Start number 6 was manually annotated 1 time for cluster AZ.

Info for manual annotations of cluster AZ1:

- Start number 7 was manually annotated 2 times for cluster AZ1.
- Start number 8 was manually annotated 38 times for cluster AZ1.
- Start number 9 was manually annotated 4 times for cluster AZ1.

Info for manual annotations of cluster AZ3:

- Start number 9 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 6 was manually annotated 3 times for cluster AZ4.

Info for manual annotations of cluster FP:

- Start number 5 was manually annotated 2 times for cluster FP.

**Gene Information:**

Gene: AEgle\_23 Start: 19548, Stop: 19799, Start Num: 8

Candidate Starts for AEgle\_23:

(Start: 8 @19548 has 38 MA's), (21, 19704),

Gene: AGrandiflora\_24 Start: 19645, Stop: 19866, Start Num: 8  
Candidate Starts for AGrandiflora\_24:  
(Start: 8 @19645 has 38 MA's), (21, 19801),

Gene: Adolin\_22 Start: 18001, Stop: 18249, Start Num: 9  
Candidate Starts for Adolin\_22:  
(Start: 9 @18001 has 6 MA's), (16, 18073), (21, 18157),

Gene: Adumb2043\_23 Start: 19547, Stop: 19798, Start Num: 8  
Candidate Starts for Adumb2043\_23:  
(Start: 8 @19547 has 38 MA's), (21, 19703),

Gene: AinMach\_23 Start: 20024, Stop: 20305, Start Num: 4  
Candidate Starts for AinMach\_23:  
(4, 20024),

Gene: Amyev\_23 Start: 19937, Stop: 20185, Start Num: 8  
Candidate Starts for Amyev\_23:  
(Start: 8 @19937 has 38 MA's), (21, 20093),

Gene: Asa16\_24 Start: 20166, Stop: 20417, Start Num: 8  
Candidate Starts for Asa16\_24:  
(Start: 8 @20166 has 38 MA's), (12, 20217), (15, 20238), (21, 20325),

Gene: Ascela\_23 Start: 19556, Stop: 19798, Start Num: 7  
Candidate Starts for Ascela\_23:  
(Start: 7 @19556 has 2 MA's), (10, 19580), (21, 19715), (27, 19778),

Gene: BaileyBlu\_22 Start: 18791, Stop: 19042, Start Num: 5  
Candidate Starts for BaileyBlu\_22:  
(Start: 5 @18791 has 2 MA's), (17, 18875), (18, 18905), (21, 18956), (22, 18977),

Gene: Berrie\_24 Start: 20720, Stop: 20965, Start Num: 8  
Candidate Starts for Berrie\_24:  
(2, 20645), (3, 20657), (Start: 8 @20720 has 38 MA's), (10, 20744), (12, 20771), (21, 20879), (28, 20945),

Gene: CallinAllBarbz\_21 Start: 18801, Stop: 19052, Start Num: 5  
Candidate Starts for CallinAllBarbz\_21:  
(Start: 5 @18801 has 2 MA's), (12, 18858), (14, 18876), (17, 18885), (18, 18915), (21, 18966), (22, 18987),

Gene: Cassia\_23 Start: 19988, Stop: 20239, Start Num: 8  
Candidate Starts for Cassia\_23:  
(Start: 8 @19988 has 38 MA's), (10, 20009), (21, 20144), (23, 20186),

Gene: Community\_24 Start: 21806, Stop: 22048, Start Num: 8  
Candidate Starts for Community\_24:  
(Start: 8 @21806 has 38 MA's), (10, 21830), (12, 21857), (21, 21965),

Gene: Crewmate\_24 Start: 18617, Stop: 18865, Start Num: 9  
Candidate Starts for Crewmate\_24:

(1, 18350), (Start: 9 @18617 has 6 MA's), (10, 18638), (12, 18665),

Gene: Cyan\_23 Start: 19693, Stop: 19914, Start Num: 8

Candidate Starts for Cyan\_23:

(Start: 8 @19693 has 38 MA's), (21, 19849), (22, 19870),

Gene: DrManhattan\_22 Start: 17991, Stop: 18239, Start Num: 9

Candidate Starts for DrManhattan\_22:

(Start: 9 @17991 has 6 MA's), (16, 18063), (21, 18147),

Gene: DrSierra\_23 Start: 18674, Stop: 18925, Start Num: 8

Candidate Starts for DrSierra\_23:

(Start: 8 @18674 has 38 MA's), (10, 18698), (16, 18749), (21, 18833), (22, 18854), (24, 18878),

Gene: Elezi\_24 Start: 20167, Stop: 20418, Start Num: 8

Candidate Starts for Elezi\_24:

(Start: 8 @20167 has 38 MA's), (12, 20218), (15, 20239), (21, 20326),

Gene: Emotion\_23 Start: 19367, Stop: 19633, Start Num: 6

Candidate Starts for Emotion\_23:

(Start: 6 @19367 has 4 MA's), (11, 19412), (12, 19421),

Gene: Eraser\_24 Start: 20167, Stop: 20418, Start Num: 8

Candidate Starts for Eraser\_24:

(Start: 8 @20167 has 38 MA's), (12, 20218), (15, 20239), (21, 20326),

Gene: Exile\_23 Start: 21855, Stop: 22133, Start Num: 6

Candidate Starts for Exile\_23:

(Start: 6 @21855 has 4 MA's), (10, 21882), (17, 21936), (21, 22017),

Gene: Iter\_23 Start: 19556, Stop: 19798, Start Num: 7

Candidate Starts for Iter\_23:

(Start: 7 @19556 has 2 MA's), (10, 19580), (21, 19715), (27, 19778),

Gene: IttyBittyPiggy\_22 Start: 18085, Stop: 18336, Start Num: 8

Candidate Starts for IttyBittyPiggy\_22:

(Start: 8 @18085 has 38 MA's), (12, 18136), (21, 18244),

Gene: Janeemi\_25 Start: 21813, Stop: 22058, Start Num: 8

Candidate Starts for Janeemi\_25:

(Start: 8 @21813 has 38 MA's), (10, 21837), (12, 21864), (21, 21972), (28, 22041),

Gene: JasmineDragon\_23 Start: 18773, Stop: 19057, Start Num: 6

Candidate Starts for JasmineDragon\_23:

(Start: 6 @18773 has 4 MA's), (25, 18986),

Gene: Joemato\_23 Start: 19694, Stop: 19915, Start Num: 8

Candidate Starts for Joemato\_23:

(Start: 8 @19694 has 38 MA's), (21, 19850),

Gene: JohnDoe\_23 Start: 19689, Stop: 19910, Start Num: 8

Candidate Starts for JohnDoe\_23:

(Start: 8 @19689 has 38 MA's), (21, 19845),

Gene: Jstan\_25 Start: 20167, Stop: 20418, Start Num: 8  
Candidate Starts for Jstan\_25:  
(Start: 8 @20167 has 38 MA's), (12, 20218), (15, 20239), (21, 20326),

Gene: JuneStar\_23 Start: 20394, Stop: 20642, Start Num: 8  
Candidate Starts for JuneStar\_23:  
(Start: 8 @20394 has 38 MA's), (21, 20550),

Gene: Kaylissa\_23 Start: 19695, Stop: 19916, Start Num: 8  
Candidate Starts for Kaylissa\_23:  
(Start: 8 @19695 has 38 MA's), (21, 19851),

Gene: KeAlii\_23 Start: 18182, Stop: 18472, Start Num: 8  
Candidate Starts for KeAlii\_23:  
(Start: 8 @18182 has 38 MA's), (16, 18251), (20, 18329), (21, 18335),

Gene: Lego\_23 Start: 19649, Stop: 19870, Start Num: 8  
Candidate Starts for Lego\_23:  
(Start: 8 @19649 has 38 MA's), (21, 19805),

Gene: Lizalica\_23 Start: 19679, Stop: 19900, Start Num: 8  
Candidate Starts for Lizalica\_23:  
(Start: 8 @19679 has 38 MA's), (21, 19835),

Gene: London\_24 Start: 20167, Stop: 20418, Start Num: 8  
Candidate Starts for London\_24:  
(Start: 8 @20167 has 38 MA's), (12, 20218), (15, 20239), (21, 20326),

Gene: MiniMommy\_24 Start: 18774, Stop: 19058, Start Num: 6  
Candidate Starts for MiniMommy\_24:  
(Start: 6 @18774 has 4 MA's), (25, 18987),

Gene: MissSwiss\_22 Start: 18050, Stop: 18298, Start Num: 8  
Candidate Starts for MissSwiss\_22:  
(Start: 8 @18050 has 38 MA's), (21, 18206),

Gene: Mudpuppy\_23 Start: 19692, Stop: 19913, Start Num: 8  
Candidate Starts for Mudpuppy\_23:  
(Start: 8 @19692 has 38 MA's), (21, 19848),

Gene: Niobe\_24 Start: 20167, Stop: 20418, Start Num: 8  
Candidate Starts for Niobe\_24:  
(Start: 8 @20167 has 38 MA's), (12, 20218), (15, 20239), (21, 20326),

Gene: Nitro\_23 Start: 19547, Stop: 19795, Start Num: 8  
Candidate Starts for Nitro\_23:  
(Start: 8 @19547 has 38 MA's), (12, 19595), (21, 19703),

Gene: ObiToo\_23 Start: 18354, Stop: 18602, Start Num: 9  
Candidate Starts for ObiToo\_23:  
(1, 18087), (Start: 9 @18354 has 6 MA's), (10, 18375), (12, 18402),

Gene: Phives\_25 Start: 21643, Stop: 21885, Start Num: 8  
Candidate Starts for Phives\_25:  
(Start: 8 @21643 has 38 MA's), (10, 21667), (12, 21694), (21, 21802),

Gene: Pixelle\_23 Start: 19940, Stop: 20188, Start Num: 8  
Candidate Starts for Pixelle\_23:  
(Start: 8 @19940 has 38 MA's), (12, 19988), (21, 20096),

Gene: Powerpuff\_23 Start: 19699, Stop: 19920, Start Num: 8  
Candidate Starts for Powerpuff\_23:  
(Start: 8 @19699 has 38 MA's), (21, 19855),

Gene: Pumpkins\_23 Start: 20421, Stop: 20672, Start Num: 8  
Candidate Starts for Pumpkins\_23:  
(Start: 8 @20421 has 38 MA's), (10, 20442), (21, 20577), (23, 20619),

Gene: Reedo\_23 Start: 18183, Stop: 18467, Start Num: 8  
Candidate Starts for Reedo\_23:  
(Start: 8 @18183 has 38 MA's), (17, 18258), (21, 18339), (22, 18360),

Gene: ShakeltOph\_24 Start: 18773, Stop: 19057, Start Num: 6  
Candidate Starts for ShakeltOph\_24:  
(Start: 6 @18773 has 4 MA's), (25, 18986),

Gene: Simpson\_25 Start: 19694, Stop: 19915, Start Num: 8  
Candidate Starts for Simpson\_25:  
(Start: 8 @19694 has 38 MA's), (21, 19850),

Gene: Snek\_23 Start: 17230, Stop: 17565, Start Num: 9  
Candidate Starts for Snek\_23:  
(Start: 9 @17230 has 6 MA's), (10, 17251), (11, 17269), (13, 17287), (17, 17305), (21, 17386), (22, 17407), (26, 17452), (29, 17476),

Gene: Soondubu\_23 Start: 21859, Stop: 22137, Start Num: 6  
Candidate Starts for Soondubu\_23:  
(Start: 6 @21859 has 4 MA's), (10, 21886), (17, 21940), (21, 22021),

Gene: Sue2\_23 Start: 18846, Stop: 19097, Start Num: 8  
Candidate Starts for Sue2\_23:  
(Start: 8 @18846 has 38 MA's), (16, 18921), (22, 19026),

Gene: Tallboi\_23 Start: 19526, Stop: 19774, Start Num: 8  
Candidate Starts for Tallboi\_23:  
(Start: 8 @19526 has 38 MA's), (12, 19574), (21, 19682),

Gene: Tbone\_23 Start: 19699, Stop: 19920, Start Num: 8  
Candidate Starts for Tbone\_23:  
(Start: 8 @19699 has 38 MA's), (21, 19855), (22, 19876),

Gene: TforTroy\_24 Start: 20302, Stop: 20556, Start Num: 8  
Candidate Starts for TforTroy\_24:  
(Start: 8 @20302 has 38 MA's), (10, 20326), (23, 20503),



Gene: Tian\_23 Start: 19937, Stop: 20185, Start Num: 8  
Candidate Starts for Tian\_23:  
(Start: 8 @19937 has 38 MA's), (21, 20093),

Gene: Tuck\_25 Start: 21786, Stop: 22028, Start Num: 8  
Candidate Starts for Tuck\_25:  
(Start: 8 @21786 has 38 MA's), (10, 21810), (12, 21837), (21, 21945),

Gene: Turab\_23 Start: 19547, Stop: 19798, Start Num: 8  
Candidate Starts for Turab\_23:  
(Start: 8 @19547 has 38 MA's), (21, 19703),

Gene: Tutumahutu\_23 Start: 19699, Stop: 19920, Start Num: 8  
Candidate Starts for Tutumahutu\_23:  
(Start: 8 @19699 has 38 MA's), (21, 19855),

Gene: Tweety19\_23 Start: 17229, Stop: 17564, Start Num: 9  
Candidate Starts for Tweety19\_23:  
(Start: 9 @17229 has 6 MA's), (10, 17250), (11, 17268), (13, 17286), (17, 17304), (21, 17385), (22, 17406), (26, 17451), (29, 17475),

Gene: VResidence\_23 Start: 18257, Stop: 18508, Start Num: 8  
Candidate Starts for VResidence\_23:  
(Start: 8 @18257 has 38 MA's), (16, 18332), (19, 18389), (21, 18416),

Gene: VroomVroom\_23 Start: 18784, Stop: 19068, Start Num: 6  
Candidate Starts for VroomVroom\_23:  
(Start: 6 @18784 has 4 MA's), (25, 18997), (30, 19039),

Gene: Warda\_23 Start: 19691, Stop: 19912, Start Num: 8  
Candidate Starts for Warda\_23:  
(Start: 8 @19691 has 38 MA's), (21, 19847),

Gene: Wildwest\_24 Start: 19604, Stop: 19855, Start Num: 8  
Candidate Starts for Wildwest\_24:  
(Start: 8 @19604 has 38 MA's), (10, 19628), (16, 19679), (21, 19763),

Gene: Yang\_23 Start: 19688, Stop: 19939, Start Num: 8  
Candidate Starts for Yang\_23:  
(Start: 8 @19688 has 38 MA's), (23, 19886),

Gene: YesChef\_23 Start: 19699, Stop: 19920, Start Num: 8  
Candidate Starts for YesChef\_23:  
(Start: 8 @19699 has 38 MA's), (21, 19855),