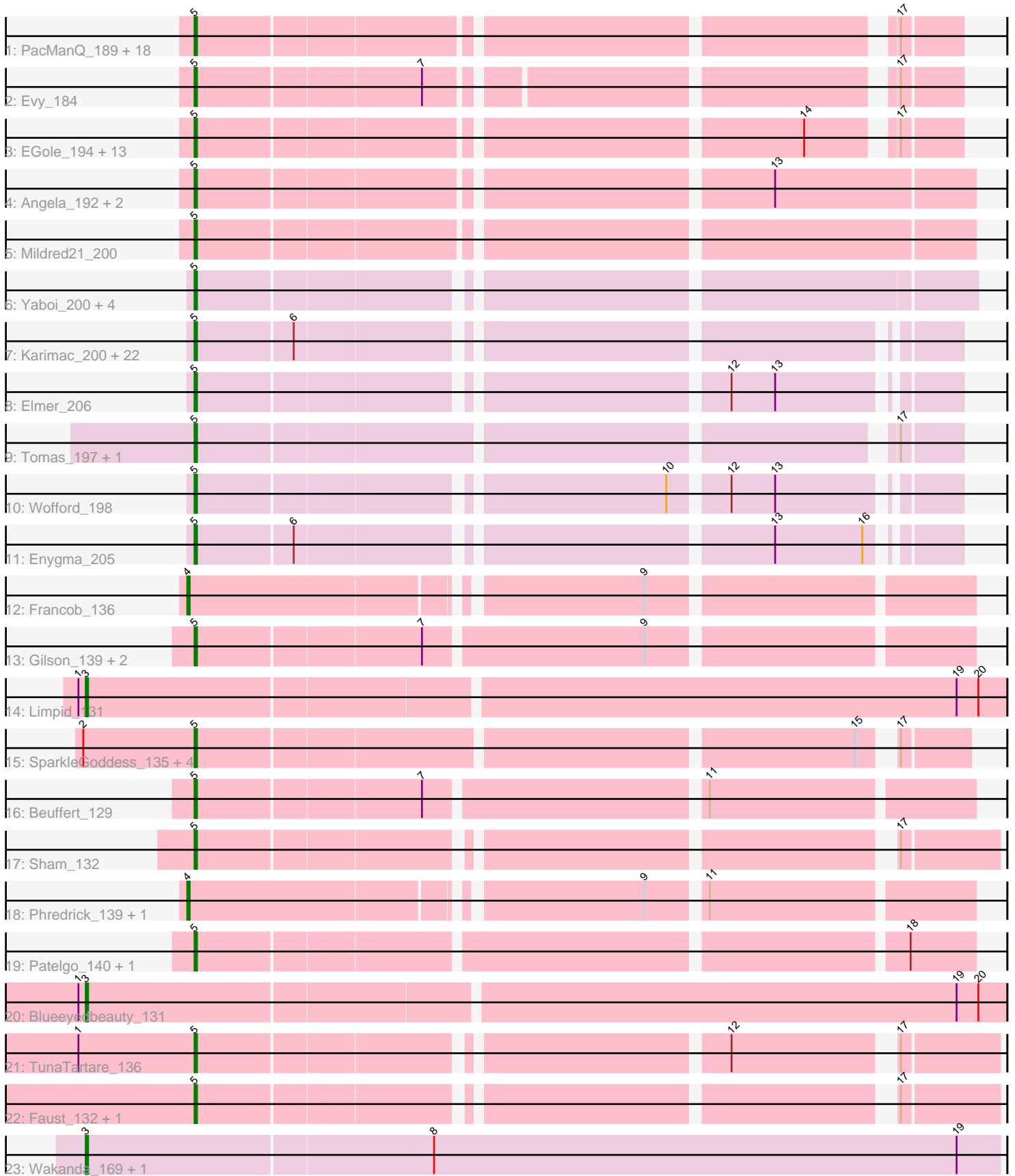


Pham 185488



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 185488 Report

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

Pham number 185488 has 93 members, 5 are drafts.

Phages represented in each track:

- Track 1 : PacManQ\_189, Leo04\_192, HangryHippo\_190, Cross\_190, Larnav\_191, Daubenski\_183, Scheme\_195, BlueOtter\_190, Teutsch\_189, Cursive\_191, Samisti12\_193, Pepperwood\_190, Sushi23\_191, Watermoore\_190, Peebs\_188, Tribute\_188, Paradiddles\_183, Bmoc\_194, Lululemon\_189
- Track 2 : Evy\_184
- Track 3 : EGole\_194, WhereRU\_189, Liandry\_189, Navo\_184, Jay2Jay\_196, Targaryen\_190, Bartholomune\_190, PinkiePie\_189, Squillium\_192, NootNoot\_186, Persimmon\_190, Braelyn\_186, Warpy\_194, Anedea\_195
- Track 4 : Angela\_192, MulchMansion\_193, LilMartin\_190
- Track 5 : Mildred21\_200
- Track 6 : Yaboi\_200, Sollertia\_196, BoomerJR\_195, Stanimal\_195, Genie2\_195
- Track 7 : Karimac\_200, Gibbi\_207, JimJam\_207, Bordeaux\_198, Quarant19\_200, Mugiwara\_209, SaltySpittoon\_199, StarPlatinum\_206, IchabodCrane\_195, Jollison\_197, Birchlyn\_198, TomSawyer\_204, Battuta\_197, KentuckyRacer\_206, Amabiko\_204, Spelly\_203, MindFlayer\_193, Starbow\_197, CeilingFan\_210, PumpkinSpice\_202, Wipeout\_191, LukeCage\_201, Spilled\_206
- Track 8 : Elmer\_206
- Track 9 : Tomas\_197, Annadreamy\_124
- Track 10 : Wofford\_198
- Track 11 : Enygma\_205
- Track 12 : Francob\_136
- Track 13 : Gilson\_139, Emma1919\_139, MeganTheeKilla\_137
- Track 14 : Limpid\_131
- Track 15 : SparkleGoddess\_135, Stigma\_134, Comrade\_133, Belfort\_137, Karp\_133
- Track 16 : Beuffert\_129
- Track 17 : Sham\_132
- Track 18 : Phredrick\_139, Kenrey\_142
- Track 19 : Patelgo\_140, Moab\_137
- Track 20 : Blueeyedbeauty\_131
- Track 21 : TunaTartare\_136
- Track 22 : Faust\_132, SeresaTree\_133
- Track 23 : Wakanda\_169, Muntaha\_171

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

The start number called the most often in the published annotations is 5, it was called in 81 of the 88 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amabiko\_204, Anedea\_195, Angela\_192, Annadreamy\_124, Bartholomune\_190, Battuta\_197, Belfort\_137, Beuffert\_129, Birchlyn\_198, BlueOtter\_190, Bmoc\_194, BoomerJR\_195, Bordeaux\_198, Braelyn\_186, CeilingFan\_210, Comrade\_133, Cross\_190, Cursive\_191, Daubenski\_183, EGole\_194, Elmer\_206, Emma1919\_139, Enygma\_205, Evy\_184, Faust\_132, Genie2\_195, Gibbi\_207, Gilson\_139, HangryHippo\_190, IchabodCrane\_195, Jay2Jay\_196, JimJam\_207, Jollison\_197, Karimac\_200, Karp\_133, KentuckyRacer\_206, Larnav\_191, Leo04\_192, Liandry\_189, LilMartin\_190, LukeCage\_201, Lululemon\_189, MeganTheeKilla\_137, Mildred21\_200, MindFlayer\_193, Moab\_137, Mugiwara\_209, MulchMansion\_193, Navo\_184, NootNoot\_186, PacManQ\_189, Paradiddles\_183, Patelgo\_140, Peebs\_188, Pepperwood\_190, Persimmon\_190, PinkiePie\_189, PumpkinSpice\_202, Quarant19\_200, SaltySpittoon\_199, Samisti12\_193, Scheme\_195, SeresaTree\_133, Sham\_132, Sollertia\_196, SparkleGoddess\_135, Spelly\_203, Spilled\_206, Squillium\_192, Stanimal\_195, StarPlatinum\_206, Starbow\_197, Stigma\_134, Sushi23\_191, Targaryen\_190, Teutsch\_189, TomSawyer\_204, Tomas\_197, Tribute\_188, TunaTartare\_136, Warpy\_194, Watermoore\_190, WhereRU\_189, Wipeout\_191, Wofford\_198, Yaboi\_200,

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

- 

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

- Blueeyedbeauty\_131, Francob\_136, Kenrey\_142, Limpid\_131, Muntaha\_171, Phredrick\_139, Wakanda\_169,

### Summary by start number:

Start 3:

- Found in 4 of 93 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 4 of 88
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Blueeyedbeauty\_131 (BK1), Limpid\_131 (BK1), Muntaha\_171 (BK2), Wakanda\_169 (BK2),

Start 4:

- Found in 3 of 93 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 3 of 88
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Francob\_136 (BK1), Kenrey\_142 (BK1), Phredrick\_139 (BK1),

Start 5:

- Found in 86 of 93 ( 92.5% ) of genes in pham
- Manual Annotations of this start: 81 of 88
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amabiko\_204 (BE2), Anedea\_195 (BE1), Angela\_192 (BE1), Annadreamy\_124 (BK1), Bartholomune\_190 (BE1), Battuta\_197 (BE2), Belfort\_137 (BK1), Beuffert\_129 (BK1), Birchlyn\_198 (BE2),

BlueOtter\_190 (BE1), Bmoc\_194 (BE1), BoomerJR\_195 (BE2), Bordeaux\_198 (BE2), Braelyn\_186 (BE1), CeilingFan\_210 (BE2), Comrade\_133 (BK1), Cross\_190 (BE1), Cursive\_191 (BE1), Daubenski\_183 (BE1), EGole\_194 (BE1), Elmer\_206 (BE2), Emma1919\_139 (BK1), Enygma\_205 (BE2), Evy\_184 (BE1), Faust\_132 (BK1), Genie2\_195 (BE2), Gibbi\_207 (BE2), Gilson\_139 (BK1), HangryHippo\_190 (BE1), IchabodCrane\_195 (BE2), Jay2Jay\_196 (BE1), JimJam\_207 (BE2), Jollison\_197 (BE2), Karimac\_200 (BE2), Karp\_133 (BK1), KentuckyRacer\_206 (BE2), Larnav\_191 (BE1), Leo04\_192 (BE1), Liandry\_189 (BE1), LilMartin\_190 (BE1), LukeCage\_201 (BE2), Lululemon\_189 (BE1), MeganTheeKilla\_137 (BK1), Mildred21\_200 (BE1), MindFlayer\_193 (BE2), Moab\_137 (BK1), Mugiwara\_209 (BE2), MulchMansion\_193 (BE1), Navo\_184 (BE1), NootNoot\_186 (BE1), PacManQ\_189 (BE1), Paradiddles\_183 (BE1), Patelgo\_140 (BK1), Peebs\_188 (BE1), Pepperwood\_190 (BE1), Persimmon\_190 (BE1), PinkiePie\_189 (BE1), PumpkinSpice\_202 (BE2), Quarant19\_200 (BE2), SaltySpittoon\_199 (BE2), Samisti12\_193 (BE1), Scheme\_195 (BE1), SeresaTree\_133 (BK1), Sham\_132 (BK1), Sollertia\_196 (BE2), SparkleGoddess\_135 (BK1), Spelly\_203 (BE2), Spilled\_206 (BE2), Squillium\_192 (BE1), Stanimal\_195 (BE2), StarPlatinum\_206 (BE2), Starbow\_197 (BE2), Stigma\_134 (BK1), Sushi23\_191 (BE1), Targaryen\_190 (BE1), Teutsch\_189 (BE1), TomSawyer\_204 (BE2), Tomas\_197 (BE2), Tribute\_188 (BE1), TunaTartare\_136 (BK1), Warpy\_194 (BE1), Watermoore\_190 (BE1), WhereRU\_189 (BE1), Wipeout\_191 (BE2), Wofford\_198 (BE2), Yaboi\_200 (BE2),

### **Summary by clusters:**

There are 4 clusters represented in this pham: BE2, BE1, BK1, BK2,

Info for manual annotations of cluster BE1:

- Start number 5 was manually annotated 37 times for cluster BE1.

Info for manual annotations of cluster BE2:

- Start number 5 was manually annotated 29 times for cluster BE2.

Info for manual annotations of cluster BK1:

- Start number 3 was manually annotated 2 times for cluster BK1.
- Start number 4 was manually annotated 3 times for cluster BK1.
- Start number 5 was manually annotated 15 times for cluster BK1.

Info for manual annotations of cluster BK2:

- Start number 3 was manually annotated 2 times for cluster BK2.

### **Gene Information:**

Gene: Amabiko\_204 Start: 100359, Stop: 100643, Start Num: 5

Candidate Starts for Amabiko\_204:

(Start: 5 @100359 has 81 MA's), (6, 100398),

Gene: Anedea\_195 Start: 100010, Stop: 100297, Start Num: 5

Candidate Starts for Anedea\_195:

(Start: 5 @100010 has 81 MA's), (14, 100244), (17, 100274),

Gene: Angela\_192 Start: 99651, Stop: 99953, Start Num: 5

Candidate Starts for Angela\_192:  
(Start: 5 @99651 has 81 MA's), (13, 99873),

Gene: Annadreamy\_124 Start: 73662, Stop: 73958, Start Num: 5  
Candidate Starts for Annadreamy\_124:  
(Start: 5 @73662 has 81 MA's), (17, 73935),

Gene: Bartholomune\_190 Start: 99518, Stop: 99805, Start Num: 5  
Candidate Starts for Bartholomune\_190:  
(Start: 5 @99518 has 81 MA's), (14, 99752), (17, 99782),

Gene: Battuta\_197 Start: 99675, Stop: 99959, Start Num: 5  
Candidate Starts for Battuta\_197:  
(Start: 5 @99675 has 81 MA's), (6, 99714),

Gene: Belfort\_137 Start: 80130, Stop: 80423, Start Num: 5  
Candidate Starts for Belfort\_137:  
(2, 80085), (Start: 5 @80130 has 81 MA's), (15, 80388), (17, 80397),

Gene: Beuffert\_129 Start: 77991, Stop: 78293, Start Num: 5  
Candidate Starts for Beuffert\_129:  
(Start: 5 @77991 has 81 MA's), (7, 78081), (11, 78189),

Gene: Birchlyn\_198 Start: 97607, Stop: 97891, Start Num: 5  
Candidate Starts for Birchlyn\_198:  
(Start: 5 @97607 has 81 MA's), (6, 97646),

Gene: BlueOtter\_190 Start: 100311, Stop: 100598, Start Num: 5  
Candidate Starts for BlueOtter\_190:  
(Start: 5 @100311 has 81 MA's), (17, 100575),

Gene: Blueeyedbeauty\_131 Start: 77347, Stop: 77718, Start Num: 3  
Candidate Starts for Blueeyedbeauty\_131:  
(1, 77344), (Start: 3 @77347 has 4 MA's), (19, 77698), (20, 77707),

Gene: Bmoc\_194 Start: 100157, Stop: 100444, Start Num: 5  
Candidate Starts for Bmoc\_194:  
(Start: 5 @100157 has 81 MA's), (17, 100421),

Gene: BoomerJR\_195 Start: 99877, Stop: 100176, Start Num: 5  
Candidate Starts for BoomerJR\_195:  
(Start: 5 @99877 has 81 MA's),

Gene: Bordeaux\_198 Start: 100258, Stop: 100542, Start Num: 5  
Candidate Starts for Bordeaux\_198:  
(Start: 5 @100258 has 81 MA's), (6, 100297),

Gene: Braelyn\_186 Start: 98994, Stop: 99281, Start Num: 5  
Candidate Starts for Braelyn\_186:  
(Start: 5 @98994 has 81 MA's), (14, 99228), (17, 99258),

Gene: CeilingFan\_210 Start: 101052, Stop: 101336, Start Num: 5  
Candidate Starts for CeilingFan\_210:

(Start: 5 @101052 has 81 MA's), (6, 101091),

Gene: Comrade\_133 Start: 79449, Stop: 79742, Start Num: 5

Candidate Starts for Comrade\_133:

(2, 79404), (Start: 5 @79449 has 81 MA's), (15, 79707), (17, 79716),

Gene: Cross\_190 Start: 100956, Stop: 101243, Start Num: 5

Candidate Starts for Cross\_190:

(Start: 5 @100956 has 81 MA's), (17, 101220),

Gene: Cursive\_191 Start: 99858, Stop: 100145, Start Num: 5

Candidate Starts for Cursive\_191:

(Start: 5 @99858 has 81 MA's), (17, 100122),

Gene: Daubenski\_183 Start: 100580, Stop: 100867, Start Num: 5

Candidate Starts for Daubenski\_183:

(Start: 5 @100580 has 81 MA's), (17, 100844),

Gene: EGole\_194 Start: 102608, Stop: 102895, Start Num: 5

Candidate Starts for EGole\_194:

(Start: 5 @102608 has 81 MA's), (14, 102842), (17, 102872),

Gene: Elmer\_206 Start: 103322, Stop: 103606, Start Num: 5

Candidate Starts for Elmer\_206:

(Start: 5 @103322 has 81 MA's), (12, 103523), (13, 103541),

Gene: Emma1919\_139 Start: 79324, Stop: 79626, Start Num: 5

Candidate Starts for Emma1919\_139:

(Start: 5 @79324 has 81 MA's), (7, 79414), (9, 79501),

Gene: Enygma\_205 Start: 102883, Stop: 103167, Start Num: 5

Candidate Starts for Enygma\_205:

(Start: 5 @102883 has 81 MA's), (6, 102922), (13, 103102), (16, 103138),

Gene: Evy\_184 Start: 101005, Stop: 101289, Start Num: 5

Candidate Starts for Evy\_184:

(Start: 5 @101005 has 81 MA's), (7, 101095), (17, 101266),

Gene: Faust\_132 Start: 80292, Stop: 80591, Start Num: 5

Candidate Starts for Faust\_132:

(Start: 5 @80292 has 81 MA's), (17, 80553),

Gene: Francob\_136 Start: 79522, Stop: 79821, Start Num: 4

Candidate Starts for Francob\_136:

(Start: 4 @79522 has 3 MA's), (9, 79696),

Gene: Genie2\_195 Start: 99991, Stop: 100290, Start Num: 5

Candidate Starts for Genie2\_195:

(Start: 5 @99991 has 81 MA's),

Gene: Gibbi\_207 Start: 100545, Stop: 100829, Start Num: 5

Candidate Starts for Gibbi\_207:

(Start: 5 @100545 has 81 MA's), (6, 100584),

Gene: Gilson\_139 Start: 79286, Stop: 79588, Start Num: 5  
Candidate Starts for Gilson\_139:  
(Start: 5 @79286 has 81 MA's), (7, 79376), (9, 79463),

Gene: HangryHippo\_190 Start: 100311, Stop: 100598, Start Num: 5  
Candidate Starts for HangryHippo\_190:  
(Start: 5 @100311 has 81 MA's), (17, 100575),

Gene: IchabodCrane\_195 Start: 100060, Stop: 100344, Start Num: 5  
Candidate Starts for IchabodCrane\_195:  
(Start: 5 @100060 has 81 MA's), (6, 100099),

Gene: Jay2Jay\_196 Start: 101157, Stop: 101444, Start Num: 5  
Candidate Starts for Jay2Jay\_196:  
(Start: 5 @101157 has 81 MA's), (14, 101391), (17, 101421),

Gene: JimJam\_207 Start: 101981, Stop: 102265, Start Num: 5  
Candidate Starts for JimJam\_207:  
(Start: 5 @101981 has 81 MA's), (6, 102020),

Gene: Jollison\_197 Start: 100191, Stop: 100475, Start Num: 5  
Candidate Starts for Jollison\_197:  
(Start: 5 @100191 has 81 MA's), (6, 100230),

Gene: Karimac\_200 Start: 100385, Stop: 100669, Start Num: 5  
Candidate Starts for Karimac\_200:  
(Start: 5 @100385 has 81 MA's), (6, 100424),

Gene: Karp\_133 Start: 79557, Stop: 79850, Start Num: 5  
Candidate Starts for Karp\_133:  
(2, 79512), (Start: 5 @79557 has 81 MA's), (15, 79815), (17, 79824),

Gene: Kenrey\_142 Start: 80818, Stop: 81117, Start Num: 4  
Candidate Starts for Kenrey\_142:  
(Start: 4 @80818 has 3 MA's), (9, 80992), (11, 81013),

Gene: KentuckyRacer\_206 Start: 101896, Stop: 102180, Start Num: 5  
Candidate Starts for KentuckyRacer\_206:  
(Start: 5 @101896 has 81 MA's), (6, 101935),

Gene: Larnav\_191 Start: 100931, Stop: 101218, Start Num: 5  
Candidate Starts for Larnav\_191:  
(Start: 5 @100931 has 81 MA's), (17, 101195),

Gene: Leo04\_192 Start: 101322, Stop: 101609, Start Num: 5  
Candidate Starts for Leo04\_192:  
(Start: 5 @101322 has 81 MA's), (17, 101586),

Gene: Liandry\_189 Start: 99837, Stop: 100124, Start Num: 5  
Candidate Starts for Liandry\_189:  
(Start: 5 @99837 has 81 MA's), (14, 100071), (17, 100101),

Gene: LilMartin\_190 Start: 99268, Stop: 99570, Start Num: 5  
Candidate Starts for LilMartin\_190:  
(Start: 5 @99268 has 81 MA's), (13, 99490),

Gene: Limpid\_131 Start: 78901, Stop: 79272, Start Num: 3  
Candidate Starts for Limpid\_131:  
(1, 78898), (Start: 3 @78901 has 4 MA's), (19, 79252), (20, 79261),

Gene: LukeCage\_201 Start: 101488, Stop: 101784, Start Num: 5  
Candidate Starts for LukeCage\_201:  
(Start: 5 @101488 has 81 MA's), (6, 101527),

Gene: Lululemon\_189 Start: 99692, Stop: 99979, Start Num: 5  
Candidate Starts for Lululemon\_189:  
(Start: 5 @99692 has 81 MA's), (17, 99956),

Gene: MeganTheeKilla\_137 Start: 79366, Stop: 79668, Start Num: 5  
Candidate Starts for MeganTheeKilla\_137:  
(Start: 5 @79366 has 81 MA's), (7, 79456), (9, 79543),

Gene: Mildred21\_200 Start: 98784, Stop: 99086, Start Num: 5  
Candidate Starts for Mildred21\_200:  
(Start: 5 @98784 has 81 MA's),

Gene: MindFlayer\_193 Start: 99576, Stop: 99860, Start Num: 5  
Candidate Starts for MindFlayer\_193:  
(Start: 5 @99576 has 81 MA's), (6, 99615),

Gene: Moab\_137 Start: 81658, Stop: 81960, Start Num: 5  
Candidate Starts for Moab\_137:  
(Start: 5 @81658 has 81 MA's), (18, 81934),

Gene: Mugiwara\_209 Start: 102269, Stop: 102565, Start Num: 5  
Candidate Starts for Mugiwara\_209:  
(Start: 5 @102269 has 81 MA's), (6, 102308),

Gene: MulchMansion\_193 Start: 100650, Stop: 100952, Start Num: 5  
Candidate Starts for MulchMansion\_193:  
(Start: 5 @100650 has 81 MA's), (13, 100872),

Gene: Muntaha\_171 Start: 90649, Stop: 91023, Start Num: 3  
Candidate Starts for Muntaha\_171:  
(Start: 3 @90649 has 4 MA's), (8, 90790), (19, 91006),

Gene: Navo\_184 Start: 98375, Stop: 98662, Start Num: 5  
Candidate Starts for Navo\_184:  
(Start: 5 @98375 has 81 MA's), (14, 98609), (17, 98639),

Gene: NootNoot\_186 Start: 98626, Stop: 98913, Start Num: 5  
Candidate Starts for NootNoot\_186:  
(Start: 5 @98626 has 81 MA's), (14, 98860), (17, 98890),

Gene: PacManQ\_189 Start: 99692, Stop: 99979, Start Num: 5



Candidate Starts for PacManQ\_189:  
(Start: 5 @99692 has 81 MA's), (17, 99956),

Gene: Paradiddles\_183 Start: 101298, Stop: 101585, Start Num: 5  
Candidate Starts for Paradiddles\_183:  
(Start: 5 @101298 has 81 MA's), (17, 101562),

Gene: Patelgo\_140 Start: 82350, Stop: 82652, Start Num: 5  
Candidate Starts for Patelgo\_140:  
(Start: 5 @82350 has 81 MA's), (18, 82626),

Gene: Peebs\_188 Start: 100604, Stop: 100891, Start Num: 5  
Candidate Starts for Peebs\_188:  
(Start: 5 @100604 has 81 MA's), (17, 100868),

Gene: Pepperwood\_190 Start: 100562, Stop: 100849, Start Num: 5  
Candidate Starts for Pepperwood\_190:  
(Start: 5 @100562 has 81 MA's), (17, 100826),

Gene: Persimmon\_190 Start: 98570, Stop: 98857, Start Num: 5  
Candidate Starts for Persimmon\_190:  
(Start: 5 @98570 has 81 MA's), (14, 98804), (17, 98834),

Gene: Phredrick\_139 Start: 79130, Stop: 79429, Start Num: 4  
Candidate Starts for Phredrick\_139:  
(Start: 4 @79130 has 3 MA's), (9, 79304), (11, 79325),

Gene: PinkiePie\_189 Start: 99837, Stop: 100124, Start Num: 5  
Candidate Starts for PinkiePie\_189:  
(Start: 5 @99837 has 81 MA's), (14, 100071), (17, 100101),

Gene: PumpkinSpice\_202 Start: 100797, Stop: 101081, Start Num: 5  
Candidate Starts for PumpkinSpice\_202:  
(Start: 5 @100797 has 81 MA's), (6, 100836),

Gene: Quaran19\_200 Start: 100238, Stop: 100522, Start Num: 5  
Candidate Starts for Quaran19\_200:  
(Start: 5 @100238 has 81 MA's), (6, 100277),

Gene: SaltySpittoon\_199 Start: 99780, Stop: 100064, Start Num: 5  
Candidate Starts for SaltySpittoon\_199:  
(Start: 5 @99780 has 81 MA's), (6, 99819),

Gene: Samisti12\_193 Start: 102015, Stop: 102302, Start Num: 5  
Candidate Starts for Samisti12\_193:  
(Start: 5 @102015 has 81 MA's), (17, 102279),

Gene: Scheme\_195 Start: 102199, Stop: 102486, Start Num: 5  
Candidate Starts for Scheme\_195:  
(Start: 5 @102199 has 81 MA's), (17, 102463),

Gene: SeresaTree\_133 Start: 79674, Stop: 79973, Start Num: 5  
Candidate Starts for SeresaTree\_133:

(Start: 5 @79674 has 81 MA's), (17, 79935),

Gene: Sham\_132 Start: 80226, Stop: 80525, Start Num: 5

Candidate Starts for Sham\_132:

(Start: 5 @80226 has 81 MA's), (17, 80487),

Gene: Sollertia\_196 Start: 99991, Stop: 100290, Start Num: 5

Candidate Starts for Sollertia\_196:

(Start: 5 @99991 has 81 MA's),

Gene: SparkleGoddess\_135 Start: 79749, Stop: 80042, Start Num: 5

Candidate Starts for SparkleGoddess\_135:

(2, 79704), (Start: 5 @79749 has 81 MA's), (15, 80007), (17, 80016),

Gene: Spelly\_203 Start: 99709, Stop: 99993, Start Num: 5

Candidate Starts for Spelly\_203:

(Start: 5 @99709 has 81 MA's), (6, 99748),

Gene: Spilled\_206 Start: 100913, Stop: 101197, Start Num: 5

Candidate Starts for Spilled\_206:

(Start: 5 @100913 has 81 MA's), (6, 100952),

Gene: Squillium\_192 Start: 99839, Stop: 100126, Start Num: 5

Candidate Starts for Squillium\_192:

(Start: 5 @99839 has 81 MA's), (14, 100073), (17, 100103),

Gene: Stanimal\_195 Start: 100352, Stop: 100651, Start Num: 5

Candidate Starts for Stanimal\_195:

(Start: 5 @100352 has 81 MA's),

Gene: StarPlatinum\_206 Start: 102177, Stop: 102473, Start Num: 5

Candidate Starts for StarPlatinum\_206:

(Start: 5 @102177 has 81 MA's), (6, 102216),

Gene: Starbow\_197 Start: 99753, Stop: 100037, Start Num: 5

Candidate Starts for Starbow\_197:

(Start: 5 @99753 has 81 MA's), (6, 99792),

Gene: Stigma\_134 Start: 79894, Stop: 80187, Start Num: 5

Candidate Starts for Stigma\_134:

(2, 79849), (Start: 5 @79894 has 81 MA's), (15, 80152), (17, 80161),

Gene: Sushi23\_191 Start: 101668, Stop: 101955, Start Num: 5

Candidate Starts for Sushi23\_191:

(Start: 5 @101668 has 81 MA's), (17, 101932),

Gene: Targaryen\_190 Start: 101686, Stop: 101973, Start Num: 5

Candidate Starts for Targaryen\_190:

(Start: 5 @101686 has 81 MA's), (14, 101920), (17, 101950),

Gene: Teutsch\_189 Start: 101116, Stop: 101403, Start Num: 5

Candidate Starts for Teutsch\_189:

(Start: 5 @101116 has 81 MA's), (17, 101380),

Gene: TomSawyer\_204 Start: 102224, Stop: 102508, Start Num: 5  
Candidate Starts for TomSawyer\_204:  
(Start: 5 @102224 has 81 MA's), (6, 102263),

Gene: Tomas\_197 Start: 100801, Stop: 101091, Start Num: 5  
Candidate Starts for Tomas\_197:  
(Start: 5 @100801 has 81 MA's), (17, 101068),

Gene: Tribute\_188 Start: 101133, Stop: 101420, Start Num: 5  
Candidate Starts for Tribute\_188:  
(Start: 5 @101133 has 81 MA's), (17, 101397),

Gene: TunaTartare\_136 Start: 82592, Stop: 82891, Start Num: 5  
Candidate Starts for TunaTartare\_136:  
(1, 82544), (Start: 5 @82592 has 81 MA's), (12, 82793), (17, 82853),

Gene: Wakanda\_169 Start: 90329, Stop: 90703, Start Num: 3  
Candidate Starts for Wakanda\_169:  
(Start: 3 @90329 has 4 MA's), (8, 90470), (19, 90686),

Gene: Warpy\_194 Start: 100598, Stop: 100885, Start Num: 5  
Candidate Starts for Warpy\_194:  
(Start: 5 @100598 has 81 MA's), (14, 100832), (17, 100862),

Gene: Watermoore\_190 Start: 101954, Stop: 102241, Start Num: 5  
Candidate Starts for Watermoore\_190:  
(Start: 5 @101954 has 81 MA's), (17, 102218),

Gene: WhereRU\_189 Start: 99322, Stop: 99609, Start Num: 5  
Candidate Starts for WhereRU\_189:  
(Start: 5 @99322 has 81 MA's), (14, 99556), (17, 99586),

Gene: Wipeout\_191 Start: 101176, Stop: 101460, Start Num: 5  
Candidate Starts for Wipeout\_191:  
(Start: 5 @101176 has 81 MA's), (6, 101215),

Gene: Wofford\_198 Start: 103190, Stop: 103474, Start Num: 5  
Candidate Starts for Wofford\_198:  
(Start: 5 @103190 has 81 MA's), (10, 103370), (12, 103391), (13, 103409),

Gene: Yaboi\_200 Start: 99926, Stop: 100225, Start Num: 5  
Candidate Starts for Yaboi\_200:  
(Start: 5 @99926 has 81 MA's),