



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 296262 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296262 has 198 members, 27 are drafts.

Phages represented in each track:

- Track 1 : Adolin\_58, DrManhattan\_58
- Track 2 : Reedo\_54
- Track 3 : PandaPo\_57, MissSwiss\_57
- Track 4 : Snek\_57, Tweety19\_58
- Track 5 : Emotion\_61
- Track 6 : VroomVroom\_56
- Track 7 : JohnThicc\_59, LadyAstra\_59, Origami\_58
- Track 8 : ShakeltOph\_60, MiniMommy\_60, JasmineDragon\_60
- Track 9 : FiveHead\_60
- Track 10 : AceofSpades\_57
- Track 11 : Exile\_50, Soondubu\_51
- Track 12 : AinMach\_54
- Track 13 : Beuffert\_94
- Track 14 : Forrest\_104, Gilson\_101, DeluluLabubu\_100, Maupel\_101, Phredrick\_100, Jada\_101, Emma1919\_102
- Track 15 : SparkleGoddess\_99, Karp\_97, Comrade\_98, Moab\_100, Stigma\_98, Westy\_103, Patelgo\_99, Belfort\_101
- Track 16 : Kenrey\_102, Francob\_99
- Track 17 : Blueeyedbeauty\_96, Annadreamy\_94, Limpid\_93
- Track 18 : NiceHouse\_187
- Track 19 : Trina\_197
- Track 20 : Francesca\_175, Dorin\_173
- Track 21 : Nova53\_185
- Track 22 : Sidious\_47
- Track 23 : Malibo\_48
- Track 24 : Marshmallow\_72, MollyToe\_69, Mindy\_73, Dumbo\_74, Flypotenuse\_70, Hoonter\_77, TBrady12\_77, Manda\_75, Daikon\_76, IHOP\_72, Easy2Say\_75, FoghornLeghorn\_68, Bogg\_74, ABCat\_71, Rimmer\_75, OrionPax\_73, Teaspoon\_75, ShamWow\_74, Buck\_75, Porky\_73, Amao\_74, Highbury\_73, SophKB\_71, Ukulele\_69, Cactus\_77, NelitzaMV\_72, NoSleep\_75, Glexan\_73, Eureka\_72, Nala\_76, xkcd\_77, Kostya\_74, SirDuracell\_73, AmericanBeauty\_78, TeardropMSU\_70, Pat3\_72, Sotrice96\_75, GoldenSpark\_78, Myrale\_74, Cookies\_71, GooberAzure\_77, Goldilocks\_77, Harella\_74, Kimchi\_78, Icee\_75, Murica\_77, ChotaBhai\_74, Inca\_71, Toto\_72, Balomoji\_74, Kanye\_71, Command613\_76, Saints25\_73, Gemini\_79, 244\_75, Elite2014\_73, CrystalP\_73, StormChicken\_76, Brewer\_69, FairyPath\_74, Cjw1\_74, JeTaimé\_74, BaboJay\_71, ChosenOne\_74, Emmina\_74, Gage\_76, Goku\_72, Simpliphy\_73, BadStone\_71,

Nimrod\_75, DoctorDiddles\_73, Argent26\_78, Henry\_72, HuffyPuff\_77, Bask21\_74, Petra64142\_78, FireRed\_78, ShereKhan\_73, Ptowny\_71, Tuco\_75, StolenFromERC\_77, Holt\_79, Qualification\_75, NonchalantPear\_72, Lilpickle\_73, MadamMonkfish\_74, BilboSwaggins\_72, Stank\_77

- Track 25 : Dusk\_71
- Track 26 : Cen1621\_30
- Track 27 : WaterT\_74
- Track 28 : Sweetums\_49, DelaGarza\_49, Gingerbug\_48, Teng\_53
- Track 29 : Lesiram\_50
- Track 30 : Aminay\_54
- Track 31 : Fishburne\_33, Polkaroo\_33, Majeke\_33, Brusacoram\_33, Atcoo\_33, Bartholomew\_32, Venti\_33, KilKor\_33, Phalm\_33, Mangethe\_33, BronnyJr\_33, Gavriela\_33, Willsammy\_32, Vidya\_33, Megiddo\_33, Necropolis\_33, Camster\_33, Bunnies\_33, Kari\_33, FirstPlacePfu\_33, Juniormint\_33, Etoile\_33, Jung\_32, Techage\_33, Ksquared\_33, Malithi\_33, Sonah\_33, Thespis\_33, StressBall\_33, CactusJack\_33, Zilizebeth\_33, Glaske\_33, Phegasus\_33
- Track 32 : PeanutPie\_33, Bhagsy\_33
- Track 33 : Dynamo\_33, Chubbello\_33, Phineas\_33
- Track 34 : Langerak\_33, Shipwreck\_35, Pygmy\_35, Bogie\_35, Arib1\_33, GaloreK\_33
- Track 35 : HUHilltop\_33, Donovan\_33
- Track 36 : GreaseLightnin\_33, StevieRay\_33
- Track 37 : Jebeks\_34
- Track 38 : BigNuz\_36, Nazo\_37
- Track 39 : Phayonce\_35
- Track 40 : Purky\_40

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

The start number called the most often in the published annotations is 13, it was called in 79 of the 171 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244\_75, ABCat\_71, Amao\_74, AmericanBeauty\_78, Argent26\_78, BaboJay\_71, BadStone\_71, Balomoji\_74, Bask21\_74, BilboSwaggins\_72, Bogg\_74, Brewer\_69, Buck\_75, Cactus\_77, ChosenOne\_74, ChotaBhai\_74, Cjw1\_74, Command613\_76, Cookies\_71, CrystalP\_73, Daikon\_76, DoctorDiddles\_73, Dumbo\_74, Dusk\_71, Easy2Say\_75, Elite2014\_73, Emmina\_74, Eureka\_72, FairyPath\_74, FireRed\_78, Flypotenuse\_70, FoghornLeghorn\_68, Gage\_76, Gemini\_79, Glexan\_73, Goku\_72, GoldenSpark\_78, Goldilocks\_77, GooberAzure\_77, Harella\_74, Henry\_72, Highbury\_73, Holt\_79, Hoonter\_77, HuffyPuff\_77, IHOP\_72, Icee\_75, Inca\_71, JeTaimie\_74, Kanye\_71, Kimchi\_78, Kostya\_74, Lilpickle\_73, MadamMonkfish\_74, Manda\_75, Marshmallow\_72, Mindy\_73, MollyToe\_69, Murica\_77, Myrale\_74, Nala\_76, NelitzaMV\_72, Nimrod\_75, NoSleep\_75, NonchalantPear\_72, OrionPax\_73, Pat3\_72, Petra64142\_78, Porky\_73, Ptowny\_71, Qualification\_75, Rimmer\_75, Saints25\_73, ShamWow\_74, ShereKhan\_73, Simpliphy\_73, SirDuracell\_73, SophKB\_71, Sotrice96\_75, Stank\_77, StolenFromERC\_77, StormChicken\_76, TBrady12\_77, TeardropMSU\_70, Teaspoon\_75, Toto\_72, Tuco\_75, Ukulele\_69, xkcd\_77,

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

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

- AceofSpades\_57, Adolin\_58, AinMach\_54, Aminay\_54, Annadreamy\_94, Arib1\_33, Atcoo\_33, Bartholomew\_32, Belfort\_101, Beuffert\_94, Bhagsy\_33, BigNuz\_36, Blueeyedbeauty\_96, Bogie\_35, BronnyJr\_33, Brusacoram\_33, Bunnies\_33, CactusJack\_33, Camster\_33, Cen1621\_30, Chubbello\_33, Comrade\_98, DelaGarza\_49, DeluluLabubu\_100, Donovan\_33, Dorin\_173, DrManhattan\_58, Dynamo\_33, Emma1919\_102, Emotion\_61, Etoile\_33, Exile\_50, FirstPlacePfu\_33, Fishburne\_33, FiveHead\_60, Forrest\_104, Francesca\_175, Francob\_99, GaloreK\_33, Gavriela\_33, Gilson\_101, Gingerbug\_48, Glaske\_33, GreaseLightnin\_33, HUHilltop\_33, Jada\_101, JasmineDragon\_60, Jebeks\_34, JohnThicc\_59, Jung\_32, Juniormint\_33, Kari\_33, Karp\_97, Kenrey\_102, KilKor\_33, Ksquared\_33, LadyAstra\_59, Langerak\_33, Lesiram\_50, Limpid\_93, Majeke\_33, Malibo\_48, Malithi\_33, Mangethe\_33, Maupel\_101, Megiddo\_33, MiniMommy\_60, MissSwiss\_57, Moab\_100, Nazo\_37, Necropolis\_33, NiceHouse\_187, Nova53\_185, Origami\_58, PandaPo\_57, Patelgo\_99, PeanutPie\_33, Phalm\_33, Phayonce\_35, Phegasus\_33, Phineas\_33, Phredrick\_100, Polkaroo\_33, Purky\_40, Pygmy\_35, Reedo\_54, ShakeltOph\_60, Shipwreck\_35, Sidious\_47, Sneak\_57, Sonah\_33, Soondubu\_51, SparkleGoddess\_99, StevieRay\_33, Stigma\_98, StressBall\_33, Sweetums\_49, Techage\_33, Teng\_53, Thespis\_33, Trina\_197, Tweety19\_58, Venti\_33, Vidya\_33, VroomVroom\_56, WaterT\_74, Westy\_103, Willsammy\_32, Zilizebeth\_33,

### Summary by start number:

Start 7:

- Found in 53 of 198 ( 26.8% ) of genes in pham
- Manual Annotations of this start: 47 of 171
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arib1\_33 (P1), Atcoo\_33 (P1), Bartholomew\_32 (P1), Bhagsy\_33 (P1), BigNuz\_36 (P4), Bogie\_35 (P1), BronnyJr\_33 (P1), Brusacoram\_33 (P1), Bunnies\_33 (P1), CactusJack\_33 (P1), Camster\_33 (P1), Chubbello\_33 (P1), Donovan\_33 (P1), Dynamo\_33 (P1), Etoile\_33 (P1), FirstPlacePfu\_33 (P1), Fishburne\_33 (P1), GaloreK\_33 (P1), Gavriela\_33 (P1), Glaske\_33 (P1), GreaseLightnin\_33 (P1), HUHilltop\_33 (P1), Jebeks\_34 (P1), Jung\_32 (P1), Juniormint\_33 (P1), Kari\_33 (P1), KilKor\_33 (P1), Ksquared\_33 (P1), Langerak\_33 (P1), Majeke\_33 (P1), Malithi\_33 (P1), Mangethe\_33 (P1), Megiddo\_33 (P1), Nazo\_37 (P4), Necropolis\_33 (P1), PeanutPie\_33 (P1), Phalm\_33 (P1), Phayonce\_35 (P5), Phegasus\_33 (P1), Phineas\_33 (P1), Polkaroo\_33 (P1), Purky\_40 (P6), Pygmy\_35 (P1), Shipwreck\_35 (P1), Sonah\_33 (P1), StevieRay\_33 (P1), StressBall\_33 (P1), Techage\_33 (P1), Thespis\_33 (P1), Venti\_33 (P1), Vidya\_33 (P1), Willsammy\_32 (P1), Zilizebeth\_33 (P1),

Start 8:

- Found in 5 of 198 ( 2.5% ) of genes in pham
- Manual Annotations of this start: 3 of 171
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DelaGarza\_49 (GF), Gingerbug\_48 (GF), Lesiram\_50 (GF), Sweetums\_49 (GF), Teng\_53 (GF),

Start 9:

- Found in 7 of 198 ( 3.5% ) of genes in pham
- Manual Annotations of this start: 2 of 171
- Called 42.9% of time when present
- Phage (with cluster) where this start called: AceofSpades\_57 (AZ4), Emotion\_61 (AZ4), VroomVroom\_56 (AZ4),

#### Start 10:

- Found in 1 of 198 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 171
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cen1621\_30 (EH),

#### Start 12:

- Found in 2 of 198 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 2 of 171
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Malibo\_48 (DW), Sidious\_47 (CZ7),

#### Start 13:

- Found in 89 of 198 ( 44.9% ) of genes in pham
- Manual Annotations of this start: 79 of 171
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 244\_75 (E), ABCat\_71 (E), Amao\_74 (E), AmericanBeauty\_78 (E), Argent26\_78 (E), BaboJay\_71 (E), BadStone\_71 (E), Balomoji\_74 (E), Bask21\_74 (E), BilboSwaggins\_72 (E), Bogg\_74 (E), Brewer\_69 (E), Buck\_75 (E), Cactus\_77 (E), ChosenOne\_74 (E), ChotaBhai\_74 (E), Cjw1\_74 (E), Command613\_76 (E), Cookies\_71 (E), CrystalP\_73 (E), Daikon\_76 (E), DoctorDiddles\_73 (E), Dumbo\_74 (E), Dusk\_71 (E), Easy2Say\_75 (E), Elite2014\_73 (E), Emmina\_74 (E), Eureka\_72 (E), FairyPath\_74 (E), FireRed\_78 (E), Flypotenuse\_70 (E), FoghornLeghorn\_68 (E), Gage\_76 (E), Gemini\_79 (E), Glexan\_73 (E), Goku\_72 (E), GoldenSpark\_78 (E), Goldilocks\_77 (E), GooberAzure\_77 (E), Harella\_74 (E), Henry\_72 (E), Highbury\_73 (E), Holt\_79 (E), Hoonter\_77 (E), HufflyPuff\_77 (E), IHOP\_72 (E), Icee\_75 (E), Inca\_71 (E), JeTaima\_74 (E), Kanye\_71 (E), Kimchi\_78 (E), Kostya\_74 (E), Lilpickle\_73 (E), MadamMonkfish\_74 (E), Manda\_75 (E), Marshmallow\_72 (E), Mindy\_73 (E), MollyToe\_69 (E), Murica\_77 (E), Myrale\_74 (E), Nala\_76 (E), NelitzaMV\_72 (E), Nimrod\_75 (E), NoSleep\_75 (E), NonchalantPear\_72 (E), OrionPax\_73 (E), Pat3\_72 (E), Petra64142\_78 (E), Porky\_73 (E), Ptowny\_71 (E), Qualification\_75 (E), Rimmer\_75 (E), Saints25\_73 (E), ShamWow\_74 (E), ShereKhan\_73 (E), Simpliphy\_73 (E), SirDuracell\_73 (E), SophKB\_71 (E), Sotrice96\_75 (E), Stank\_77 (E), StolenFromERC\_77 (E), StormChicken\_76 (E), TBrady12\_77 (E), TeardropMSU\_70 (E), Teaspoon\_75 (E), Toto\_72 (E), Tuco\_75 (E), Ukulele\_69 (E), xkcd\_77 (E),

#### Start 14:

- Found in 4 of 198 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 3 of 171
- Called 75.0% of time when present
- Phage (with cluster) where this start called: NiceHouse\_187 (CE), Trina\_197 (CE), WaterT\_74 (GB),

#### Start 15:

- Found in 4 of 198 ( 2.0% ) of genes in pham

- Manual Annotations of this start: 4 of 171
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annadreamy\_94 (BK1), Beuffert\_94 (BK1), Blueeyedbeauty\_96 (BK1), Limpid\_93 (BK1),

#### Start 16:

- Found in 17 of 198 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 16 of 171
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Belfort\_101 (BK1), Comrade\_98 (BK1), DeluluLabubu\_100 (BK1), Emma1919\_102 (BK1), Forrest\_104 (BK1), Francob\_99 (BK1), Gilson\_101 (BK1), Jada\_101 (BK1), Karp\_97 (BK1), Kenrey\_102 (BK1), Maupel\_101 (BK1), Moab\_100 (BK1), Patelgo\_99 (BK1), Phredrick\_100 (BK1), SparkleGoddess\_99 (BK1), Stigma\_98 (BK1), Westy\_103 (BK1),

#### Start 18:

- Found in 1 of 198 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 171
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay\_54 (K7),

#### Start 19:

- Found in 3 of 198 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 3 of 171
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dorin\_173 (CG), Francesca\_175 (CG), Nova53\_185 (CG),

#### Start 21:

- Found in 25 of 198 ( 12.6% ) of genes in pham
- Manual Annotations of this start: 10 of 171
- Called 68.0% of time when present
- Phage (with cluster) where this start called: Adolin\_58 (AZ1), AinMach\_54 (AZ7), DrManhattan\_58 (AZ1), Exile\_50 (AZ6), FiveHead\_60 (AZ4), JasmineDragon\_60 (AZ4), JohnThicc\_59 (AZ4), LadyAstra\_59 (AZ4), MiniMommy\_60 (AZ4), MissSwiss\_57 (AZ1), Origami\_58 (AZ4), PandaPo\_57 (AZ1), Reedo\_54 (AZ1), ShakeltOph\_60 (AZ4), Snek\_57 (AZ3), Soondubu\_51 (AZ6), Tweety19\_58 (AZ3),

### Summary by clusters:

There are 19 clusters represented in this pham: P1, E, EH, P4, P5, CG, P6, CZ7, CE, GF, K7, BK1, DW, AZ7, AZ1, AZ3, AZ4, AZ6, GB,

Info for manual annotations of cluster AZ1:

- Start number 21 was manually annotated 4 times for cluster AZ1.

Info for manual annotations of cluster AZ3:

- Start number 21 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 9 was manually annotated 2 times for cluster AZ4.
- Start number 21 was manually annotated 3 times for cluster AZ4.

Info for manual annotations of cluster AZ6:

- Start number 21 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BK1:

- Start number 15 was manually annotated 4 times for cluster BK1.
- Start number 16 was manually annotated 16 times for cluster BK1.

Info for manual annotations of cluster CE:

- Start number 14 was manually annotated 2 times for cluster CE.

Info for manual annotations of cluster CG:

- Start number 19 was manually annotated 3 times for cluster CG.

Info for manual annotations of cluster CZ7:

- Start number 12 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DW:

- Start number 12 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster E:

- Start number 13 was manually annotated 79 times for cluster E.

Info for manual annotations of cluster EH:

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

Info for manual annotations of cluster GB:

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

Info for manual annotations of cluster GF:

- Start number 8 was manually annotated 3 times for cluster GF.

Info for manual annotations of cluster K7:

- Start number 18 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster P1:

- Start number 7 was manually annotated 43 times for cluster P1.

Info for manual annotations of cluster P4:

- Start number 7 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 7 was manually annotated 1 time for cluster P5.

Info for manual annotations of cluster P6:

- Start number 7 was manually annotated 1 time for cluster P6.

**Gene Information:**

Gene: 244\_75 Start: 47793, Stop: 47966, Start Num: 13

Candidate Starts for 244\_75:

(Start: 13 @47793 has 79 MA's), (25, 47844),

Gene: ABCat\_71 Start: 48146, Stop: 48319, Start Num: 13

Candidate Starts for ABCat\_71:

(Start: 13 @48146 has 79 MA's), (25, 48197),

Gene: AceofSpades\_57 Start: 39591, Stop: 39779, Start Num: 9

Candidate Starts for AceofSpades\_57:

(Start: 9 @39591 has 2 MA's), (Start: 21 @39633 has 10 MA's),

Gene: Adolin\_58 Start: 37478, Stop: 37633, Start Num: 21

Candidate Starts for Adolin\_58:

(Start: 21 @37478 has 10 MA's), (32, 37556),

Gene: AinMach\_54 Start: 37308, Stop: 37466, Start Num: 21

Candidate Starts for AinMach\_54:

(Start: 21 @37308 has 10 MA's), (27, 37350), (28, 37356),

Gene: Amao\_74 Start: 47566, Stop: 47739, Start Num: 13

Candidate Starts for Amao\_74:

(Start: 13 @47566 has 79 MA's), (25, 47617),

Gene: AmericanBeauty\_78 Start: 48315, Stop: 48488, Start Num: 13

Candidate Starts for AmericanBeauty\_78:

(Start: 13 @48315 has 79 MA's), (25, 48366),

Gene: Aminay\_54 Start: 38354, Stop: 38521, Start Num: 18

Candidate Starts for Aminay\_54:

(Start: 18 @38354 has 1 MA's),

Gene: Annadreamy\_94 Start: 66362, Stop: 66547, Start Num: 15

Candidate Starts for Annadreamy\_94:

(Start: 15 @66362 has 4 MA's), (30, 66434),

Gene: Argent26\_78 Start: 47953, Stop: 48126, Start Num: 13

Candidate Starts for Argent26\_78:

(Start: 13 @47953 has 79 MA's), (25, 48004),

Gene: Arib1\_33 Start: 27712, Stop: 27948, Start Num: 7

Candidate Starts for Arib1\_33:

(Start: 7 @27712 has 47 MA's), (32, 27859), (33, 27871), (38, 27931),

Gene: Atcoo\_33 Start: 28193, Stop: 28429, Start Num: 7

Candidate Starts for Atcoo\_33:

(Start: 7 @28193 has 47 MA's), (11, 28238), (25, 28298), (32, 28340), (33, 28352), (38, 28412),

Gene: BaboJay\_71 Start: 47346, Stop: 47519, Start Num: 13

Candidate Starts for BaboJay\_71:

(Start: 13 @47346 has 79 MA's), (25, 47397),

Gene: BadStone\_71 Start: 47715, Stop: 47888, Start Num: 13

Candidate Starts for BadStone\_71:

(Start: 13 @47715 has 79 MA's), (25, 47766),

Gene: Balomoji\_74 Start: 48276, Stop: 48449, Start Num: 13

Candidate Starts for Balomoji\_74:

(Start: 13 @48276 has 79 MA's), (25, 48327),

Gene: Bartholomew\_32 Start: 27706, Stop: 27942, Start Num: 7

Candidate Starts for Bartholomew\_32:

(Start: 7 @27706 has 47 MA's), (11, 27751), (25, 27811), (32, 27853), (33, 27865), (38, 27925),

Gene: Bask21\_74 Start: 47129, Stop: 47302, Start Num: 13

Candidate Starts for Bask21\_74:

(Start: 13 @47129 has 79 MA's), (25, 47180),

Gene: Belfort\_101 Start: 68605, Stop: 68790, Start Num: 16

Candidate Starts for Belfort\_101:

(Start: 16 @68605 has 16 MA's), (30, 68677),

Gene: Beuffert\_94 Start: 66921, Stop: 67106, Start Num: 15

Candidate Starts for Beuffert\_94:

(Start: 15 @66921 has 4 MA's),

Gene: Bhagsy\_33 Start: 27702, Stop: 27938, Start Num: 7

Candidate Starts for Bhagsy\_33:

(Start: 7 @27702 has 47 MA's), (11, 27747), (25, 27807), (32, 27849), (33, 27861),

Gene: BigNuz\_36 Start: 29834, Stop: 30067, Start Num: 7

Candidate Starts for BigNuz\_36:

(Start: 7 @29834 has 47 MA's), (33, 29990),

Gene: BilboSwaggins\_72 Start: 48154, Stop: 48327, Start Num: 13

Candidate Starts for BilboSwaggins\_72:

(Start: 13 @48154 has 79 MA's), (25, 48205),

Gene: Blueeyedbeauty\_96 Start: 66320, Stop: 66505, Start Num: 15

Candidate Starts for Blueeyedbeauty\_96:

(Start: 15 @66320 has 4 MA's), (30, 66392),

Gene: Bogg\_74 Start: 47092, Stop: 47265, Start Num: 13

Candidate Starts for Bogg\_74:

(Start: 13 @47092 has 79 MA's), (25, 47143),

Gene: Bogie\_35 Start: 29489, Stop: 29725, Start Num: 7

Candidate Starts for Bogie\_35:

(Start: 7 @29489 has 47 MA's), (32, 29636), (33, 29648), (38, 29708),

Gene: Brewer\_69 Start: 46615, Stop: 46788, Start Num: 13

Candidate Starts for Brewer\_69:

(Start: 13 @46615 has 79 MA's), (25, 46666),

Gene: BronnyJr\_33 Start: 28203, Stop: 28439, Start Num: 7

Candidate Starts for BronnyJr\_33:

(Start: 7 @28203 has 47 MA's), (11, 28248), (25, 28308), (32, 28350), (33, 28362), (38, 28422),

Gene: Brusacoram\_33 Start: 27699, Stop: 27935, Start Num: 7  
Candidate Starts for Brusacoram\_33:  
(Start: 7 @27699 has 47 MA's), (11, 27744), (25, 27804), (32, 27846), (33, 27858), (38, 27918),

Gene: Buck\_75 Start: 48394, Stop: 48567, Start Num: 13  
Candidate Starts for Buck\_75:  
(Start: 13 @48394 has 79 MA's), (25, 48445),

Gene: Bunnies\_33 Start: 27720, Stop: 27956, Start Num: 7  
Candidate Starts for Bunnies\_33:  
(Start: 7 @27720 has 47 MA's), (11, 27765), (25, 27825), (32, 27867), (33, 27879), (38, 27939),

Gene: Cactus\_77 Start: 47170, Stop: 47343, Start Num: 13  
Candidate Starts for Cactus\_77:  
(Start: 13 @47170 has 79 MA's), (25, 47221),

Gene: CactusJack\_33 Start: 27963, Stop: 28199, Start Num: 7  
Candidate Starts for CactusJack\_33:  
(Start: 7 @27963 has 47 MA's), (11, 28008), (25, 28068), (32, 28110), (33, 28122), (38, 28182),

Gene: Camster\_33 Start: 27736, Stop: 27972, Start Num: 7  
Candidate Starts for Camster\_33:  
(Start: 7 @27736 has 47 MA's), (11, 27781), (25, 27841), (32, 27883), (33, 27895), (38, 27955),

Gene: Cen1621\_30 Start: 22502, Stop: 22687, Start Num: 10  
Candidate Starts for Cen1621\_30:  
(Start: 10 @22502 has 1 MA's),

Gene: ChosenOne\_74 Start: 47170, Stop: 47343, Start Num: 13  
Candidate Starts for ChosenOne\_74:  
(Start: 13 @47170 has 79 MA's), (25, 47221),

Gene: ChotaBhai\_74 Start: 47494, Stop: 47667, Start Num: 13  
Candidate Starts for ChotaBhai\_74:  
(Start: 13 @47494 has 79 MA's), (25, 47545),

Gene: Chubbello\_33 Start: 27705, Stop: 27938, Start Num: 7  
Candidate Starts for Chubbello\_33:  
(Start: 7 @27705 has 47 MA's), (27, 27819), (38, 27921),

Gene: Cjw1\_74 Start: 48867, Stop: 49040, Start Num: 13  
Candidate Starts for Cjw1\_74:  
(Start: 13 @48867 has 79 MA's), (25, 48918),

Gene: Command613\_76 Start: 48209, Stop: 48382, Start Num: 13  
Candidate Starts for Command613\_76:  
(Start: 13 @48209 has 79 MA's), (25, 48260),

Gene: Comrade\_98 Start: 67922, Stop: 68107, Start Num: 16  
Candidate Starts for Comrade\_98:  
(Start: 16 @67922 has 16 MA's), (30, 67994),

Gene: Cookies\_71 Start: 47351, Stop: 47524, Start Num: 13

Candidate Starts for Cookies\_71:  
(Start: 13 @47351 has 79 MA's), (25, 47402),

Gene: CrystalP\_73 Start: 48154, Stop: 48327, Start Num: 13  
Candidate Starts for CrystalP\_73:  
(Start: 13 @48154 has 79 MA's), (25, 48205),

Gene: Daikon\_76 Start: 48297, Stop: 48470, Start Num: 13  
Candidate Starts for Daikon\_76:  
(Start: 13 @48297 has 79 MA's), (25, 48348),

Gene: DelaGarza\_49 Start: 28678, Stop: 28896, Start Num: 8  
Candidate Starts for DelaGarza\_49:  
(Start: 8 @28678 has 3 MA's), (17, 28726), (Start: 21 @28741 has 10 MA's),

Gene: DeluluLabubu\_100 Start: 66761, Stop: 66946, Start Num: 16  
Candidate Starts for DeluluLabubu\_100:  
(Start: 16 @66761 has 16 MA's),

Gene: DoctorDiddles\_73 Start: 47538, Stop: 47711, Start Num: 13  
Candidate Starts for DoctorDiddles\_73:  
(Start: 13 @47538 has 79 MA's), (25, 47589),

Gene: Donovan\_33 Start: 27728, Stop: 27964, Start Num: 7  
Candidate Starts for Donovan\_33:  
(Start: 7 @27728 has 47 MA's), (11, 27773), (32, 27875), (33, 27887),

Gene: Dorin\_173 Start: 95195, Stop: 95365, Start Num: 19  
Candidate Starts for Dorin\_173:  
(Start: 19 @95195 has 3 MA's), (27, 95243), (30, 95258), (34, 95288),

Gene: DrManhattan\_58 Start: 37046, Stop: 37201, Start Num: 21  
Candidate Starts for DrManhattan\_58:  
(Start: 21 @37046 has 10 MA's), (32, 37124),

Gene: Dumbo\_74 Start: 47075, Stop: 47248, Start Num: 13  
Candidate Starts for Dumbo\_74:  
(Start: 13 @47075 has 79 MA's), (25, 47126),

Gene: Dusk\_71 Start: 47375, Stop: 47548, Start Num: 13  
Candidate Starts for Dusk\_71:  
(Start: 13 @47375 has 79 MA's),

Gene: Dynamo\_33 Start: 28117, Stop: 28350, Start Num: 7  
Candidate Starts for Dynamo\_33:  
(Start: 7 @28117 has 47 MA's), (27, 28231), (38, 28333),

Gene: Easy2Say\_75 Start: 48619, Stop: 48792, Start Num: 13  
Candidate Starts for Easy2Say\_75:  
(Start: 13 @48619 has 79 MA's), (25, 48670),

Gene: Elite2014\_73 Start: 47169, Stop: 47342, Start Num: 13  
Candidate Starts for Elite2014\_73:

(Start: 13 @47169 has 79 MA's), (25, 47220),

Gene: Emma1919\_102 Start: 67382, Stop: 67567, Start Num: 16

Candidate Starts for Emma1919\_102:

(Start: 16 @67382 has 16 MA's),

Gene: Emmina\_74 Start: 47076, Stop: 47249, Start Num: 13

Candidate Starts for Emmina\_74:

(Start: 13 @47076 has 79 MA's), (25, 47127),

Gene: Emotion\_61 Start: 40785, Stop: 40988, Start Num: 9

Candidate Starts for Emotion\_61:

(4, 40701), (Start: 9 @40785 has 2 MA's), (Start: 21 @40836 has 10 MA's),

Gene: Etoile\_33 Start: 27706, Stop: 27942, Start Num: 7

Candidate Starts for Etoile\_33:

(Start: 7 @27706 has 47 MA's), (11, 27751), (25, 27811), (32, 27853), (33, 27865), (38, 27925),

Gene: Eureka\_72 Start: 47640, Stop: 47813, Start Num: 13

Candidate Starts for Eureka\_72:

(Start: 13 @47640 has 79 MA's), (25, 47691),

Gene: Exile\_50 Start: 40505, Stop: 40657, Start Num: 21

Candidate Starts for Exile\_50:

(Start: 21 @40505 has 10 MA's), (29, 40547), (37, 40637),

Gene: FairyPath\_74 Start: 48288, Stop: 48461, Start Num: 13

Candidate Starts for FairyPath\_74:

(Start: 13 @48288 has 79 MA's), (25, 48339),

Gene: FireRed\_78 Start: 48663, Stop: 48836, Start Num: 13

Candidate Starts for FireRed\_78:

(Start: 13 @48663 has 79 MA's), (25, 48714),

Gene: FirstPlacePfu\_33 Start: 27738, Stop: 27974, Start Num: 7

Candidate Starts for FirstPlacePfu\_33:

(Start: 7 @27738 has 47 MA's), (11, 27783), (25, 27843), (32, 27885), (33, 27897), (38, 27957),

Gene: Fishburne\_33 Start: 27706, Stop: 27942, Start Num: 7

Candidate Starts for Fishburne\_33:

(Start: 7 @27706 has 47 MA's), (11, 27751), (25, 27811), (32, 27853), (33, 27865), (38, 27925),

Gene: FiveHead\_60 Start: 39271, Stop: 39417, Start Num: 21

Candidate Starts for FiveHead\_60:

(Start: 9 @39229 has 2 MA's), (Start: 21 @39271 has 10 MA's), (32, 39349),

Gene: Flypotenuse\_70 Start: 47160, Stop: 47333, Start Num: 13

Candidate Starts for Flypotenuse\_70:

(Start: 13 @47160 has 79 MA's), (25, 47211),

Gene: FoghornLeghorn\_68 Start: 46173, Stop: 46346, Start Num: 13

Candidate Starts for FoghornLeghorn\_68:

(Start: 13 @46173 has 79 MA's), (25, 46224),

Gene: Forrest\_104 Start: 69125, Stop: 69310, Start Num: 16  
Candidate Starts for Forrest\_104:  
(Start: 16 @69125 has 16 MA's),

Gene: Francesca\_175 Start: 96114, Stop: 96284, Start Num: 19  
Candidate Starts for Francesca\_175:  
(Start: 19 @96114 has 3 MA's), (27, 96162), (30, 96177), (34, 96207),

Gene: Francob\_99 Start: 67565, Stop: 67750, Start Num: 16  
Candidate Starts for Francob\_99:  
(Start: 16 @67565 has 16 MA's), (30, 67637),

Gene: Gage\_76 Start: 47953, Stop: 48126, Start Num: 13  
Candidate Starts for Gage\_76:  
(Start: 13 @47953 has 79 MA's), (25, 48004),

Gene: GaloreK\_33 Start: 27702, Stop: 27938, Start Num: 7  
Candidate Starts for GaloreK\_33:  
(Start: 7 @27702 has 47 MA's), (32, 27849), (33, 27861), (38, 27921),

Gene: Gavriela\_33 Start: 27963, Stop: 28199, Start Num: 7  
Candidate Starts for Gavriela\_33:  
(Start: 7 @27963 has 47 MA's), (11, 28008), (25, 28068), (32, 28110), (33, 28122), (38, 28182),

Gene: Gemini\_79 Start: 48470, Stop: 48643, Start Num: 13  
Candidate Starts for Gemini\_79:  
(Start: 13 @48470 has 79 MA's), (25, 48521),

Gene: Gilson\_101 Start: 67344, Stop: 67529, Start Num: 16  
Candidate Starts for Gilson\_101:  
(Start: 16 @67344 has 16 MA's),

Gene: Gingerbug\_48 Start: 29164, Stop: 29382, Start Num: 8  
Candidate Starts for Gingerbug\_48:  
(Start: 8 @29164 has 3 MA's), (17, 29212), (Start: 21 @29227 has 10 MA's),

Gene: Glaske\_33 Start: 27963, Stop: 28199, Start Num: 7  
Candidate Starts for Glaske\_33:  
(Start: 7 @27963 has 47 MA's), (11, 28008), (25, 28068), (32, 28110), (33, 28122), (38, 28182),

Gene: Glexan\_73 Start: 48290, Stop: 48463, Start Num: 13  
Candidate Starts for Glexan\_73:  
(Start: 13 @48290 has 79 MA's), (25, 48341),

Gene: Goku\_72 Start: 47369, Stop: 47542, Start Num: 13  
Candidate Starts for Goku\_72:  
(Start: 13 @47369 has 79 MA's), (25, 47420),

Gene: GoldenSpark\_78 Start: 47953, Stop: 48126, Start Num: 13  
Candidate Starts for GoldenSpark\_78:  
(Start: 13 @47953 has 79 MA's), (25, 48004),

Gene: Goldilocks\_77 Start: 47451, Stop: 47624, Start Num: 13  
Candidate Starts for Goldilocks\_77:  
(Start: 13 @47451 has 79 MA's), (25, 47502),

Gene: GooberAzure\_77 Start: 47953, Stop: 48126, Start Num: 13  
Candidate Starts for GooberAzure\_77:  
(Start: 13 @47953 has 79 MA's), (25, 48004),

Gene: GreaseLightnin\_33 Start: 27955, Stop: 28182, Start Num: 7  
Candidate Starts for GreaseLightnin\_33:  
(Start: 7 @27955 has 47 MA's), (32, 28093),

Gene: HUHilltop\_33 Start: 27739, Stop: 27975, Start Num: 7  
Candidate Starts for HUHilltop\_33:  
(Start: 7 @27739 has 47 MA's), (11, 27784), (32, 27886), (33, 27898),

Gene: Harella\_74 Start: 48806, Stop: 48979, Start Num: 13  
Candidate Starts for Harella\_74:  
(Start: 13 @48806 has 79 MA's), (25, 48857),

Gene: Henry\_72 Start: 47594, Stop: 47767, Start Num: 13  
Candidate Starts for Henry\_72:  
(Start: 13 @47594 has 79 MA's), (25, 47645),

Gene: Highbury\_73 Start: 47242, Stop: 47415, Start Num: 13  
Candidate Starts for Highbury\_73:  
(Start: 13 @47242 has 79 MA's), (25, 47293),

Gene: Holt\_79 Start: 48367, Stop: 48540, Start Num: 13  
Candidate Starts for Holt\_79:  
(Start: 13 @48367 has 79 MA's), (25, 48418),

Gene: Hoonter\_77 Start: 47953, Stop: 48126, Start Num: 13  
Candidate Starts for Hoonter\_77:  
(Start: 13 @47953 has 79 MA's), (25, 48004),

Gene: HufflyPuff\_77 Start: 48619, Stop: 48792, Start Num: 13  
Candidate Starts for HufflyPuff\_77:  
(Start: 13 @48619 has 79 MA's), (25, 48670),

Gene: IHOP\_72 Start: 47718, Stop: 47891, Start Num: 13  
Candidate Starts for IHOP\_72:  
(Start: 13 @47718 has 79 MA's), (25, 47769),

Gene: Icee\_75 Start: 47617, Stop: 47790, Start Num: 13  
Candidate Starts for Icee\_75:  
(Start: 13 @47617 has 79 MA's), (25, 47668),

Gene: Inca\_71 Start: 46243, Stop: 46416, Start Num: 13  
Candidate Starts for Inca\_71:  
(Start: 13 @46243 has 79 MA's), (25, 46294),

Gene: Jada\_101 Start: 67857, Stop: 68042, Start Num: 16

Candidate Starts for Jada\_101:  
(Start: 16 @67857 has 16 MA's),

Gene: JasmineDragon\_60 Start: 40141, Stop: 40287, Start Num: 21  
Candidate Starts for JasmineDragon\_60:  
(Start: 21 @40141 has 10 MA's), (32, 40219),

Gene: JeTaime\_74 Start: 48435, Stop: 48608, Start Num: 13  
Candidate Starts for JeTaime\_74:  
(Start: 13 @48435 has 79 MA's), (25, 48486),

Gene: Jebeks\_34 Start: 27691, Stop: 27927, Start Num: 7  
Candidate Starts for Jebeks\_34:  
(Start: 7 @27691 has 47 MA's), (11, 27736), (27, 27808), (32, 27838), (38, 27910),

Gene: JohnThicc\_59 Start: 39271, Stop: 39417, Start Num: 21  
Candidate Starts for JohnThicc\_59:  
(Start: 9 @39229 has 2 MA's), (Start: 21 @39271 has 10 MA's), (32, 39349),

Gene: Jung\_32 Start: 27670, Stop: 27906, Start Num: 7  
Candidate Starts for Jung\_32:  
(Start: 7 @27670 has 47 MA's), (11, 27715), (25, 27775), (32, 27817), (33, 27829), (38, 27889),

Gene: Juniormint\_33 Start: 27742, Stop: 27978, Start Num: 7  
Candidate Starts for Juniormint\_33:  
(Start: 7 @27742 has 47 MA's), (11, 27787), (25, 27847), (32, 27889), (33, 27901), (38, 27961),

Gene: Kanye\_71 Start: 47299, Stop: 47472, Start Num: 13  
Candidate Starts for Kanye\_71:  
(Start: 13 @47299 has 79 MA's), (25, 47350),

Gene: Kari\_33 Start: 27703, Stop: 27939, Start Num: 7  
Candidate Starts for Kari\_33:  
(Start: 7 @27703 has 47 MA's), (11, 27748), (25, 27808), (32, 27850), (33, 27862), (38, 27922),

Gene: Karp\_97 Start: 67879, Stop: 68064, Start Num: 16  
Candidate Starts for Karp\_97:  
(Start: 16 @67879 has 16 MA's), (30, 67951),

Gene: Kenrey\_102 Start: 67572, Stop: 67757, Start Num: 16  
Candidate Starts for Kenrey\_102:  
(Start: 16 @67572 has 16 MA's), (30, 67644),

Gene: KilKor\_33 Start: 27963, Stop: 28199, Start Num: 7  
Candidate Starts for KilKor\_33:  
(Start: 7 @27963 has 47 MA's), (11, 28008), (25, 28068), (32, 28110), (33, 28122), (38, 28182),

Gene: Kimchi\_78 Start: 47956, Stop: 48129, Start Num: 13  
Candidate Starts for Kimchi\_78:  
(Start: 13 @47956 has 79 MA's), (25, 48007),

Gene: Kostya\_74 Start: 47817, Stop: 47990, Start Num: 13  
Candidate Starts for Kostya\_74:

(Start: 13 @47817 has 79 MA's), (25, 47868),

Gene: Ksquared\_33 Start: 27720, Stop: 27956, Start Num: 7

Candidate Starts for Ksquared\_33:

(Start: 7 @27720 has 47 MA's), (11, 27765), (25, 27825), (32, 27867), (33, 27879), (38, 27939),

Gene: LadyAstra\_59 Start: 39371, Stop: 39517, Start Num: 21

Candidate Starts for LadyAstra\_59:

(Start: 9 @39329 has 2 MA's), (Start: 21 @39371 has 10 MA's), (32, 39449),

Gene: Langerak\_33 Start: 27722, Stop: 27958, Start Num: 7

Candidate Starts for Langerak\_33:

(Start: 7 @27722 has 47 MA's), (32, 27869), (33, 27881), (38, 27941),

Gene: Lesiram\_50 Start: 28642, Stop: 28860, Start Num: 8

Candidate Starts for Lesiram\_50:

(Start: 8 @28642 has 3 MA's), (Start: 21 @28705 has 10 MA's), (31, 28774),

Gene: Lilpickle\_73 Start: 47169, Stop: 47342, Start Num: 13

Candidate Starts for Lilpickle\_73:

(Start: 13 @47169 has 79 MA's), (25, 47220),

Gene: Limpid\_93 Start: 66361, Stop: 66546, Start Num: 15

Candidate Starts for Limpid\_93:

(Start: 15 @66361 has 4 MA's), (30, 66433),

Gene: MadamMonkfish\_74 Start: 46893, Stop: 47066, Start Num: 13

Candidate Starts for MadamMonkfish\_74:

(Start: 13 @46893 has 79 MA's), (25, 46944),

Gene: Majeke\_33 Start: 27744, Stop: 27980, Start Num: 7

Candidate Starts for Majeke\_33:

(Start: 7 @27744 has 47 MA's), (11, 27789), (25, 27849), (32, 27891), (33, 27903), (38, 27963),

Gene: Malibo\_48 Start: 36272, Stop: 36448, Start Num: 12

Candidate Starts for Malibo\_48:

(3, 36155), (Start: 12 @36272 has 2 MA's),

Gene: Malithi\_33 Start: 27629, Stop: 27865, Start Num: 7

Candidate Starts for Malithi\_33:

(Start: 7 @27629 has 47 MA's), (11, 27674), (25, 27734), (32, 27776), (33, 27788), (38, 27848),

Gene: Manda\_75 Start: 48755, Stop: 48928, Start Num: 13

Candidate Starts for Manda\_75:

(Start: 13 @48755 has 79 MA's), (25, 48806),

Gene: Mangethe\_33 Start: 27744, Stop: 27980, Start Num: 7

Candidate Starts for Mangethe\_33:

(Start: 7 @27744 has 47 MA's), (11, 27789), (25, 27849), (32, 27891), (33, 27903), (38, 27963),

Gene: Marshmallow\_72 Start: 48448, Stop: 48621, Start Num: 13

Candidate Starts for Marshmallow\_72:

(Start: 13 @48448 has 79 MA's), (25, 48499),

Gene: Maupel\_101 Start: 67344, Stop: 67529, Start Num: 16  
Candidate Starts for Maupel\_101:  
(Start: 16 @67344 has 16 MA's),

Gene: Megiddo\_33 Start: 27963, Stop: 28199, Start Num: 7  
Candidate Starts for Megiddo\_33:  
(Start: 7 @27963 has 47 MA's), (11, 28008), (25, 28068), (32, 28110), (33, 28122), (38, 28182),

Gene: Mindy\_73 Start: 46760, Stop: 46933, Start Num: 13  
Candidate Starts for Mindy\_73:  
(Start: 13 @46760 has 79 MA's), (25, 46811),

Gene: MiniMommy\_60 Start: 40144, Stop: 40290, Start Num: 21  
Candidate Starts for MiniMommy\_60:  
(Start: 21 @40144 has 10 MA's), (32, 40222),

Gene: MissSwiss\_57 Start: 37199, Stop: 37351, Start Num: 21  
Candidate Starts for MissSwiss\_57:  
(Start: 21 @37199 has 10 MA's),

Gene: Moab\_100 Start: 69731, Stop: 69916, Start Num: 16  
Candidate Starts for Moab\_100:  
(Start: 16 @69731 has 16 MA's), (30, 69803),

Gene: MollyToe\_69 Start: 46514, Stop: 46687, Start Num: 13  
Candidate Starts for MollyToe\_69:  
(Start: 13 @46514 has 79 MA's), (25, 46565),

Gene: Murica\_77 Start: 48619, Stop: 48792, Start Num: 13  
Candidate Starts for Murica\_77:  
(Start: 13 @48619 has 79 MA's), (25, 48670),

Gene: Myrale\_74 Start: 48313, Stop: 48486, Start Num: 13  
Candidate Starts for Myrale\_74:  
(Start: 13 @48313 has 79 MA's), (25, 48364),

Gene: Nala\_76 Start: 48177, Stop: 48350, Start Num: 13  
Candidate Starts for Nala\_76:  
(Start: 13 @48177 has 79 MA's), (25, 48228),

Gene: Nazo\_37 Start: 29836, Stop: 30069, Start Num: 7  
Candidate Starts for Nazo\_37:  
(Start: 7 @29836 has 47 MA's), (33, 29992),

Gene: Necropolis\_33 Start: 27703, Stop: 27939, Start Num: 7  
Candidate Starts for Necropolis\_33:  
(Start: 7 @27703 has 47 MA's), (11, 27748), (25, 27808), (32, 27850), (33, 27862), (38, 27922),

Gene: NelitzaMV\_72 Start: 47259, Stop: 47432, Start Num: 13  
Candidate Starts for NelitzaMV\_72:  
(Start: 13 @47259 has 79 MA's), (25, 47310),

Gene: NiceHouse\_187 Start: 105087, Stop: 105269, Start Num: 14  
Candidate Starts for NiceHouse\_187:  
(Start: 14 @105087 has 3 MA's), (20, 105102), (26, 105138), (27, 105147), (30, 105162),

Gene: Nimrod\_75 Start: 48880, Stop: 49053, Start Num: 13  
Candidate Starts for Nimrod\_75:  
(Start: 13 @48880 has 79 MA's), (25, 48931),

Gene: NoSleep\_75 Start: 47514, Stop: 47687, Start Num: 13  
Candidate Starts for NoSleep\_75:  
(Start: 13 @47514 has 79 MA's), (25, 47565),

Gene: NonchalantPear\_72 Start: 47367, Stop: 47540, Start Num: 13  
Candidate Starts for NonchalantPear\_72:  
(Start: 13 @47367 has 79 MA's), (25, 47418),

Gene: Nova53\_185 Start: 97990, Stop: 98160, Start Num: 19  
Candidate Starts for Nova53\_185:  
(Start: 14 @97978 has 3 MA's), (Start: 19 @97990 has 3 MA's), (27, 98038), (30, 98053), (34, 98083),

Gene: Origami\_58 Start: 39163, Stop: 39309, Start Num: 21  
Candidate Starts for Origami\_58:  
(Start: 9 @39121 has 2 MA's), (Start: 21 @39163 has 10 MA's), (32, 39241),

Gene: OrionPax\_73 Start: 47265, Stop: 47438, Start Num: 13  
Candidate Starts for OrionPax\_73:  
(Start: 13 @47265 has 79 MA's), (25, 47316),

Gene: PandaPo\_57 Start: 37207, Stop: 37359, Start Num: 21  
Candidate Starts for PandaPo\_57:  
(Start: 21 @37207 has 10 MA's),

Gene: Pat3\_72 Start: 46423, Stop: 46596, Start Num: 13  
Candidate Starts for Pat3\_72:  
(Start: 13 @46423 has 79 MA's), (25, 46474),

Gene: Patelgo\_99 Start: 68817, Stop: 69002, Start Num: 16  
Candidate Starts for Patelgo\_99:  
(Start: 16 @68817 has 16 MA's), (30, 68889),

Gene: PeanutPie\_33 Start: 27702, Stop: 27938, Start Num: 7  
Candidate Starts for PeanutPie\_33:  
(Start: 7 @27702 has 47 MA's), (11, 27747), (25, 27807), (32, 27849), (33, 27861),

Gene: Petra64142\_78 Start: 49110, Stop: 49283, Start Num: 13  
Candidate Starts for Petra64142\_78:  
(Start: 13 @49110 has 79 MA's), (25, 49161),

Gene: Phalm\_33 Start: 27963, Stop: 28199, Start Num: 7  
Candidate Starts for Phalm\_33:  
(Start: 7 @27963 has 47 MA's), (11, 28008), (25, 28068), (32, 28110), (33, 28122), (38, 28182),

Gene: Phayonce\_35 Start: 29732, Stop: 29965, Start Num: 7

Candidate Starts for Phayonce\_35:  
(Start: 7 @29732 has 47 MA's), (33, 29888), (36, 29918),

Gene: Pegasus\_33 Start: 27711, Stop: 27947, Start Num: 7  
Candidate Starts for Pegasus\_33:  
(Start: 7 @27711 has 47 MA's), (11, 27756), (25, 27816), (32, 27858), (33, 27870), (38, 27930),

Gene: Phineas\_33 Start: 28077, Stop: 28310, Start Num: 7  
Candidate Starts for Phineas\_33:  
(Start: 7 @28077 has 47 MA's), (27, 28191), (38, 28293),

Gene: Phredrick\_100 Start: 66672, Stop: 66857, Start Num: 16  
Candidate Starts for Phredrick\_100:  
(Start: 16 @66672 has 16 MA's),

Gene: Polkaroo\_33 Start: 27720, Stop: 27956, Start Num: 7  
Candidate Starts for Polkaroo\_33:  
(Start: 7 @27720 has 47 MA's), (11, 27765), (25, 27825), (32, 27867), (33, 27879), (38, 27939),

Gene: Porky\_73 Start: 47084, Stop: 47257, Start Num: 13  
Candidate Starts for Porky\_73:  
(Start: 13 @47084 has 79 MA's), (25, 47135),

Gene: Ptowny\_71 Start: 46553, Stop: 46726, Start Num: 13  
Candidate Starts for Ptowny\_71:  
(Start: 13 @46553 has 79 MA's), (25, 46604),

Gene: Purky\_40 Start: 30459, Stop: 30692, Start Num: 7  
Candidate Starts for Purky\_40:  
(Start: 7 @30459 has 47 MA's),

Gene: Pygmy\_35 Start: 29545, Stop: 29781, Start Num: 7  
Candidate Starts for Pygmy\_35:  
(Start: 7 @29545 has 47 MA's), (32, 29692), (33, 29704), (38, 29764),

Gene: Quallification\_75 Start: 48299, Stop: 48472, Start Num: 13  
Candidate Starts for Quallification\_75:  
(Start: 13 @48299 has 79 MA's), (25, 48350),

Gene: Reedo\_54 Start: 36267, Stop: 36416, Start Num: 21  
Candidate Starts for Reedo\_54:  
(Start: 21 @36267 has 10 MA's), (32, 36342),

Gene: Rimmer\_75 Start: 48004, Stop: 48177, Start Num: 13  
Candidate Starts for Rimmer\_75:  
(Start: 13 @48004 has 79 MA's), (25, 48055),

Gene: Saints25\_73 Start: 47242, Stop: 47415, Start Num: 13  
Candidate Starts for Saints25\_73:  
(Start: 13 @47242 has 79 MA's), (25, 47293),

Gene: ShakeltOph\_60 Start: 40141, Stop: 40287, Start Num: 21  
Candidate Starts for ShakeltOph\_60:

(Start: 21 @40141 has 10 MA's), (32, 40219),

Gene: ShamWow\_74 Start: 48154, Stop: 48327, Start Num: 13

Candidate Starts for ShamWow\_74:

(Start: 13 @48154 has 79 MA's), (25, 48205),

Gene: ShereKhan\_73 Start: 48223, Stop: 48396, Start Num: 13

Candidate Starts for ShereKhan\_73:

(Start: 13 @48223 has 79 MA's), (25, 48274),

Gene: Shipwreck\_35 Start: 29520, Stop: 29756, Start Num: 7

Candidate Starts for Shipwreck\_35:

(Start: 7 @29520 has 47 MA's), (32, 29667), (33, 29679), (38, 29739),

Gene: Sidious\_47 Start: 36440, Stop: 36616, Start Num: 12

Candidate Starts for Sidious\_47:

(Start: 12 @36440 has 2 MA's), (31, 36527),

Gene: Simpliphy\_73 Start: 47232, Stop: 47405, Start Num: 13

Candidate Starts for Simpliphy\_73:

(Start: 13 @47232 has 79 MA's), (25, 47283),

Gene: SirDuracell\_73 Start: 46518, Stop: 46691, Start Num: 13

Candidate Starts for SirDuracell\_73:

(Start: 13 @46518 has 79 MA's), (25, 46569),

Gene: Snek\_57 Start: 37403, Stop: 37558, Start Num: 21

Candidate Starts for Snek\_57:

(Start: 21 @37403 has 10 MA's), (37, 37541),

Gene: Sonah\_33 Start: 27692, Stop: 27928, Start Num: 7

Candidate Starts for Sonah\_33:

(Start: 7 @27692 has 47 MA's), (11, 27737), (25, 27797), (32, 27839), (33, 27851), (38, 27911),

Gene: Soondubu\_51 Start: 41018, Stop: 41170, Start Num: 21

Candidate Starts for Soondubu\_51:

(Start: 21 @41018 has 10 MA's), (29, 41060), (37, 41150),

Gene: SophKB\_71 Start: 46910, Stop: 47083, Start Num: 13

Candidate Starts for SophKB\_71:

(Start: 13 @46910 has 79 MA's), (25, 46961),

Gene: Sotrice96\_75 Start: 47913, Stop: 48086, Start Num: 13

Candidate Starts for Sotrice96\_75:

(Start: 13 @47913 has 79 MA's), (25, 47964),

Gene: SparkleGoddess\_99 Start: 68222, Stop: 68407, Start Num: 16

Candidate Starts for SparkleGoddess\_99:

(Start: 16 @68222 has 16 MA's), (30, 68294),

Gene: Stank\_77 Start: 48171, Stop: 48344, Start Num: 13

Candidate Starts for Stank\_77:

(Start: 13 @48171 has 79 MA's), (25, 48222),

Gene: StevieRay\_33 Start: 27671, Stop: 27898, Start Num: 7

Candidate Starts for StevieRay\_33:

(Start: 7 @27671 has 47 MA's), (32, 27809),

Gene: Stigma\_98 Start: 68230, Stop: 68415, Start Num: 16

Candidate Starts for Stigma\_98:

(Start: 16 @68230 has 16 MA's), (30, 68302),

Gene: StolenFromERC\_77 Start: 47953, Stop: 48126, Start Num: 13

Candidate Starts for StolenFromERC\_77:

(Start: 13 @47953 has 79 MA's), (25, 48004),

Gene: StormChicken\_76 Start: 48611, Stop: 48784, Start Num: 13

Candidate Starts for StormChicken\_76:

(Start: 13 @48611 has 79 MA's), (25, 48662),

Gene: StressBall\_33 Start: 27963, Stop: 28199, Start Num: 7

Candidate Starts for StressBall\_33:

(Start: 7 @27963 has 47 MA's), (11, 28008), (25, 28068), (32, 28110), (33, 28122), (38, 28182),

Gene: Sweetums\_49 Start: 28762, Stop: 28980, Start Num: 8

Candidate Starts for Sweetums\_49:

(Start: 8 @28762 has 3 MA's), (17, 28810), (Start: 21 @28825 has 10 MA's),

Gene: TBrady12\_77 Start: 47652, Stop: 47825, Start Num: 13

Candidate Starts for TBrady12\_77:

(Start: 13 @47652 has 79 MA's), (25, 47703),

Gene: TeardropMSU\_70 Start: 46900, Stop: 47073, Start Num: 13

Candidate Starts for TeardropMSU\_70:

(Start: 13 @46900 has 79 MA's), (25, 46951),

Gene: Teaspoon\_75 Start: 47794, Stop: 47967, Start Num: 13

Candidate Starts for Teaspoon\_75:

(Start: 13 @47794 has 79 MA's), (25, 47845),

Gene: Techage\_33 Start: 27729, Stop: 27965, Start Num: 7

Candidate Starts for Techage\_33:

(Start: 7 @27729 has 47 MA's), (11, 27774), (25, 27834), (32, 27876), (33, 27888), (38, 27948),

Gene: Teng\_53 Start: 28666, Stop: 28884, Start Num: 8

Candidate Starts for Teng\_53:

(Start: 8 @28666 has 3 MA's), (17, 28714), (Start: 21 @28729 has 10 MA's),

Gene: Thespis\_33 Start: 27699, Stop: 27935, Start Num: 7

Candidate Starts for Thespis\_33:

(Start: 7 @27699 has 47 MA's), (11, 27744), (25, 27804), (32, 27846), (33, 27858), (38, 27918),

Gene: Toto\_72 Start: 48154, Stop: 48327, Start Num: 13

Candidate Starts for Toto\_72:

(Start: 13 @48154 has 79 MA's), (25, 48205),

Gene: Trina\_197 Start: 106567, Stop: 106749, Start Num: 14  
Candidate Starts for Trina\_197:  
(Start: 14 @106567 has 3 MA's), (22, 106591), (27, 106627), (30, 106642), (37, 106720),

Gene: Tuco\_75 Start: 48662, Stop: 48835, Start Num: 13  
Candidate Starts for Tuco\_75:  
(Start: 13 @48662 has 79 MA's), (25, 48713),

Gene: Tweety19\_58 Start: 37403, Stop: 37558, Start Num: 21  
Candidate Starts for Tweety19\_58:  
(Start: 21 @37403 has 10 MA's), (37, 37541),

Gene: Ukulele\_69 Start: 47045, Stop: 47218, Start Num: 13  
Candidate Starts for Ukulele\_69:  
(Start: 13 @47045 has 79 MA's), (25, 47096),

Gene: Venti\_33 Start: 27706, Stop: 27942, Start Num: 7  
Candidate Starts for Venti\_33:  
(Start: 7 @27706 has 47 MA's), (11, 27751), (25, 27811), (32, 27853), (33, 27865), (38, 27925),

Gene: Vidya\_33 Start: 27739, Stop: 27975, Start Num: 7  
Candidate Starts for Vidya\_33:  
(Start: 7 @27739 has 47 MA's), (11, 27784), (25, 27844), (32, 27886), (33, 27898), (38, 27958),

Gene: VroomVroom\_56 Start: 39271, Stop: 39462, Start Num: 9  
Candidate Starts for VroomVroom\_56:  
(1, 38755), (2, 39007), (5, 39190), (Start: 9 @39271 has 2 MA's), (Start: 21 @39316 has 10 MA's), (32, 39394), (35, 39427),

Gene: WaterT\_74 Start: 43421, Stop: 43254, Start Num: 14  
Candidate Starts for WaterT\_74:  
(6, 43508), (Start: 14 @43421 has 3 MA's), (23, 43391), (24, 43382), (33, 43319), (36, 43289), (37, 43268),

Gene: Westy\_103 Start: 69242, Stop: 69427, Start Num: 16  
Candidate Starts for Westy\_103:  
(Start: 16 @69242 has 16 MA's), (30, 69314),

Gene: Willsammy\_32 Start: 27446, Stop: 27682, Start Num: 7  
Candidate Starts for Willsammy\_32:  
(Start: 7 @27446 has 47 MA's), (11, 27491), (25, 27551), (32, 27593), (33, 27605), (38, 27665),

Gene: Zilizebeth\_33 Start: 27738, Stop: 27974, Start Num: 7  
Candidate Starts for Zilizebeth\_33:  
(Start: 7 @27738 has 47 MA's), (11, 27783), (25, 27843), (32, 27885), (33, 27897), (38, 27957),

Gene: xkcd\_77 Start: 48804, Stop: 48977, Start Num: 13  
Candidate Starts for xkcd\_77:  
(Start: 13 @48804 has 79 MA's), (25, 48855),