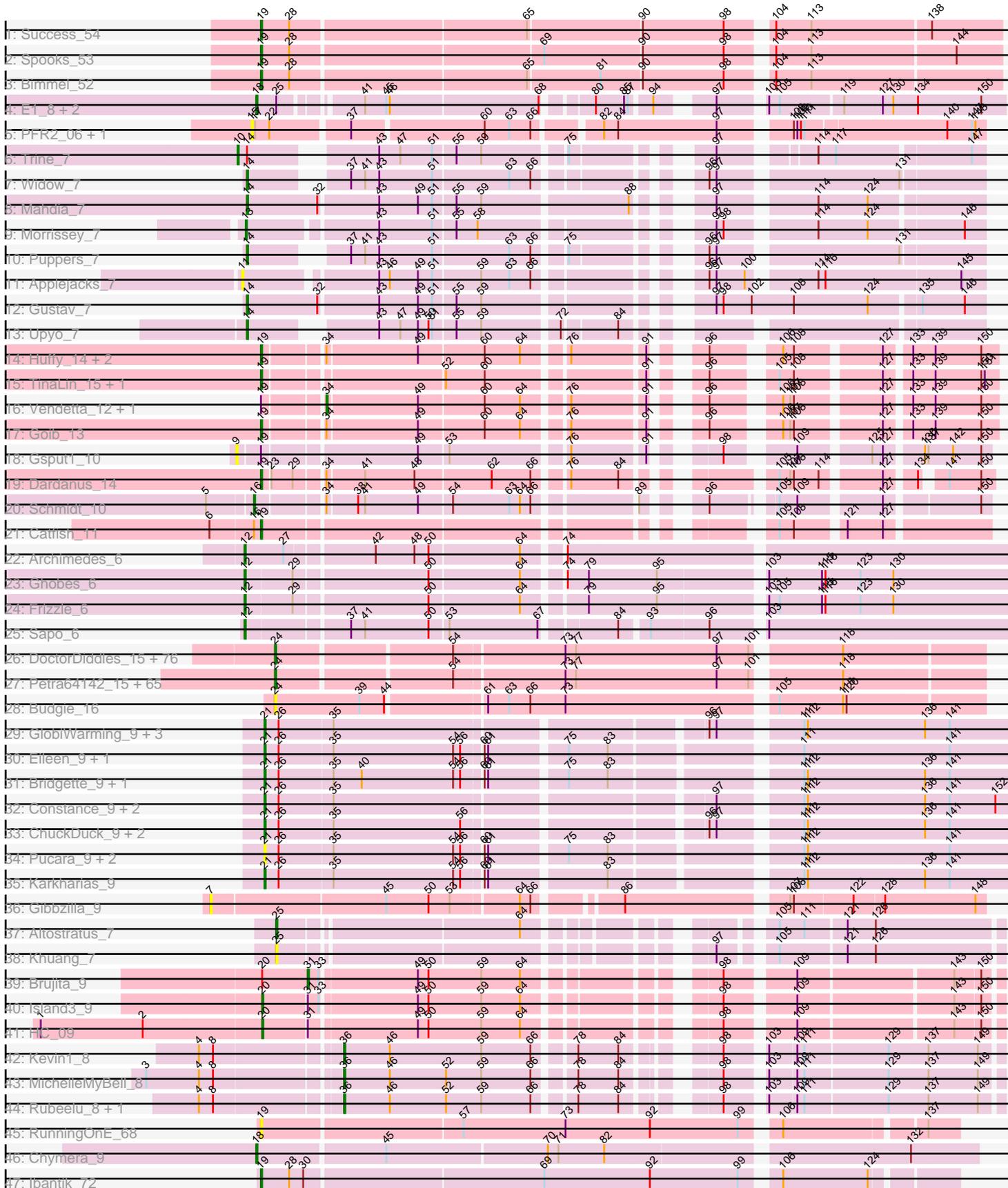


Pham 283493



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 283493 Report

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

Pham number 283493 has 207 members, 32 are drafts.

Phages represented in each track:

- Track 1 : Success\_54
- Track 2 : Spooks\_53
- Track 3 : Bimmel\_52
- Track 4 : E1\_8, B3\_8, Anatole\_8
- Track 5 : PFR2\_06, PFR1\_06
- Track 6 : Trine\_7
- Track 7 : Widow\_7
- Track 8 : Mahdia\_7
- Track 9 : Morrissey\_7
- Track 10 : Puppets\_7
- Track 11 : Applejacks\_7
- Track 12 : Gustav\_7
- Track 13 : Upyo\_7
- Track 14 : Huffy\_14, TZGordon\_14, DinoDaryn\_14
- Track 15 : TinaLin\_15, Banquo\_16
- Track 16 : Vendetta\_12, Splinter\_12
- Track 17 : Goib\_13
- Track 18 : Gspu1\_10
- Track 19 : Dardanus\_14
- Track 20 : Schmidt\_10
- Track 21 : Catfish\_11
- Track 22 : Archimedes\_6
- Track 23 : Ghobes\_6
- Track 24 : Frizzle\_6
- Track 25 : Sapo\_6
- Track 26 : DoctorDiddles\_15, Bogg\_15, Henry\_15, Palpatine\_14, FireRed\_14, IHOP\_14, Bruin\_14, Contagion\_14, MISSy\_14, Willez\_14, Quallification\_16, Bask21\_14, Harella\_13, Rakim\_16, Balomoji\_14, Dusk\_14, StellaBean\_15, Command613\_16, Thimble\_15, Miniwave\_15, Gator\_13, CrystalP\_15, Tomaszewski\_14, Cookies\_15, Myrale\_15, Manda\_15, Mosby\_14, Nala\_14, BugsBunny\_12, FairyPath\_15, Icee\_14, Pat3\_14, MPhalcon\_14, Marshmallow\_15, BaboJay\_14, YassJohnny\_15, ShamWow\_15, Rimmer\_14, Sotrice96\_15, Teaspoon\_14, SophKB\_15, Buck\_14, Kostya\_15, NelitzaMV\_15, Eureka\_15, Cactus\_16, Phaja\_14, TeardropMSU\_14, ABCat\_14, SirDuracell\_14, BilboSwaggins\_15, Tucu\_15, Mindy\_15, Toto\_15, Holt\_16, Sassay\_14, Murica\_13, Policronamos\_14, Inca\_14, Asriel\_14, Barbarian\_14, Flypotenuse\_13, PhatBacter\_14, StormChicken\_15, Daikon\_13, Traaww1\_13, MollyToe\_15,

TeamEdward\_15, Phaux\_13, Goldilocks\_16, Glexan\_13, Goku\_15, Amao\_15, xkcd\_15, BadStone\_14, FoghornLeghorn\_14, HuffyPuff\_13

- Track 27 : Petra64142\_15, Adnama\_16, Elite2014\_13, Lilpickle\_13, BigBubba\_14, Misfit\_14, GoldenSpark\_16, Lilizi\_16, OrionPax\_15, HanKaySha\_15, Bench\_16, Hopey\_15, Terminus\_14, AmericanBeauty\_16, MadamMonkfish\_14, TBrady12\_16, Maxxinista\_15, 244\_15, Stark\_15, Hoonter\_16, Cjw1\_14, Ukulele\_14, Becksu\_14, Thresher\_15, ChosenOne\_13, Pharsalus\_15, Simpliphy\_15, Pumpkin\_15, Czystczon1\_15, Highbury\_15, Stank\_16, Kanye\_16, RiverMonster\_14, Xandras\_16, GooberAzure\_16, Argent26\_16, Wiggin\_16, Youngblood\_14, Emmina\_14, ChotaBhai\_14, DrDrey\_15, Elph10\_15, Greep\_15, StolenFromERC\_16, Paperbeatsrock\_16, NonchalantPear\_14, ShereKhan\_16, Murphy\_14, Brewer\_14, Nimrod\_14, NoSleep\_15, Filch\_15, Gemini\_16, Phrux\_14, PaddyBaddy\_15, Lilac\_16, Dumbo\_14, JeTaime\_16, Ptowny\_14, Porky\_13, Moldemort\_15, Gage\_16, Tarkin\_16, Easy2Say\_15, Kimchi\_16, Saints25\_15
- Track 28 : Budgie\_16
- Track 29 : GlobiWarming\_9, Judy\_9, NidoQ\_9, NikkiHotWheels\_9
- Track 30 : Eileen\_9, Peas\_9
- Track 31 : Bridgette\_9, Henrique\_9
- Track 32 : Constance\_9, PeggyLeg03\_9, FosterFrank\_9
- Track 33 : ChuckDuck\_9, LittleRon\_9, KayMoney\_9
- Track 34 : Pucara\_9, LilyBell\_9, HotPotato\_9
- Track 35 : Karkharias\_9
- Track 36 : Gibbzilla\_9
- Track 37 : Altostratus\_7
- Track 38 : Khuang\_7
- Track 39 : Brujita\_9
- Track 40 : Island3\_9
- Track 41 : HC\_09
- Track 42 : Kevin1\_8
- Track 43 : MichelleMyBell\_8
- Track 44 : Rubeelu\_8, Butters\_8
- Track 45 : RunningOnE\_68
- Track 46 : Chymera\_9
- Track 47 : Ibantik\_72

***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 127 of the 175 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244\_15, ABCat\_14, Adnama\_16, Amao\_15, AmericanBeauty\_16, Argent26\_16, Asriel\_14, BaboJay\_14, BadStone\_14, Balomoji\_14, Barbarian\_14, Bask21\_14, Becksu\_14, Bench\_16, BigBubba\_14, BilboSwaggins\_15, Bogg\_15, Brewer\_14, Bruin\_14, Buck\_14, Budgie\_16, BugsBunny\_12, Cactus\_16, ChosenOne\_13, ChotaBhai\_14, Cjw1\_14, Command613\_16, Contagion\_14, Cookies\_15, CrystalP\_15, Czystczon1\_15, Daikon\_13, DoctorDiddles\_15, DrDrey\_15, Dumbo\_14, Dusk\_14, Easy2Say\_15, Elite2014\_13, Elph10\_15, Emmina\_14, Eureka\_15, FairyPath\_15, Filch\_15, FireRed\_14, Flypotenuse\_13, FoghornLeghorn\_14, Gage\_16, Gator\_13, Gemini\_16, Glexan\_13, Goku\_15, GoldenSpark\_16,

Goldilocks\_16, GooberAzure\_16, Greep\_15, HanKaySha\_15, Harella\_13, Henry\_15, Highbury\_15, Holt\_16, Hoonter\_16, Hopey\_15, HufflyPuff\_13, IHOP\_14, Icee\_14, Inca\_14, JeTaime\_16, Kanye\_16, Kimchi\_16, Kostya\_15, Lilac\_16, Lilizi\_16, Lilpickle\_13, MISSy\_14, MPhalcon\_14, MadamMonkfish\_14, Manda\_15, Marshmallow\_15, Maxxinista\_15, Mindy\_15, Miniwave\_15, Misfit\_14, Moldemort\_15, MollyToe\_15, Mosby\_14, Murica\_13, Murphy\_14, Myrale\_15, Nala\_14, NelitzaMV\_15, Nimrod\_14, NoSleep\_15, NonchalantPear\_14, OrionPax\_15, PaddyBaddy\_15, Palpatine\_14, Paperbeatsrock\_16, Pat3\_14, Petra64142\_15, Phaja\_14, Pharsalus\_15, PhatBacter\_14, Phaux\_13, Phrux\_14, Policronamos\_14, Porky\_13, Ptowny\_14, Pumpkin\_15, Qualification\_16, Rakim\_16, Rimmer\_14, RiverMonster\_14, Saints25\_15, Sassay\_14, ShamWow\_15, ShereKhan\_16, Simpliphy\_15, SirDuracell\_14, SophKB\_15, Sotrice96\_15, Stank\_16, Stark\_15, StellaBean\_15, StolenFromERC\_16, StormChicken\_15, TBrady12\_16, Tarkin\_16, TeamEdward\_15, TeardropMSU\_14, Teaspoon\_14, Terminus\_14, Thimble\_15, Thresher\_15, Tomaszewski\_14, Toto\_15, Traaww1\_13, Tuco\_15, Ukulele\_14, Wiggin\_16, Willez\_14, Xandras\_16, YassJohnny\_15, Youngblood\_14, xkcd\_15,

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

- 

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

- Altostratus\_7, Anatole\_8, Applejacks\_7, Archimedes\_6, B3\_8, Banquo\_16, Bimmel\_52, Bridgette\_9, Brujita\_9, Butters\_8, Catfish\_11, ChuckDuck\_9, Chymera\_9, Constance\_9, Dardanus\_14, DinoDaryn\_14, E1\_8, Eileen\_9, FosterFrank\_9, Frizzle\_6, Ghobes\_6, Gibbzilla\_9, GlobiWarming\_9, Goib\_13, Gspu1\_10, Gustav\_7, HC\_09, Henrique\_9, HotPotato\_9, Huffly\_14, Ibantik\_72, Island3\_9, Judy\_9, Karkharias\_9, KayMoney\_9, Kevin1\_8, Khuang\_7, LilyBell\_9, LittleRon\_9, Mahdia\_7, MichelleMyBell\_8, Morrissey\_7, NidoQ\_9, NikkiHotWheels\_9, PFR1\_06, PFR2\_06, Peas\_9, PeggyLeg03\_9, Pucara\_9, Puppies\_7, Rubeelu\_8, RunningOnE\_68, Sapo\_6, Schmidt\_10, Splinter\_12, Spooks\_53, Success\_54, TZGordon\_14, TinaLin\_15, Trine\_7, Upyo\_7, Vendetta\_12, Widow\_7,

### Summary by start number:

Start 7:

- Found in 1 of 207 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gibbzilla\_9 (FB),

Start 9:

- Found in 1 of 207 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gspu1\_10 (CU2),

Start 10:

- Found in 1 of 207 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 175
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trine\_7 (CD),

Start 11:

- Found in 1 of 207 ( 0.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Applejacks\_7 (CD),

Start 12:

- Found in 4 of 207 ( 1.9% ) of genes in pham
- Manual Annotations of this start: 4 of 175
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archimedes\_6 (DA), Frizzle\_6 (DA), Ghobes\_6 (DA), Sapo\_6 (DA),

Start 13:

- Found in 1 of 207 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 175
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrissey\_7 (CD),

Start 14:

- Found in 6 of 207 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 5 of 175
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Gustav\_7 (CD), Mahdia\_7 (CD), Puppies\_7 (CD), Upyo\_7 (CD), Widow\_7 (CD),

Start 15:

- Found in 2 of 207 ( 1.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PFR1\_06 (BX), PFR2\_06 (BX),

Start 16:

- Found in 2 of 207 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 1 of 175
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Schmidt\_10 (CU4),

Start 18:

- Found in 4 of 207 ( 1.9% ) of genes in pham
- Manual Annotations of this start: 4 of 175
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anatole\_8 (BV), B3\_8 (BV), Chymera\_9 (singleton), E1\_8 (BV),

Start 19:

- Found in 16 of 207 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 12 of 175
- Called 81.2% of time when present
- Phage (with cluster) where this start called: Banquo\_16 (CU1), Bimmel\_52 (BT), Catfish\_11 (CU5), Dardanus\_14 (CU3), DinoDaryn\_14 (CU1), Goib\_13 (CU1), Huffy\_14 (CU1), Ibantik\_72 (singleton), RunningOnE\_68 (UNK), Spooks\_53 (BT), Success\_54 (BT), TZGordon\_14 (CU1), TinaLin\_15 (CU1),

Start 20:

- Found in 3 of 207 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 2 of 175
- Called 66.7% of time when present
- Phage (with cluster) where this start called: HC\_09 (I1), Island3\_9 (I1),

Start 21:

- Found in 18 of 207 ( 8.7% ) of genes in pham
- Manual Annotations of this start: 10 of 175
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bridgette\_9 (FA), ChuckDuck\_9 (FA), Constance\_9 (FA), Eileen\_9 (FA), FosterFrank\_9 (FA), GlobiWarming\_9 (FA), Henrique\_9 (FA), HotPotato\_9 (FA), Judy\_9 (FA), Karkharias\_9 (FA), KayMoney\_9 (FA), LilyBell\_9 (FA), LittleRon\_9 (FA), NidoQ\_9 (FA), NikkiHotWheels\_9 (FA), Peas\_9 (FA), PeggyLeg03\_9 (FA), Pucara\_9 (FA),

Start 24:

- Found in 144 of 207 ( 69.6% ) of genes in pham
- Manual Annotations of this start: 127 of 175
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 244\_15 (E), ABCat\_14 (E), Adnama\_16 (E), Amao\_15 (E), AmericanBeauty\_16 (E), Argent26\_16 (E), Asriel\_14 (E), BaboJay\_14 (E), BadStone\_14 (E), Balomoji\_14 (E), Barbarian\_14 (E), Bask21\_14 (E), Becksu\_14 (E), Bench\_16 (E), BigBubba\_14 (E), BilboSwaggins\_15 (E), Bogg\_15 (E), Brewer\_14 (E), Bruin\_14 (E), Buck\_14 (E), Budgie\_16 (E), BugsBunny\_12 (E), Cactus\_16 (E), ChosenOne\_13 (E), ChotaBhai\_14 (E), Cjw1\_14 (E), Command613\_16 (E), Contagion\_14 (E), Cookies\_15 (E), CrystalP\_15 (E), Czystczon1\_15 (E), Daikon\_13 (E), DoctorDiddles\_15 (E), DrDrey\_15 (E), Dumbo\_14 (E), Dusk\_14 (E), Easy2Say\_15 (E), Elite2014\_13 (E), Elph10\_15 (E), Emmina\_14 (E), Eureka\_15 (E), FairyPath\_15 (E), Filch\_15 (E), FireRed\_14 (E), Flypotenuse\_13 (E), FoghornLeghorn\_14 (E), Gage\_16 (E), Gator\_13 (E), Gemini\_16 (E), Glexan\_13 (E), Goku\_15 (E), GoldenSpark\_16 (E), Goldilocks\_16 (E), GooberAzure\_16 (E), Greep\_15 (E), HanKaySha\_15 (E), Harella\_13 (E), Henry\_15 (E), Highbury\_15 (E), Holt\_16 (E), Hoonter\_16 (E), Hopey\_15 (E), HufflyPuff\_13 (E), IHOP\_14 (E), Icee\_14 (E), Inca\_14 (E), JeTaime\_16 (E), Kanye\_16 (E), Kimchi\_16 (E), Kostya\_15 (E), Lilac\_16 (E), Lilizi\_16 (E), Lilpickle\_13 (E), MISSy\_14 (E), MPhalcon\_14 (E), MadamMonkfish\_14 (E), Manda\_15 (E), Marshmallow\_15 (E), Maxxinista\_15 (E), Mindy\_15 (E), Miniwave\_15 (E), Misfit\_14 (E), Moldemort\_15 (E), MollyToe\_15 (E), Mosby\_14 (E), Murica\_13 (E), Murphy\_14 (E), Myrale\_15 (E), Nala\_14 (E), NelitzaMV\_15 (E), Nimrod\_14 (E), NoSleep\_15 (E), NonchalantPear\_14 (E), OrionPax\_15 (E), PaddyBaddy\_15 (E), Palpatine\_14 (E), Paperbeatsrock\_16 (E), Pat3\_14 (E), Petra64142\_15 (E), Phaja\_14 (E), Pharsalus\_15 (E), PhatBacter\_14 (E), Phaux\_13 (E), Phrux\_14 (E), Policronamos\_14 (E), Porky\_13 (E), Ptowny\_14 (E), Pumpkin\_15 (E), Quallification\_16 (E), Rakim\_16 (E), Rimmer\_14 (E), RiverMonster\_14 (E), Saints25\_15 (E), Sassay\_14 (E), ShamWow\_15 (E), ShereKhan\_16 (E), Simpliphy\_15 (E), SirDuracell\_14 (E), SophKB\_15 (E), Sotrice96\_15 (E), Stank\_16 (E), Stark\_15 (E), StellaBean\_15 (E), StolenFromERC\_16 (E), StormChicken\_15 (E), TBrady12\_16 (E), Tarkin\_16 (E), TeamEdward\_15 (E), TeardropMSU\_14 (E), Teaspoon\_14 (E), Terminus\_14 (E), Thimble\_15 (E), Thresher\_15 (E), Tomaszewski\_14 (E), Toto\_15 (E), Traaww1\_13 (E), Tuco\_15 (E), Ukulele\_14 (E), Wiggin\_16 (E), Willez\_14 (E), Xandras\_16 (E), YassJohnny\_15 (E), Youngblood\_14 (E), xkcd\_15 (E),

Start 25:

- Found in 5 of 207 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 1 of 175
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Altostratus\_7 (FS), Khuang\_7 (FS),

Start 31:

- Found in 3 of 207 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 1 of 175
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Brujita\_9 (I1),

Start 34:

- Found in 8 of 207 ( 3.9% ) of genes in pham
- Manual Annotations of this start: 2 of 175
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Splinter\_12 (CU1), Vendetta\_12 (CU1),

Start 36:

- Found in 4 of 207 ( 1.9% ) of genes in pham
- Manual Annotations of this start: 4 of 175
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Butters\_8 (N), Kevin1\_8 (N), MichelleMyBell\_8 (N), Rubeelu\_8 (N),

**Summary by clusters:**

There are 18 clusters represented in this pham: CU5, FS, E, CU2, CU1, DA, I1, FB, singleton, CD, BT, FA, BV, CU4, CU3, N, UNK, BX,

Info for manual annotations of cluster BT:

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

Info for manual annotations of cluster BV:

- Start number 18 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster CD:

- Start number 10 was manually annotated 1 time for cluster CD.
- Start number 13 was manually annotated 1 time for cluster CD.
- Start number 14 was manually annotated 5 times for cluster CD.

Info for manual annotations of cluster CU1:

- Start number 19 was manually annotated 6 times for cluster CU1.
- Start number 34 was manually annotated 2 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 19 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 16 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 19 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster DA:

- Start number 12 was manually annotated 4 times for cluster DA.

Info for manual annotations of cluster E:

- Start number 24 was manually annotated 127 times for cluster E.

Info for manual annotations of cluster FA:

- Start number 21 was manually annotated 10 times for cluster FA.

Info for manual annotations of cluster FS:

- Start number 25 was manually annotated 1 time for cluster FS.

Info for manual annotations of cluster I1:

- Start number 20 was manually annotated 2 times for cluster I1.
- Start number 31 was manually annotated 1 time for cluster I1.

Info for manual annotations of cluster N:

- Start number 36 was manually annotated 4 times for cluster N.

### ***Gene Information:***

Gene: 244\_15 Start: 8901, Stop: 9467, Start Num: 24

Candidate Starts for 244\_15:

(Start: 24 @8901 has 127 MA's), (54, 9039), (73, 9129), (77, 9138), (97, 9258), (101, 9285), (118, 9351),

Gene: ABCat\_14 Start: 9678, Stop: 10244, Start Num: 24

Candidate Starts for ABCat\_14:

(Start: 24 @9678 has 127 MA's), (54, 9816), (73, 9906), (77, 9915), (97, 10035), (101, 10062), (118, 10128),

Gene: Adnama\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for Adnama\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: Altostratus\_7 Start: 5860, Stop: 6384, Start Num: 25

Candidate Starts for Altostratus\_7:

(Start: 25 @5860 has 1 MA's), (64, 6052), (105, 6202), (111, 6223), (121, 6256), (126, 6280),

Gene: Amao\_15 Start: 8883, Stop: 9449, Start Num: 24

Candidate Starts for Amao\_15:

(Start: 24 @8883 has 127 MA's), (54, 9021), (73, 9111), (77, 9120), (97, 9240), (101, 9267), (118, 9333),

Gene: AmericanBeauty\_16 Start: 9130, Stop: 9696, Start Num: 24

Candidate Starts for AmericanBeauty\_16:

(Start: 24 @9130 has 127 MA's), (54, 9268), (73, 9358), (77, 9367), (97, 9487), (101, 9514), (118, 9580),

Gene: Anatole\_8 Start: 6423, Stop: 6980, Start Num: 18

Candidate Starts for Anatole\_8:

(Start: 18 @6423 has 4 MA's), (Start: 25 @6438 has 1 MA's), (41, 6495), (45, 6513), (46, 6516), (68, 6639), (80, 6672), (85, 6696), (87, 6699), (94, 6714), (97, 6750), (103, 6783), (105, 6792), (119, 6843), (127, 6876), (130, 6885), (134, 6906), (150, 6960),

Gene: Applejacks\_7 Start: 5984, Stop: 6535, Start Num: 11

Candidate Starts for Applejacks\_7:

(11, 5984), (43, 6086), (46, 6095), (49, 6119), (51, 6131), (59, 6170), (63, 6194), (66, 6212), (96, 6317), (97, 6323), (100, 6347), (114, 6395), (116, 6401), (145, 6515),

Gene: Archimedes\_6 Start: 5387, Stop: 6001, Start Num: 12

Candidate Starts for Archimedes\_6:

(Start: 12 @5387 has 4 MA's), (27, 5420), (42, 5489), (48, 5522), (50, 5534), (64, 5609), (74, 5636),

Gene: Argent26\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for Argent26\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: Asriel\_14 Start: 8550, Stop: 9116, Start Num: 24

Candidate Starts for Asriel\_14:

(Start: 24 @8550 has 127 MA's), (54, 8688), (73, 8778), (77, 8787), (97, 8907), (101, 8934), (118, 9000),

Gene: B3\_8 Start: 6423, Stop: 6980, Start Num: 18

Candidate Starts for B3\_8:

(Start: 18 @6423 has 4 MA's), (Start: 25 @6438 has 1 MA's), (41, 6495), (45, 6513), (46, 6516), (68, 6639), (80, 6672), (85, 6696), (87, 6699), (94, 6714), (97, 6750), (103, 6783), (105, 6792), (119, 6843), (127, 6876), (130, 6885), (134, 6906), (150, 6960),

Gene: BaboJay\_14 Start: 9212, Stop: 9778, Start Num: 24

Candidate Starts for BaboJay\_14:

(Start: 24 @9212 has 127 MA's), (54, 9350), (73, 9440), (77, 9449), (97, 9569), (101, 9596), (118, 9662),

Gene: BadStone\_14 Start: 9678, Stop: 10244, Start Num: 24

Candidate Starts for BadStone\_14:

(Start: 24 @9678 has 127 MA's), (54, 9816), (73, 9906), (77, 9915), (97, 10035), (101, 10062), (118, 10128),

Gene: Balomoji\_14 Start: 9412, Stop: 9978, Start Num: 24

Candidate Starts for Balomoji\_14:

(Start: 24 @9412 has 127 MA's), (54, 9550), (73, 9640), (77, 9649), (97, 9769), (101, 9796), (118, 9862),

Gene: Banquo\_16 Start: 9976, Stop: 10500, Start Num: 19

Candidate Starts for Banquo\_16:

(Start: 19 @9976 has 12 MA's), (52, 10117), (60, 10150), (91, 10267), (96, 10291), (105, 10333), (108, 10345), (127, 10411), (133, 10429), (139, 10447), (150, 10486), (151, 10489),

Gene: Barbarian\_14 Start: 8550, Stop: 9116, Start Num: 24

Candidate Starts for Barbarian\_14:

(Start: 24 @8550 has 127 MA's), (54, 8688), (73, 8778), (77, 8787), (97, 8907), (101, 8934), (118, 9000),

Gene: Bask21\_14 Start: 8345, Stop: 8911, Start Num: 24

Candidate Starts for Bask21\_14:

(Start: 24 @8345 has 127 MA's), (54, 8483), (73, 8573), (77, 8582), (97, 8702), (101, 8729), (118, 8795),

Gene: Becksu\_14 Start: 9320, Stop: 9886, Start Num: 24

Candidate Starts for Becksu\_14:

(Start: 24 @9320 has 127 MA's), (54, 9458), (73, 9548), (77, 9557), (97, 9677), (101, 9704), (118, 9770),

Gene: Bench\_16 Start: 9006, Stop: 9572, Start Num: 24

Candidate Starts for Bench\_16:

(Start: 24 @9006 has 127 MA's), (54, 9144), (73, 9234), (77, 9243), (97, 9363), (101, 9390), (118, 9456),

Gene: BigBubba\_14 Start: 8389, Stop: 8955, Start Num: 24

Candidate Starts for BigBubba\_14:

(Start: 24 @8389 has 127 MA's), (54, 8527), (73, 8617), (77, 8626), (97, 8746), (101, 8773), (118, 8839),

Gene: BilboSwaggins\_15 Start: 9679, Stop: 10245, Start Num: 24

Candidate Starts for BilboSwaggins\_15:

(Start: 24 @9679 has 127 MA's), (54, 9817), (73, 9907), (77, 9916), (97, 10036), (101, 10063), (118, 10129),

Gene: Bimmel\_52 Start: 30092, Stop: 30691, Start Num: 19

Candidate Starts for Bimmel\_52:

(Start: 19 @30092 has 12 MA's), (28, 30116), (65, 30311), (81, 30371), (90, 30404), (98, 30473), (104, 30503), (113, 30533),

Gene: Bogg\_15 Start: 8562, Stop: 9128, Start Num: 24

Candidate Starts for Bogg\_15:

(Start: 24 @8562 has 127 MA's), (54, 8700), (73, 8790), (77, 8799), (97, 8919), (101, 8946), (118, 9012),

Gene: Brewer\_14 Start: 9388, Stop: 9954, Start Num: 24

Candidate Starts for Brewer\_14:

(Start: 24 @9388 has 127 MA's), (54, 9526), (73, 9616), (77, 9625), (97, 9745), (101, 9772), (118, 9838),

Gene: Bridgette\_9 Start: 7210, Stop: 7803, Start Num: 21

Candidate Starts for Bridgette\_9:

(Start: 21 @7210 has 10 MA's), (26, 7222), (35, 7267), (40, 7291), (54, 7369), (56, 7375), (60, 7390), (61, 7393), (75, 7453), (83, 7486), (111, 7627), (112, 7630), (136, 7729), (141, 7750),

Gene: Bruin\_14 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for Bruin\_14:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: Brujita\_9 Start: 7024, Stop: 7533, Start Num: 31

Candidate Starts for Brujita\_9:

(Start: 20 @6988 has 2 MA's), (Start: 31 @7024 has 1 MA's), (33, 7033), (49, 7111), (50, 7120), (59, 7165), (64, 7198), (98, 7324), (109, 7375), (143, 7498), (150, 7519),

Gene: Buck\_14 Start: 9635, Stop: 10201, Start Num: 24

Candidate Starts for Buck\_14:

(Start: 24 @9635 has 127 MA's), (54, 9773), (73, 9863), (77, 9872), (97, 9992), (101, 10019), (118, 10085),

Gene: Budgie\_16 Start: 8981, Stop: 9553, Start Num: 24

Candidate Starts for Budgie\_16:

(Start: 24 @8981 has 127 MA's), (39, 9050), (44, 9071), (61, 9149), (63, 9167), (66, 9185), (73, 9215), (105, 9383), (118, 9437), (120, 9440),

Gene: BugsBunny\_12 Start: 8752, Stop: 9318, Start Num: 24

Candidate Starts for BugsBunny\_12:

(Start: 24 @8752 has 127 MA's), (54, 8890), (73, 8980), (77, 8989), (97, 9109), (101, 9136), (118, 9202),

Gene: Butters\_8 Start: 5970, Stop: 6461, Start Num: 36

Candidate Starts for Butters\_8:

(4, 5859), (8, 5871), (Start: 36 @5970 has 4 MA's), (46, 6009), (52, 6057), (59, 6087), (66, 6129), (78, 6156), (84, 6189), (98, 6246), (103, 6273), (109, 6294), (111, 6300), (129, 6369), (137, 6402), (149, 6444),

Gene: Cactus\_16 Start: 8891, Stop: 9457, Start Num: 24

Candidate Starts for Cactus\_16:

(Start: 24 @8891 has 127 MA's), (54, 9029), (73, 9119), (77, 9128), (97, 9248), (101, 9275), (118, 9341),

Gene: Catfish\_11 Start: 7940, Stop: 8464, Start Num: 19

Candidate Starts for Catfish\_11:

(6, 7898), (Start: 16 @7934 has 1 MA's), (Start: 19 @7940 has 12 MA's), (105, 8303), (108, 8315), (121, 8351), (127, 8381),

Gene: ChosenOne\_13 Start: 8353, Stop: 8919, Start Num: 24

Candidate Starts for ChosenOne\_13:

(Start: 24 @8353 has 127 MA's), (54, 8491), (73, 8581), (77, 8590), (97, 8710), (101, 8737), (118, 8803),

Gene: ChotaBhai\_14 Start: 8389, Stop: 8955, Start Num: 24

Candidate Starts for ChotaBhai\_14:

(Start: 24 @8389 has 127 MA's), (54, 8527), (73, 8617), (77, 8626), (97, 8746), (101, 8773), (118, 8839),

Gene: ChuckDuck\_9 Start: 7169, Stop: 7759, Start Num: 21

Candidate Starts for ChuckDuck\_9:

(Start: 21 @7169 has 10 MA's), (26, 7181), (35, 7226), (56, 7334), (96, 7517), (97, 7523), (111, 7583), (112, 7586), (136, 7685), (141, 7706),

Gene: Chymera\_9 Start: 7652, Stop: 8236, Start Num: 18

Candidate Starts for Chymera\_9:

(Start: 18 @7652 has 4 MA's), (45, 7757), (70, 7889), (71, 7898), (82, 7937), (132, 8180),

Gene: Cjw1\_14 Start: 9903, Stop: 10469, Start Num: 24

Candidate Starts for Cjw1\_14:

(Start: 24 @9903 has 127 MA's), (54, 10041), (73, 10131), (77, 10140), (97, 10260), (101, 10287), (118, 10353),

Gene: Command613\_16 Start: 9947, Stop: 10513, Start Num: 24

Candidate Starts for Command613\_16:

(Start: 24 @9947 has 127 MA's), (54, 10085), (73, 10175), (77, 10184), (97, 10304), (101, 10331), (118, 10397),

Gene: Constance\_9 Start: 7215, Stop: 7805, Start Num: 21

Candidate Starts for Constance\_9:

(Start: 21 @7215 has 10 MA's), (26, 7227), (35, 7272), (97, 7569), (111, 7629), (112, 7632), (136, 7731), (141, 7752), (152, 7791),

Gene: Contagion\_14 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for Contagion\_14:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: Cookies\_15 Start: 9551, Stop: 10117, Start Num: 24

Candidate Starts for Cookies\_15:

(Start: 24 @9551 has 127 MA's), (54, 9689), (73, 9779), (77, 9788), (97, 9908), (101, 9935), (118, 10001),

Gene: CrystalP\_15 Start: 9679, Stop: 10245, Start Num: 24

Candidate Starts for CrystalP\_15:

(Start: 24 @9679 has 127 MA's), (54, 9817), (73, 9907), (77, 9916), (97, 10036), (101, 10063), (118, 10129),

Gene: Czyszczone1\_15 Start: 8888, Stop: 9454, Start Num: 24

Candidate Starts for Czyszczone1\_15:

(Start: 24 @8888 has 127 MA's), (54, 9026), (73, 9116), (77, 9125), (97, 9245), (101, 9272), (118, 9338),

Gene: Daikon\_13 Start: 9413, Stop: 9979, Start Num: 24

Candidate Starts for Daikon\_13:

(Start: 24 @9413 has 127 MA's), (54, 9551), (73, 9641), (77, 9650), (97, 9770), (101, 9797), (118, 9863),

Gene: Dardanus\_14 Start: 9026, Stop: 9541, Start Num: 19

Candidate Starts for Dardanus\_14:

(Start: 19 @9026 has 12 MA's), (23, 9032), (29, 9050), (Start: 34 @9071 has 2 MA's), (41, 9101), (48, 9143), (62, 9206), (66, 9239), (76, 9260), (84, 9299), (105, 9389), (107, 9398), (108, 9401), (114, 9422), (127, 9467), (134, 9488), (141, 9503), (150, 9530),

Gene: DinoDaryn\_14 Start: 9110, Stop: 9634, Start Num: 19

Candidate Starts for DinoDaryn\_14:

(Start: 19 @9110 has 12 MA's), (Start: 34 @9155 has 2 MA's), (49, 9230), (60, 9284), (64, 9314), (76, 9344), (91, 9401), (96, 9425), (106, 9470), (108, 9479), (127, 9545), (133, 9563), (139, 9581), (150, 9620),

Gene: DoctorDiddles\_15 Start: 8844, Stop: 9410, Start Num: 24

Candidate Starts for DoctorDiddles\_15:

(Start: 24 @8844 has 127 MA's), (54, 8982), (73, 9072), (77, 9081), (97, 9201), (101, 9228), (118, 9294),

Gene: DrDrey\_15 Start: 9629, Stop: 10195, Start Num: 24

Candidate Starts for DrDrey\_15:

(Start: 24 @9629 has 127 MA's), (54, 9767), (73, 9857), (77, 9866), (97, 9986), (101, 10013), (118, 10079),

Gene: Dumbo\_14 Start: 8610, Stop: 9176, Start Num: 24

Candidate Starts for Dumbo\_14:

(Start: 24 @8610 has 127 MA's), (54, 8748), (73, 8838), (77, 8847), (97, 8967), (101, 8994), (118, 9060),

Gene: Dusk\_14 Start: 9338, Stop: 9904, Start Num: 24

Candidate Starts for Dusk\_14:

(Start: 24 @9338 has 127 MA's), (54, 9476), (73, 9566), (77, 9575), (97, 9695), (101, 9722), (118, 9788),

Gene: E1\_8 Start: 6423, Stop: 6980, Start Num: 18

Candidate Starts for E1\_8:

(Start: 18 @6423 has 4 MA's), (Start: 25 @6438 has 1 MA's), (41, 6495), (45, 6513), (46, 6516), (68, 6639), (80, 6672), (85, 6696), (87, 6699), (94, 6714), (97, 6750), (103, 6783), (105, 6792), (119, 6843), (127, 6876), (130, 6885), (134, 6906), (150, 6960),

Gene: Easy2Say\_15 Start: 9876, Stop: 10442, Start Num: 24

Candidate Starts for Easy2Say\_15:

(Start: 24 @9876 has 127 MA's), (54, 10014), (73, 10104), (77, 10113), (97, 10233), (101, 10260), (118, 10326),

Gene: Eileen\_9 Start: 7175, Stop: 7768, Start Num: 21

Candidate Starts for Eileen\_9:

(Start: 21 @7175 has 10 MA's), (26, 7187), (35, 7232), (54, 7334), (56, 7340), (60, 7355), (61, 7358), (75, 7418), (83, 7451), (111, 7592), (141, 7715),

Gene: Elite2014\_13 Start: 8353, Stop: 8919, Start Num: 24

Candidate Starts for Elite2014\_13:

(Start: 24 @8353 has 127 MA's), (54, 8491), (73, 8581), (77, 8590), (97, 8710), (101, 8737), (118, 8803),

Gene: Elph10\_15 Start: 8613, Stop: 9179, Start Num: 24

Candidate Starts for Elph10\_15:

(Start: 24 @8613 has 127 MA's), (54, 8751), (73, 8841), (77, 8850), (97, 8970), (101, 8997), (118, 9063),

Gene: Emmina\_14 Start: 8458, Stop: 9024, Start Num: 24

Candidate Starts for Emmina\_14:

(Start: 24 @8458 has 127 MA's), (54, 8596), (73, 8686), (77, 8695), (97, 8815), (101, 8842), (118, 8908),

Gene: Eureka\_15 Start: 9658, Stop: 10224, Start Num: 24

Candidate Starts for Eureka\_15:

(Start: 24 @9658 has 127 MA's), (54, 9796), (73, 9886), (77, 9895), (97, 10015), (101, 10042), (118, 10108),

Gene: FairyPath\_15 Start: 9876, Stop: 10442, Start Num: 24

Candidate Starts for FairyPath\_15:

(Start: 24 @9876 has 127 MA's), (54, 10014), (73, 10104), (77, 10113), (97, 10233), (101, 10260), (118, 10326),

Gene: Filch\_15 Start: 8898, Stop: 9464, Start Num: 24

Candidate Starts for Filch\_15:

(Start: 24 @8898 has 127 MA's), (54, 9036), (73, 9126), (77, 9135), (97, 9255), (101, 9282), (118, 9348),

Gene: FireRed\_14 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for FireRed\_14:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: Flypotenuse\_13 Start: 9295, Stop: 9861, Start Num: 24

Candidate Starts for Flypotenuse\_13:

(Start: 24 @9295 has 127 MA's), (54, 9433), (73, 9523), (77, 9532), (97, 9652), (101, 9679), (118, 9745),

Gene: FoghornLeghorn\_14 Start: 9183, Stop: 9749, Start Num: 24

Candidate Starts for FoghornLeghorn\_14:

(Start: 24 @9183 has 127 MA's), (54, 9321), (73, 9411), (77, 9420), (97, 9540), (101, 9567), (118, 9633),

Gene: FosterFrank\_9 Start: 7173, Stop: 7763, Start Num: 21

Candidate Starts for FosterFrank\_9:

(Start: 21 @7173 has 10 MA's), (26, 7185), (35, 7230), (97, 7527), (111, 7587), (112, 7590), (136, 7689), (141, 7710), (152, 7749),

Gene: Frizzle\_6 Start: 5444, Stop: 6055, Start Num: 12

Candidate Starts for Frizzle\_6:

(Start: 12 @5444 has 4 MA's), (29, 5483), (50, 5591), (64, 5666), (79, 5711), (95, 5768), (103, 5849), (105, 5858), (115, 5894), (116, 5897), (123, 5927), (130, 5954),

Gene: Gage\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for Gage\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: Gator\_13 Start: 9294, Stop: 9860, Start Num: 24

Candidate Starts for Gator\_13:

(Start: 24 @9294 has 127 MA's), (54, 9432), (73, 9522), (77, 9531), (97, 9651), (101, 9678), (118, 9744),

Gene: Gemini\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for Gemini\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: Ghobes\_6 Start: 5444, Stop: 6055, Start Num: 12

Candidate Starts for Ghobes\_6:

(Start: 12 @5444 has 4 MA's), (29, 5483), (50, 5591), (64, 5666), (74, 5693), (79, 5711), (95, 5768), (103, 5849), (115, 5894), (116, 5897), (123, 5927), (130, 5954),

Gene: Gibbzilla\_9 Start: 6357, Stop: 6959, Start Num: 7

Candidate Starts for Gibbzilla\_9:

(7, 6357), (45, 6498), (50, 6534), (53, 6552), (64, 6606), (66, 6615), (86, 6675), (107, 6801), (108, 6804), (122, 6852), (128, 6876), (148, 6951),

Gene: Glexan\_13 Start: 9295, Stop: 9861, Start Num: 24

Candidate Starts for Glexan\_13:

(Start: 24 @9295 has 127 MA's), (54, 9433), (73, 9523), (77, 9532), (97, 9652), (101, 9679), (118, 9745),

Gene: GlobiWarming\_9 Start: 7170, Stop: 7760, Start Num: 21

Candidate Starts for GlobiWarming\_9:

(Start: 21 @7170 has 10 MA's), (26, 7182), (35, 7227), (96, 7518), (97, 7524), (111, 7584), (112, 7587), (136, 7686), (141, 7707),

Gene: Goib\_13 Start: 8885, Stop: 9409, Start Num: 19

Candidate Starts for Goib\_13:

(Start: 19 @8885 has 12 MA's), (Start: 34 @8930 has 2 MA's), (49, 9005), (60, 9059), (64, 9089), (76, 9119), (91, 9176), (96, 9200), (106, 9245), (107, 9251), (108, 9254), (127, 9320), (133, 9338), (139, 9356), (150, 9395),

Gene: Goku\_15 Start: 9385, Stop: 9951, Start Num: 24

Candidate Starts for Goku\_15:

(Start: 24 @9385 has 127 MA's), (54, 9523), (73, 9613), (77, 9622), (97, 9742), (101, 9769), (118, 9835),

Gene: GoldenSpark\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for GoldenSpark\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: Goldilocks\_16 Start: 9089, Stop: 9655, Start Num: 24

Candidate Starts for Goldilocks\_16:

(Start: 24 @9089 has 127 MA's), (54, 9227), (73, 9317), (77, 9326), (97, 9446), (101, 9473), (118, 9539),

Gene: GooberAzure\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for GooberAzure\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: Greep\_15 Start: 9463, Stop: 10029, Start Num: 24

Candidate Starts for Greep\_15:

(Start: 24 @9463 has 127 MA's), (54, 9601), (73, 9691), (77, 9700), (97, 9820), (101, 9847), (118, 9913),

Gene: Gspu1\_10 Start: 7323, Stop: 7862, Start Num: 9

Candidate Starts for Gspu1\_10:

(9, 7323), (Start: 19 @7341 has 12 MA's), (49, 7464), (53, 7488), (76, 7578), (91, 7635), (98, 7671), (109, 7716), (125, 7770), (127, 7779), (136, 7806), (137, 7809), (142, 7830), (150, 7854),

Gene: Gustav\_7 Start: 6033, Stop: 6599, Start Num: 14

Candidate Starts for Gustav\_7:

(Start: 14 @6033 has 5 MA's), (32, 6093), (43, 6141), (49, 6174), (51, 6186), (55, 6204), (59, 6225), (97, 6378), (98, 6384), (102, 6408), (108, 6444), (124, 6507), (135, 6546), (146, 6582),

Gene: HC\_09 Start: 6987, Stop: 7532, Start Num: 20

Candidate Starts for HC\_09:

(1, 6801), (2, 6888), (Start: 20 @6987 has 2 MA's), (Start: 31 @7023 has 1 MA's), (49, 7110), (50, 7119), (59, 7164), (64, 7197), (98, 7323), (109, 7374), (143, 7497), (150, 7518),

Gene: HanKaySha\_15 Start: 8888, Stop: 9454, Start Num: 24

Candidate Starts for HanKaySha\_15:

(Start: 24 @8888 has 127 MA's), (54, 9026), (73, 9116), (77, 9125), (97, 9245), (101, 9272), (118, 9338),

Gene: Harella\_13 Start: 9295, Stop: 9861, Start Num: 24

Candidate Starts for Harella\_13:

(Start: 24 @9295 has 127 MA's), (54, 9433), (73, 9523), (77, 9532), (97, 9652), (101, 9679), (118, 9745),

Gene: Henrique\_9 Start: 7171, Stop: 7764, Start Num: 21

Candidate Starts for Henrique\_9:

(Start: 21 @7171 has 10 MA's), (26, 7183), (35, 7228), (40, 7252), (54, 7330), (56, 7336), (60, 7351), (61, 7354), (75, 7414), (83, 7447), (111, 7588), (112, 7591), (136, 7690), (141, 7711),

Gene: Henry\_15 Start: 9678, Stop: 10244, Start Num: 24

Candidate Starts for Henry\_15:

(Start: 24 @9678 has 127 MA's), (54, 9816), (73, 9906), (77, 9915), (97, 10035), (101, 10062), (118, 10128),

Gene: Highbury\_15 Start: 8807, Stop: 9373, Start Num: 24

Candidate Starts for Highbury\_15:

(Start: 24 @8807 has 127 MA's), (54, 8945), (73, 9035), (77, 9044), (97, 9164), (101, 9191), (118, 9257),

Gene: Holt\_16 Start: 8962, Stop: 9528, Start Num: 24

Candidate Starts for Holt\_16:

(Start: 24 @8962 has 127 MA's), (54, 9100), (73, 9190), (77, 9199), (97, 9319), (101, 9346), (118, 9412),

Gene: Hoonter\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for Hoonter\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: Hopey\_15 Start: 8898, Stop: 9464, Start Num: 24

Candidate Starts for Hopey\_15:

(Start: 24 @8898 has 127 MA's), (54, 9036), (73, 9126), (77, 9135), (97, 9255), (101, 9282), (118, 9348),

Gene: HotPotato\_9 Start: 7175, Stop: 7768, Start Num: 21

Candidate Starts for HotPotato\_9:

(Start: 21 @7175 has 10 MA's), (26, 7187), (35, 7232), (54, 7334), (56, 7340), (60, 7355), (61, 7358), (75, 7418), (83, 7451), (111, 7592), (112, 7595), (141, 7715),

Gene: HufflyPuff\_13 Start: 9142, Stop: 9708, Start Num: 24

Candidate Starts for HufflyPuff\_13:

(Start: 24 @9142 has 127 MA's), (54, 9280), (73, 9370), (77, 9379), (97, 9499), (101, 9526), (118, 9592),

Gene: Huffy\_14 Start: 9110, Stop: 9634, Start Num: 19

Candidate Starts for Huffy\_14:

(Start: 19 @9110 has 12 MA's), (Start: 34 @9155 has 2 MA's), (49, 9230), (60, 9284), (64, 9314), (76, 9344), (91, 9401), (96, 9425), (106, 9470), (108, 9479), (127, 9545), (133, 9563), (139, 9581), (150, 9620),

Gene: IHOP\_14 Start: 9338, Stop: 9904, Start Num: 24

Candidate Starts for IHOP\_14:

(Start: 24 @9338 has 127 MA's), (54, 9476), (73, 9566), (77, 9575), (97, 9695), (101, 9722), (118, 9788),

Gene: lbantik\_72 Start: 34097, Stop: 34657, Start Num: 19

Candidate Starts for lbantik\_72:

(Start: 19 @34097 has 12 MA's), (28, 34121), (30, 34133), (69, 34331), (92, 34421), (99, 34496), (106, 34520), (124, 34592),

Gene: Icee\_14 Start: 9338, Stop: 9904, Start Num: 24

Candidate Starts for Icee\_14:

(Start: 24 @9338 has 127 MA's), (54, 9476), (73, 9566), (77, 9575), (97, 9695), (101, 9722), (118, 9788),

Gene: Inca\_14 Start: 8358, Stop: 8924, Start Num: 24

Candidate Starts for Inca\_14:

(Start: 24 @8358 has 127 MA's), (54, 8496), (73, 8586), (77, 8595), (97, 8715), (101, 8742), (118, 8808),

Gene: Island3\_9 Start: 6988, Stop: 7533, Start Num: 20

Candidate Starts for Island3\_9:

(Start: 20 @6988 has 2 MA's), (Start: 31 @7024 has 1 MA's), (33, 7033), (49, 7111), (50, 7120), (59, 7165), (64, 7198), (98, 7324), (109, 7375), (143, 7498), (150, 7519),

Gene: JeTaime\_16 Start: 9938, Stop: 10504, Start Num: 24

Candidate Starts for JeTaime\_16:

(Start: 24 @9938 has 127 MA's), (54, 10076), (73, 10166), (77, 10175), (97, 10295), (101, 10322), (118, 10388),

Gene: Judy\_9 Start: 7214, Stop: 7804, Start Num: 21

Candidate Starts for Judy\_9:

(Start: 21 @7214 has 10 MA's), (26, 7226), (35, 7271), (96, 7562), (97, 7568), (111, 7628), (112, 7631), (136, 7730), (141, 7751),

Gene: Kanye\_16 Start: 10126, Stop: 10692, Start Num: 24

Candidate Starts for Kanye\_16:

(Start: 24 @10126 has 127 MA's), (54, 10264), (73, 10354), (77, 10363), (97, 10483), (101, 10510), (118, 10576),

Gene: Karkharias\_9 Start: 7171, Stop: 7764, Start Num: 21

Candidate Starts for Karkharias\_9:

(Start: 21 @7171 has 10 MA's), (26, 7183), (35, 7228), (54, 7330), (56, 7336), (60, 7351), (61, 7354), (83, 7447), (111, 7588), (112, 7591), (136, 7690), (141, 7711),

Gene: KayMoney\_9 Start: 7171, Stop: 7761, Start Num: 21

Candidate Starts for KayMoney\_9:

(Start: 21 @7171 has 10 MA's), (26, 7183), (35, 7228), (56, 7336), (96, 7519), (97, 7525), (111, 7585), (112, 7588), (136, 7687), (141, 7708),

Gene: Kevin1\_8 Start: 5970, Stop: 6461, Start Num: 36

Candidate Starts for Kevin1\_8:

(4, 5859), (8, 5871), (Start: 36 @5970 has 4 MA's), (46, 6009), (59, 6087), (66, 6129), (78, 6156), (84, 6189), (98, 6246), (103, 6273), (109, 6294), (111, 6300), (129, 6369), (137, 6402), (149, 6444),

Gene: Khuang\_7 Start: 5855, Stop: 6379, Start Num: 25

Candidate Starts for Khuang\_7:

(Start: 25 @5855 has 1 MA's), (97, 6161), (105, 6197), (121, 6251), (126, 6275),

Gene: Kimchi\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for Kimchi\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: Kostya\_15 Start: 9678, Stop: 10244, Start Num: 24

Candidate Starts for Kostya\_15:

(Start: 24 @9678 has 127 MA's), (54, 9816), (73, 9906), (77, 9915), (97, 10035), (101, 10062), (118, 10128),

Gene: Lilac\_16 Start: 8634, Stop: 9200, Start Num: 24

Candidate Starts for Lilac\_16:

(Start: 24 @8634 has 127 MA's), (54, 8772), (73, 8862), (77, 8871), (97, 8991), (101, 9018), (118, 9084),

Gene: Lilizi\_16 Start: 8845, Stop: 9411, Start Num: 24

Candidate Starts for Lilizi\_16:

(Start: 24 @8845 has 127 MA's), (54, 8983), (73, 9073), (77, 9082), (97, 9202), (101, 9229), (118, 9295),

Gene: Lilpickle\_13 Start: 8353, Stop: 8919, Start Num: 24

Candidate Starts for Lilpickle\_13:

(Start: 24 @8353 has 127 MA's), (54, 8491), (73, 8581), (77, 8590), (97, 8710), (101, 8737), (118, 8803),

Gene: LilyBell\_9 Start: 7186, Stop: 7779, Start Num: 21

Candidate Starts for LilyBell\_9:

(Start: 21 @7186 has 10 MA's), (26, 7198), (35, 7243), (54, 7345), (56, 7351), (60, 7366), (61, 7369), (75, 7429), (83, 7462), (111, 7603), (112, 7606), (141, 7726),

Gene: LittleRon\_9 Start: 7169, Stop: 7759, Start Num: 21

Candidate Starts for LittleRon\_9:

(Start: 21 @7169 has 10 MA's), (26, 7181), (35, 7226), (56, 7334), (96, 7517), (97, 7523), (111, 7583), (112, 7586), (136, 7685), (141, 7706),

Gene: MISSy\_14 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for MISSy\_14:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: MPhalcon\_14 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for MPhalcon\_14:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: MadamMonkfish\_14 Start: 8564, Stop: 9130, Start Num: 24

Candidate Starts for MadamMonkfish\_14:

(Start: 24 @8564 has 127 MA's), (54, 8702), (73, 8792), (77, 8801), (97, 8921), (101, 8948), (118, 9014),

Gene: Mahdia\_7 Start: 6047, Stop: 6601, Start Num: 14

Candidate Starts for Mahdia\_7:

(Start: 14 @6047 has 5 MA's), (32, 6107), (43, 6155), (49, 6188), (51, 6200), (55, 6218), (59, 6239), (88, 6356), (97, 6395), (114, 6467), (124, 6509),

Gene: Manda\_15 Start: 9648, Stop: 10214, Start Num: 24

Candidate Starts for Manda\_15:

(Start: 24 @9648 has 127 MA's), (54, 9786), (73, 9876), (77, 9885), (97, 10005), (101, 10032), (118, 10098),

Gene: Marshmallow\_15 Start: 9678, Stop: 10244, Start Num: 24

Candidate Starts for Marshmallow\_15:

(Start: 24 @9678 has 127 MA's), (54, 9816), (73, 9906), (77, 9915), (97, 10035), (101, 10062), (118, 10128),

Gene: Maxxinista\_15 Start: 8613, Stop: 9179, Start Num: 24

Candidate Starts for Maxxinista\_15:

(Start: 24 @8613 has 127 MA's), (54, 8751), (73, 8841), (77, 8850), (97, 8970), (101, 8997), (118, 9063),

Gene: MichelleMyBell\_8 Start: 5990, Stop: 6481, Start Num: 36

Candidate Starts for MichelleMyBell\_8:

(3, 5834), (4, 5879), (8, 5891), (Start: 36 @5990 has 4 MA's), (46, 6029), (52, 6077), (59, 6107), (66, 6149), (78, 6176), (84, 6209), (98, 6266), (103, 6293), (109, 6314), (111, 6320), (129, 6389), (137, 6422), (149, 6464),

Gene: Mindy\_15 Start: 9457, Stop: 10023, Start Num: 24

Candidate Starts for Mindy\_15:

(Start: 24 @9457 has 127 MA's), (54, 9595), (73, 9685), (77, 9694), (97, 9814), (101, 9841), (118, 9907),

Gene: Miniwave\_15 Start: 9876, Stop: 10442, Start Num: 24

Candidate Starts for Miniwave\_15:

(Start: 24 @9876 has 127 MA's), (54, 10014), (73, 10104), (77, 10113), (97, 10233), (101, 10260), (118, 10326),

Gene: Misfit\_14 Start: 9230, Stop: 9796, Start Num: 24

Candidate Starts for Misfit\_14:

(Start: 24 @9230 has 127 MA's), (54, 9368), (73, 9458), (77, 9467), (97, 9587), (101, 9614), (118, 9680),

Gene: Moldemort\_15 Start: 8888, Stop: 9454, Start Num: 24

Candidate Starts for Moldemort\_15:

(Start: 24 @8888 has 127 MA's), (54, 9026), (73, 9116), (77, 9125), (97, 9245), (101, 9272), (118, 9338),

Gene: MollyToe\_15 Start: 9848, Stop: 10414, Start Num: 24

Candidate Starts for MollyToe\_15:

(Start: 24 @9848 has 127 MA's), (54, 9986), (73, 10076), (77, 10085), (97, 10205), (101, 10232), (118, 10298),

Gene: Morrissey\_7 Start: 6029, Stop: 6574, Start Num: 13

Candidate Starts for Morrissey\_7:

(Start: 13 @6029 has 1 MA's), (43, 6131), (51, 6176), (55, 6194), (58, 6212), (97, 6368), (98, 6374), (114, 6440), (124, 6482), (146, 6557),

Gene: Mosby\_14 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for Mosby\_14:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: Murica\_13 Start: 9142, Stop: 9708, Start Num: 24

Candidate Starts for Murica\_13:

(Start: 24 @9142 has 127 MA's), (54, 9280), (73, 9370), (77, 9379), (97, 9499), (101, 9526), (118, 9592),

Gene: Murphy\_14 Start: 8605, Stop: 9171, Start Num: 24

Candidate Starts for Murphy\_14:

(Start: 24 @8605 has 127 MA's), (54, 8743), (73, 8833), (77, 8842), (97, 8962), (101, 8989), (118, 9055),

Gene: Myrale\_15 Start: 9549, Stop: 10115, Start Num: 24

Candidate Starts for Myrale\_15:

(Start: 24 @9549 has 127 MA's), (54, 9687), (73, 9777), (77, 9786), (97, 9906), (101, 9933), (118, 9999),

Gene: Nala\_14 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for Nala\_14:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: NelitzaMV\_15 Start: 9748, Stop: 10314, Start Num: 24

Candidate Starts for NelitzaMV\_15:

(Start: 24 @9748 has 127 MA's), (54, 9886), (73, 9976), (77, 9985), (97, 10105), (101, 10132), (118, 10198),

Gene: NidoQ\_9 Start: 7232, Stop: 7822, Start Num: 21

Candidate Starts for NidoQ\_9:

(Start: 21 @7232 has 10 MA's), (26, 7244), (35, 7289), (96, 7580), (97, 7586), (111, 7646), (112, 7649), (136, 7748), (141, 7769),

Gene: NikkiHotWheels\_9 Start: 7172, Stop: 7762, Start Num: 21

Candidate Starts for NikkiHotWheels\_9:

(Start: 21 @7172 has 10 MA's), (26, 7184), (35, 7229), (96, 7520), (97, 7526), (111, 7586), (112, 7589), (136, 7688), (141, 7709),

Gene: Nimrod\_14 Start: 9385, Stop: 9951, Start Num: 24

Candidate Starts for Nimrod\_14:

(Start: 24 @9385 has 127 MA's), (54, 9523), (73, 9613), (77, 9622), (97, 9742), (101, 9769), (118, 9835),

Gene: NoSleep\_15 Start: 8885, Stop: 9451, Start Num: 24

Candidate Starts for NoSleep\_15:

(Start: 24 @8885 has 127 MA's), (54, 9023), (73, 9113), (77, 9122), (97, 9242), (101, 9269), (118, 9335),

Gene: NonchalantPear\_14 Start: 8838, Stop: 9404, Start Num: 24

Candidate Starts for NonchalantPear\_14:

(Start: 24 @8838 has 127 MA's), (54, 8976), (73, 9066), (77, 9075), (97, 9195), (101, 9222), (118, 9288),

Gene: OrionPax\_15 Start: 8888, Stop: 9454, Start Num: 24

Candidate Starts for OrionPax\_15:

(Start: 24 @8888 has 127 MA's), (54, 9026), (73, 9116), (77, 9125), (97, 9245), (101, 9272), (118, 9338),

Gene: PFR1\_06 Start: 6360, Stop: 6935, Start Num: 15

Candidate Starts for PFR1\_06:

(15, 6360), (17, 6363), (22, 6375), (37, 6438), (60, 6546), (63, 6567), (66, 6585), (82, 6633), (84, 6645), (97, 6729), (108, 6780), (109, 6783), (110, 6786), (111, 6789), (140, 6903), (147, 6924), (148, 6927),

Gene: PFR2\_06 Start: 6360, Stop: 6935, Start Num: 15

Candidate Starts for PFR2\_06:

(15, 6360), (17, 6363), (22, 6375), (37, 6438), (60, 6546), (63, 6567), (66, 6585), (82, 6633), (84, 6645), (97, 6729), (108, 6780), (109, 6783), (110, 6786), (111, 6789), (140, 6903), (147, 6924), (148, 6927),

Gene: PaddyBaddy\_15 Start: 8898, Stop: 9464, Start Num: 24

Candidate Starts for PaddyBaddy\_15:

(Start: 24 @8898 has 127 MA's), (54, 9036), (73, 9126), (77, 9135), (97, 9255), (101, 9282), (118, 9348),

Gene: Palpatine\_14 Start: 9183, Stop: 9749, Start Num: 24

Candidate Starts for Palpatine\_14:

(Start: 24 @9183 has 127 MA's), (54, 9321), (73, 9411), (77, 9420), (97, 9540), (101, 9567), (118, 9633),

Gene: Paperbeatsrock\_16 Start: 10120, Stop: 10686, Start Num: 24

Candidate Starts for Paperbeatsrock\_16:

(Start: 24 @10120 has 127 MA's), (54, 10258), (73, 10348), (77, 10357), (97, 10477), (101, 10504), (118, 10570),

Gene: Pat3\_14 Start: 8388, Stop: 8954, Start Num: 24

Candidate Starts for Pat3\_14:

(Start: 24 @8388 has 127 MA's), (54, 8526), (73, 8616), (77, 8625), (97, 8745), (101, 8772), (118, 8838),

Gene: Peas\_9 Start: 7175, Stop: 7768, Start Num: 21

Candidate Starts for Peas\_9:

(Start: 21 @7175 has 10 MA's), (26, 7187), (35, 7232), (54, 7334), (56, 7340), (60, 7355), (61, 7358), (75, 7418), (83, 7451), (111, 7592), (141, 7715),

Gene: PeggyLeg03\_9 Start: 7215, Stop: 7805, Start Num: 21

Candidate Starts for PeggyLeg03\_9:

(Start: 21 @7215 has 10 MA's), (26, 7227), (35, 7272), (97, 7569), (111, 7629), (112, 7632), (136, 7731), (141, 7752), (152, 7791),

Gene: Petra64142\_15 Start: 9601, Stop: 10167, Start Num: 24

Candidate Starts for Petra64142\_15:

(Start: 24 @9601 has 127 MA's), (54, 9739), (73, 9829), (77, 9838), (97, 9958), (101, 9985), (118, 10051),

Gene: Phaja\_14 Start: 9338, Stop: 9904, Start Num: 24

Candidate Starts for Phaja\_14:

(Start: 24 @9338 has 127 MA's), (54, 9476), (73, 9566), (77, 9575), (97, 9695), (101, 9722), (118, 9788),

Gene: Pharsalus\_15 Start: 9920, Stop: 10486, Start Num: 24

Candidate Starts for Pharsalus\_15:

(Start: 24 @9920 has 127 MA's), (54, 10058), (73, 10148), (77, 10157), (97, 10277), (101, 10304), (118, 10370),

Gene: PhatBacter\_14 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for PhatBacter\_14:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: Phaux\_13 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for Phaux\_13:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: Phrux\_14 Start: 8884, Stop: 9450, Start Num: 24

Candidate Starts for Phrux\_14:

(Start: 24 @8884 has 127 MA's), (54, 9022), (73, 9112), (77, 9121), (97, 9241), (101, 9268), (118, 9334),

Gene: Policronamos\_14 Start: 9186, Stop: 9752, Start Num: 24  
Candidate Starts for Policronamos\_14:  
(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: Porky\_13 Start: 8458, Stop: 9024, Start Num: 24  
Candidate Starts for Porky\_13:  
(Start: 24 @8458 has 127 MA's), (54, 8596), (73, 8686), (77, 8695), (97, 8815), (101, 8842), (118, 8908),

Gene: Ptowny\_14 Start: 8525, Stop: 9091, Start Num: 24  
Candidate Starts for Ptowny\_14:  
(Start: 24 @8525 has 127 MA's), (54, 8663), (73, 8753), (77, 8762), (97, 8882), (101, 8909), (118, 8975),

Gene: Pucara\_9 Start: 7174, Stop: 7767, Start Num: 21  
Candidate Starts for Pucara\_9:  
(Start: 21 @7174 has 10 MA's), (26, 7186), (35, 7231), (54, 7333), (56, 7339), (60, 7354), (61, 7357), (75, 7417), (83, 7450), (111, 7591), (112, 7594), (141, 7714),

Gene: Pumpkin\_15 Start: 8701, Stop: 9267, Start Num: 24  
Candidate Starts for Pumpkin\_15:  
(Start: 24 @8701 has 127 MA's), (54, 8839), (73, 8929), (77, 8938), (97, 9058), (101, 9085), (118, 9151),

Gene: Puppies\_7 Start: 5969, Stop: 6499, Start Num: 14  
Candidate Starts for Puppies\_7:  
(Start: 14 @5969 has 5 MA's), (37, 6032), (41, 6044), (43, 6056), (51, 6101), (63, 6164), (66, 6182), (75, 6203), (96, 6284), (97, 6290), (131, 6431),

Gene: Quallification\_16 Start: 9885, Stop: 10451, Start Num: 24  
Candidate Starts for Quallification\_16:  
(Start: 24 @9885 has 127 MA's), (54, 10023), (73, 10113), (77, 10122), (97, 10242), (101, 10269), (118, 10335),

Gene: Rakim\_16 Start: 9792, Stop: 10358, Start Num: 24  
Candidate Starts for Rakim\_16:  
(Start: 24 @9792 has 127 MA's), (54, 9930), (73, 10020), (77, 10029), (97, 10149), (101, 10176), (118, 10242),

Gene: Rimmer\_14 Start: 9245, Stop: 9811, Start Num: 24  
Candidate Starts for Rimmer\_14:  
(Start: 24 @9245 has 127 MA's), (54, 9383), (73, 9473), (77, 9482), (97, 9602), (101, 9629), (118, 9695),

Gene: RiverMonster\_14 Start: 8898, Stop: 9464, Start Num: 24  
Candidate Starts for RiverMonster\_14:  
(Start: 24 @8898 has 127 MA's), (54, 9036), (73, 9126), (77, 9135), (97, 9255), (101, 9282), (118, 9348),

Gene: Rubeelu\_8 Start: 5970, Stop: 6461, Start Num: 36  
Candidate Starts for Rubeelu\_8:

(4, 5859), (8, 5871), (Start: 36 @5970 has 4 MA's), (46, 6009), (52, 6057), (59, 6087), (66, 6129), (78, 6156), (84, 6189), (98, 6246), (103, 6273), (109, 6294), (111, 6300), (129, 6369), (137, 6402), (149, 6444),

Gene: RunningOnE\_68 Start: 32829, Stop: 33389, Start Num: 19

Candidate Starts for RunningOnE\_68:

(Start: 19 @32829 has 12 MA's), (57, 32994), (73, 33081), (92, 33153), (99, 33228), (106, 33252), (137, 33363),

Gene: Saints25\_15 Start: 8807, Stop: 9373, Start Num: 24

Candidate Starts for Saints25\_15:

(Start: 24 @8807 has 127 MA's), (54, 8945), (73, 9035), (77, 9044), (97, 9164), (101, 9191), (118, 9257),

Gene: Sapo\_6 Start: 5442, Stop: 6047, Start Num: 12

Candidate Starts for Sapo\_6:

(Start: 12 @5442 has 4 MA's), (37, 5523), (41, 5535), (50, 5589), (53, 5604), (67, 5679), (84, 5733), (93, 5754), (96, 5802), (103, 5841),

Gene: Sassay\_14 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for Sassay\_14:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: Schmidt\_10 Start: 7341, Stop: 7862, Start Num: 16

Candidate Starts for Schmidt\_10:

(5, 7305), (Start: 16 @7341 has 1 MA's), (Start: 34 @7392 has 2 MA's), (38, 7416), (41, 7422), (49, 7467), (54, 7494), (63, 7542), (64, 7551), (66, 7560), (89, 7632), (96, 7662), (105, 7704), (109, 7719), (127, 7782), (150, 7854),

Gene: ShamWow\_15 Start: 9679, Stop: 10245, Start Num: 24

Candidate Starts for ShamWow\_15:

(Start: 24 @9679 has 127 MA's), (54, 9817), (73, 9907), (77, 9916), (97, 10036), (101, 10063), (118, 10129),

Gene: ShereKhan\_16 Start: 10126, Stop: 10692, Start Num: 24

Candidate Starts for ShereKhan\_16:

(Start: 24 @10126 has 127 MA's), (54, 10264), (73, 10354), (77, 10363), (97, 10483), (101, 10510), (118, 10576),

Gene: Simpliphy\_15 Start: 8888, Stop: 9454, Start Num: 24

Candidate Starts for Simpliphy\_15:

(Start: 24 @8888 has 127 MA's), (54, 9026), (73, 9116), (77, 9125), (97, 9245), (101, 9272), (118, 9338),

Gene: SirDuracell\_14 Start: 8345, Stop: 8911, Start Num: 24

Candidate Starts for SirDuracell\_14:

(Start: 24 @8345 has 127 MA's), (54, 8483), (73, 8573), (77, 8582), (97, 8702), (101, 8729), (118, 8795),

Gene: SophKB\_15 Start: 9678, Stop: 10244, Start Num: 24

Candidate Starts for SophKB\_15:

(Start: 24 @9678 has 127 MA's), (54, 9816), (73, 9906), (77, 9915), (97, 10035), (101, 10062), (118, 10128),

Gene: Sotrice96\_15 Start: 9634, Stop: 10200, Start Num: 24

Candidate Starts for Sotrice96\_15:

(Start: 24 @9634 has 127 MA's), (54, 9772), (73, 9862), (77, 9871), (97, 9991), (101, 10018), (118, 10084),

Gene: Splinter\_12 Start: 8930, Stop: 9409, Start Num: 34

Candidate Starts for Splinter\_12:

(Start: 19 @8885 has 12 MA's), (Start: 34 @8930 has 2 MA's), (49, 9005), (60, 9059), (64, 9089), (76, 9119), (91, 9176), (96, 9200), (106, 9245), (107, 9251), (108, 9254), (127, 9320), (133, 9338), (139, 9356), (150, 9395),

Gene: Spooks\_53 Start: 31393, Stop: 31992, Start Num: 19

Candidate Starts for Spooks\_53:

(Start: 19 @31393 has 12 MA's), (28, 31417), (69, 31624), (90, 31705), (98, 31774), (104, 31804), (113, 31834), (144, 31954),

Gene: Stank\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for Stank\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: Stark\_15 Start: 8901, Stop: 9467, Start Num: 24

Candidate Starts for Stark\_15:

(Start: 24 @8901 has 127 MA's), (54, 9039), (73, 9129), (77, 9138), (97, 9258), (101, 9285), (118, 9351),

Gene: StellaBean\_15 Start: 9678, Stop: 10244, Start Num: 24

Candidate Starts for StellaBean\_15:

(Start: 24 @9678 has 127 MA's), (54, 9816), (73, 9906), (77, 9915), (97, 10035), (101, 10062), (118, 10128),

Gene: StolenFromERC\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for StolenFromERC\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: StormChicken\_15 Start: 9851, Stop: 10417, Start Num: 24

Candidate Starts for StormChicken\_15:

(Start: 24 @9851 has 127 MA's), (54, 9989), (73, 10079), (77, 10088), (97, 10208), (101, 10235), (118, 10301),

Gene: Success\_54 Start: 30512, Stop: 31111, Start Num: 19

Candidate Starts for Success\_54:

(Start: 19 @30512 has 12 MA's), (28, 30536), (65, 30731), (90, 30824), (98, 30893), (104, 30923), (113, 30953), (138, 31052),

Gene: TBrady12\_16 Start: 9130, Stop: 9696, Start Num: 24

Candidate Starts for TBrady12\_16:

(Start: 24 @9130 has 127 MA's), (54, 9268), (73, 9358), (77, 9367), (97, 9487), (101, 9514), (118, 9580),

Gene: TZGordon\_14 Start: 9027, Stop: 9551, Start Num: 19

Candidate Starts for TZGordon\_14:

(Start: 19 @9027 has 12 MA's), (Start: 34 @9072 has 2 MA's), (49, 9147), (60, 9201), (64, 9231), (76, 9261), (91, 9318), (96, 9342), (106, 9387), (108, 9396), (127, 9462), (133, 9480), (139, 9498), (150, 9537),

Gene: Tarkin\_16 Start: 10129, Stop: 10695, Start Num: 24

Candidate Starts for Tarkin\_16:

(Start: 24 @10129 has 127 MA's), (54, 10267), (73, 10357), (77, 10366), (97, 10486), (101, 10513), (118, 10579),

Gene: TeamEdward\_15 Start: 9848, Stop: 10414, Start Num: 24

Candidate Starts for TeamEdward\_15:

(Start: 24 @9848 has 127 MA's), (54, 9986), (73, 10076), (77, 10085), (97, 10205), (101, 10232), (118, 10298),

Gene: TeardropMSU\_14 Start: 9586, Stop: 10152, Start Num: 24

Candidate Starts for TeardropMSU\_14:

(Start: 24 @9586 has 127 MA's), (54, 9724), (73, 9814), (77, 9823), (97, 9943), (101, 9970), (118, 10036),

Gene: Teaspoon\_14 Start: 8583, Stop: 9149, Start Num: 24

Candidate Starts for Teaspoon\_14:

(Start: 24 @8583 has 127 MA's), (54, 8721), (73, 8811), (77, 8820), (97, 8940), (101, 8967), (118, 9033),

Gene: Terminus\_14 Start: 9230, Stop: 9796, Start Num: 24

Candidate Starts for Terminus\_14:

(Start: 24 @9230 has 127 MA's), (54, 9368), (73, 9458), (77, 9467), (97, 9587), (101, 9614), (118, 9680),

Gene: Thimble\_15 Start: 8635, Stop: 9201, Start Num: 24

Candidate Starts for Thimble\_15:

(Start: 24 @8635 has 127 MA's), (54, 8773), (73, 8863), (77, 8872), (97, 8992), (101, 9019), (118, 9085),

Gene: Thresher\_15 Start: 9891, Stop: 10457, Start Num: 24

Candidate Starts for Thresher\_15:

(Start: 24 @9891 has 127 MA's), (54, 10029), (73, 10119), (77, 10128), (97, 10248), (101, 10275), (118, 10341),

Gene: TinaLin\_15 Start: 9599, Stop: 10123, Start Num: 19

Candidate Starts for TinaLin\_15:

(Start: 19 @9599 has 12 MA's), (52, 9740), (60, 9773), (91, 9890), (96, 9914), (105, 9956), (108, 9968), (127, 10034), (133, 10052), (139, 10070), (150, 10109), (151, 10112),

Gene: Tomaszewski\_14 Start: 9279, Stop: 9845, Start Num: 24

Candidate Starts for Tomaszewski\_14:

(Start: 24 @9279 has 127 MA's), (54, 9417), (73, 9507), (77, 9516), (97, 9636), (101, 9663), (118, 9729),

Gene: Toto\_15 Start: 9679, Stop: 10245, Start Num: 24

Candidate Starts for Toto\_15:

(Start: 24 @9679 has 127 MA's), (54, 9817), (73, 9907), (77, 9916), (97, 10036), (101, 10063), (118, 10129),

Gene: Traaww1\_13 Start: 9324, Stop: 9890, Start Num: 24

Candidate Starts for Traaww1\_13:

(Start: 24 @9324 has 127 MA's), (54, 9462), (73, 9552), (77, 9561), (97, 9681), (101, 9708), (118, 9774),

Gene: Trine\_7 Start: 5978, Stop: 6505, Start Num: 10

Candidate Starts for Trine\_7:

(Start: 10 @5978 has 1 MA's), (Start: 14 @5984 has 5 MA's), (43, 6071), (47, 6089), (51, 6116), (55, 6134), (59, 6155), (75, 6218), (97, 6305), (114, 6371), (117, 6386), (147, 6494),

Gene: Tuco\_15 Start: 9678, Stop: 10244, Start Num: 24

Candidate Starts for Tuco\_15:

(Start: 24 @9678 has 127 MA's), (54, 9816), (73, 9906), (77, 9915), (97, 10035), (101, 10062), (118, 10128),

Gene: Ukulele\_14 Start: 8901, Stop: 9467, Start Num: 24

Candidate Starts for Ukulele\_14:

(Start: 24 @8901 has 127 MA's), (54, 9039), (73, 9129), (77, 9138), (97, 9258), (101, 9285), (118, 9351),

Gene: Upyo\_7 Start: 5995, Stop: 6522, Start Num: 14

Candidate Starts for Upyo\_7:

(Start: 14 @5995 has 5 MA's), (43, 6082), (47, 6100), (49, 6115), (50, 6124), (51, 6127), (55, 6145), (59, 6166), (72, 6226), (84, 6268),

Gene: Vendetta\_12 Start: 8930, Stop: 9409, Start Num: 34

Candidate Starts for Vendetta\_12:

(Start: 19 @8885 has 12 MA's), (Start: 34 @8930 has 2 MA's), (49, 9005), (60, 9059), (64, 9089), (76, 9119), (91, 9176), (96, 9200), (106, 9245), (107, 9251), (108, 9254), (127, 9320), (133, 9338), (139, 9356), (150, 9395),

Gene: Widow\_7 Start: 5960, Stop: 6490, Start Num: 14

Candidate Starts for Widow\_7:

(Start: 14 @5960 has 5 MA's), (37, 6023), (41, 6035), (43, 6047), (51, 6092), (63, 6155), (66, 6173), (96, 6275), (97, 6281), (131, 6422),

Gene: Wiggin\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for Wiggin\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: Willez\_14 Start: 9186, Stop: 9752, Start Num: 24

Candidate Starts for Willez\_14:

(Start: 24 @9186 has 127 MA's), (54, 9324), (73, 9414), (77, 9423), (97, 9543), (101, 9570), (118, 9636),

Gene: Xandras\_16 Start: 9133, Stop: 9699, Start Num: 24

Candidate Starts for Xandras\_16:

(Start: 24 @9133 has 127 MA's), (54, 9271), (73, 9361), (77, 9370), (97, 9490), (101, 9517), (118, 9583),

Gene: YassJohnny\_15 Start: 9678, Stop: 10244, Start Num: 24

Candidate Starts for YassJohnny\_15:

(Start: 24 @9678 has 127 MA's), (54, 9816), (73, 9906), (77, 9915), (97, 10035), (101, 10062), (118, 10128),

Gene: Youngblood\_14 Start: 9311, Stop: 9877, Start Num: 24

Candidate Starts for Youngblood\_14:

(Start: 24 @9311 has 127 MA's), (54, 9449), (73, 9539), (77, 9548), (97, 9668), (101, 9695), (118, 9761),

Gene: xkcd\_15 Start: 9338, Stop: 9904, Start Num: 24

Candidate Starts for xkcd\_15:

(Start: 24 @9338 has 127 MA's), (54, 9476), (73, 9566), (77, 9575), (97, 9695), (101, 9722), (118, 9788),