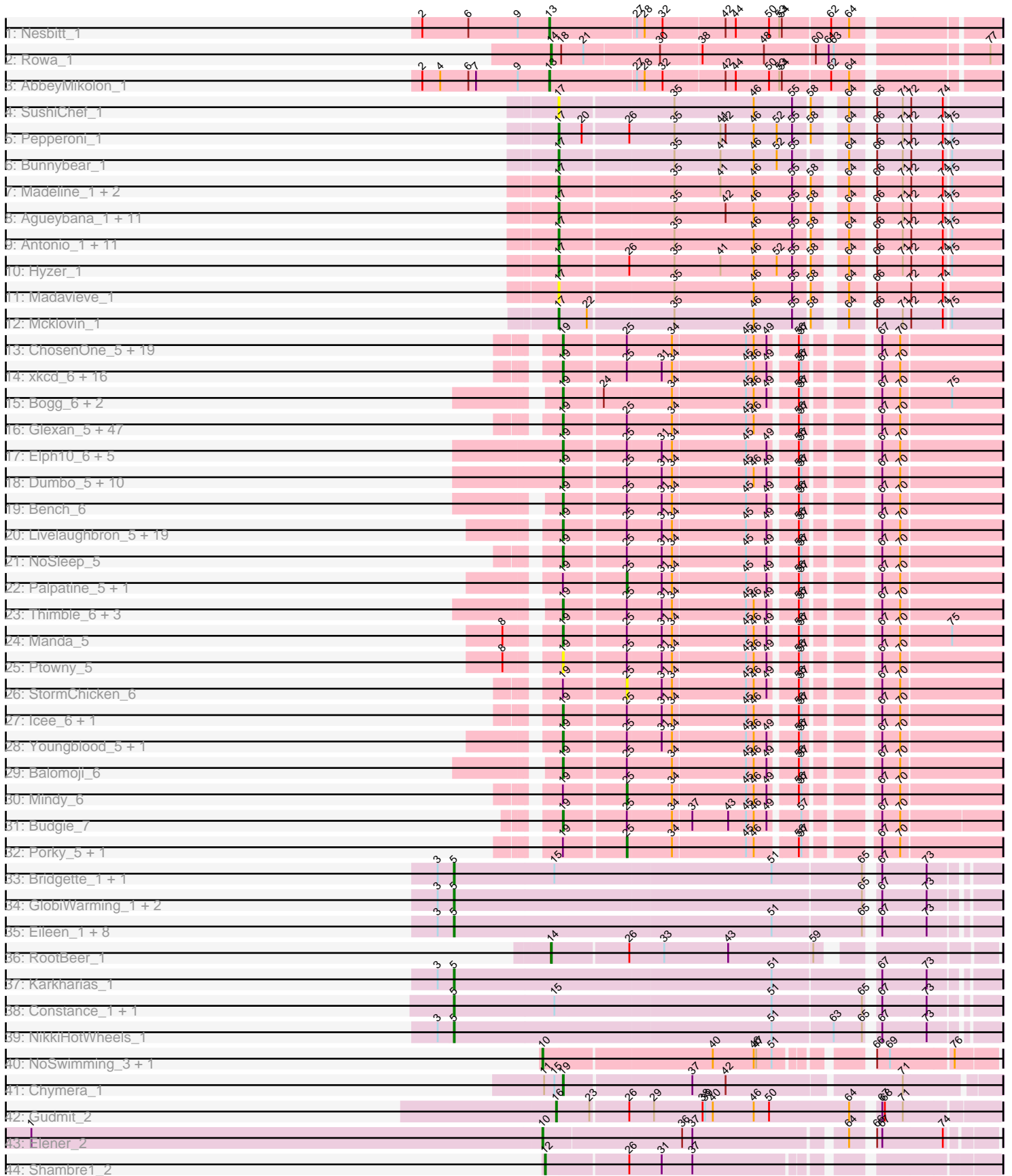


Pham 311237



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 311237 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311237 has 206 members, 21 are drafts.

Phages represented in each track:

- Track 1 : Nesbitt\_1
- Track 2 : Rowa\_1
- Track 3 : AbbeyMikolon\_1
- Track 4 : SushiChef\_1
- Track 5 : Pepperoni\_1
- Track 6 : Bunnybear\_1
- Track 7 : Madeline\_1, WelcomeAyanna\_1, ThankyouJordi\_1
- Track 8 : Agueybana\_1, Nymphadora\_1, Herod\_1, AlumE\_1, Eviarto\_1, Bialota\_1, BatStarr\_1, BoyNamedSue\_1, Hugley\_1, TimTam\_1, Zirinka\_1, Bosnia\_1
- Track 9 : Antonio\_1, Suscepit\_1, Maridalia\_1, Polly\_1, Manasvini\_1, Trumpet\_1, RavenCo17\_1, Zameen\_1, Eudoria\_1, Kita\_1, Tayonia\_1, Neobush\_1
- Track 10 : Hyzer\_1
- Track 11 : Madavieve\_1
- Track 12 : Mcklovin\_1
- Track 13 : ChosenOne\_5, IHOP\_6, BaboJay\_6, Marshmallow\_6, Pharsalus\_6, FairyPath\_6, Elite2014\_5, Myrale\_6, Phaja\_6, NelitzaMV\_6, StellaBean\_6, ShamWow\_6, SophKB\_6, Toto\_6, Lilpickle\_5, Hoonter\_6, Cookies\_6, Tarkin\_6, Greep\_6, TeardropMSU\_5
- Track 14 : xkcd\_6, Moldemort\_5, Kanye\_6, DoctorDiddles\_5, Czyszczon1\_5, Highbury\_5, TeamEdward\_6, Saints25\_5, HanKaySha\_5, Simpliphy\_5, Quallification\_6, MollyToe\_6, OrionPax\_5, Stank\_6, DrDrey\_6, AmericanBeauty\_6, ShereKhan\_6
- Track 15 : Bogg\_6, Goku\_6, Eureka\_5
- Track 16 : Glexan\_5, Brewer\_6, Paperbeatsrock\_6, Rimmer\_6, Goldilocks\_6, Wiggin\_6, Rakim\_6, Barbarian\_5, Buck\_6, Flypotenuse\_5, BigBubba\_6, MadamMonkfish\_5, SirDuracell\_6, Adnama\_6, Murphy\_5, Gage\_6, StolenFromERC\_6, Henry\_6, TBrady12\_6, ChotaBhai\_6, Miniwave\_6, Tuco\_6, ABCat\_5, CrystalP\_6, Dusk\_6, BadStone\_5, Inca\_6, GooberAzure\_6, Traaaww1\_5, Asriel\_5, Nimrod\_6, Bask21\_6, Emmina\_6, Gemini\_6, Gator\_5, GoldenSpark\_6, Argent26\_6, Harella\_5, Teaspoon\_6, Amao\_6, Kimchi\_6, YassJohnny\_6, Pat3\_6, Lilizi\_6, Xandras\_6, BilboSwaggins\_6, Kostya\_6, Command613\_6
- Track 17 : Elph10\_6, Maxxinista\_6, Filch\_6, PaddyBaddy\_6, 244\_6, RiverMonster\_5
- Track 18 : Dumbo\_5, Hopey\_6, Lilac\_7, Thresher\_6, Easy2Say\_6, Phrux\_5, Pumpkin\_6, JeTaime\_7, Stark\_6, Ukulele\_5, Cjw1\_5
- Track 19 : Bench\_6
- Track 20 : Liveloughbron\_5, FoghornLeghorn\_5, Sassay\_5, Murica\_4, Phaux\_4, HufflyPuff\_4, Terminus\_5, Bruin\_5, FireRed\_5, Tomaszewski\_5, Misfit\_5,

BugsBunny\_5, PhatBacter\_5, Contagion\_5, Willez\_5, Nala\_5, MPhalcon\_5, Mosby\_5, Policronamos\_5, MISSy\_5

- Track 21 : NoSleep\_5
- Track 22 : Palpatine\_5, Becksu\_5
- Track 23 : Thimble\_6, Holt\_6, Sotrice96\_6, Daikon\_5
- Track 24 : Manda\_5
- Track 25 : Ptowny\_5
- Track 26 : StormChicken\_6
- Track 27 : Icee\_6, Cactus\_6
- Track 28 : Youngblood\_5, NonchalantPear\_4
- Track 29 : Balomoji\_6
- Track 30 : Mindy\_6
- Track 31 : Budgie\_7
- Track 32 : Porky\_5, Petra64142\_6
- Track 33 : Bridgette\_1, HotPotato\_1
- Track 34 : GlobiWarming\_1, LittleRon\_1, KayMoney\_1
- Track 35 : Eileen\_1, Pucara\_1, Henrique\_1, NidoQ\_1, ChuckDuck\_1, LilyBell\_1, Judy\_1, FosterFrank\_1, Peas\_1
- Track 36 : RootBeer\_1
- Track 37 : Karkharias\_1
- Track 38 : Constance\_1, PeggyLeg03\_1
- Track 39 : NikkiHotWheels\_1
- Track 40 : NoSwimming\_3, Scotia\_3
- Track 41 : Chymera\_1
- Track 42 : Gudmit\_2
- Track 43 : Elener\_2
- Track 44 : Shambre1\_2

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

The start number called the most often in the published annotations is 19, it was called in 130 of the 185 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244\_6, ABCat\_5, Adnama\_6, Amao\_6, AmericanBeauty\_6, Argent26\_6, Asriel\_5, BaboJay\_6, BadStone\_5, Balomoji\_6, Barbarian\_5, Bask21\_6, Bench\_6, BigBubba\_6, BilboSwaggins\_6, Bogg\_6, Brewer\_6, Bruin\_5, Buck\_6, Budgie\_7, BugsBunny\_5, Cactus\_6, ChosenOne\_5, ChotaBhai\_6, Chymera\_1, Cjw1\_5, Command613\_6, Contagion\_5, Cookies\_6, CrystalP\_6, Czyszczonek\_5, Daikon\_5, DoctorDiddles\_5, DrDrey\_6, Dumbo\_5, Dusk\_6, Easy2Say\_6, Elite2014\_5, Elph10\_6, Emmina\_6, Eureka\_5, FairyPath\_6, Filch\_6, FireRed\_5, Flypotenuse\_5, FoghornLeghorn\_5, Gage\_6, Gator\_5, Gemini\_6, Glexan\_5, Goku\_6, GoldenSpark\_6, Goldilocks\_6, GooberAzure\_6, Greep\_6, HanKaySha\_5, Harella\_5, Henry\_6, Highbury\_5, Holt\_6, Hoonter\_6, Hopey\_6, HufflyPuff\_4, IHOP\_6, Icee\_6, Inca\_6, JeTaime\_7, Kanye\_6, Kimchi\_6, Kostya\_6, Lilac\_7, Lilizi\_6, Lilpickle\_5, Livilaughbron\_5, MISSy\_5, MPhalcon\_5, MadamMonkfish\_5, Manda\_5, Marshmallow\_6, Maxxinista\_6, Miniwave\_6, Misfit\_5, Moldemort\_5, MollyToe\_6, Mosby\_5, Murica\_4, Murphy\_5, Myrale\_6, Nala\_5, NelitzaMV\_6, Nimrod\_6, NoSleep\_5, NonchalantPear\_4, OrionPax\_5, PaddyBaddy\_6, Paperbeatsrock\_6, Pat3\_6, Phaja\_6, Pharsalus\_6, PhatBacter\_5, Phaux\_4, Phrux\_5, Policronamos\_5,

Ptowny\_5, Pumpkin\_6, Quallification\_6, Rakim\_6, Rimmer\_6, RiverMonster\_5, Saints25\_5, Sassay\_5, ShamWow\_6, ShereKhan\_6, Simpliphy\_5, SirDuracell\_6, SophKB\_6, Sotrice96\_6, Stank\_6, Stark\_6, StellaBean\_6, StolenFromERC\_6, TBrady12\_6, Tarkin\_6, TeamEdward\_6, TeardropMSU\_5, Teaspoon\_6, Terminus\_5, Thimble\_6, Thresher\_6, Tomaszewski\_5, Toto\_6, Traaww1\_5, Tuco\_6, Ukulele\_5, Wiggin\_6, Willez\_5, Xandras\_6, YassJohnny\_6, Youngblood\_5, xkcd\_6,

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

- Becksu\_5, Mindy\_6, Palpatine\_5, Petra64142\_6, Porky\_5, StormChicken\_6,

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

- AbbeyMikolon\_1, Agueybana\_1, AlumE\_1, Antonio\_1, BatStarr\_1, Bialota\_1, Bosnia\_1, BoyNamedSue\_1, Bridgette\_1, Bunnybear\_1, ChuckDuck\_1, Constance\_1, Eileen\_1, Elener\_2, Eudoria\_1, Eviarto\_1, FosterFrank\_1, GlobiWarming\_1, Gudmit\_2, Henrique\_1, Herod\_1, HotPotato\_1, Hugley\_1, Hyzer\_1, Judy\_1, Karkharias\_1, KayMoney\_1, Kita\_1, LilyBell\_1, LittleRon\_1, Madavieve\_1, Madeline\_1, Manasvini\_1, Maridalia\_1, Mcklovin\_1, Neobush\_1, Nesbitt\_1, NidoQ\_1, NikkiHotWheels\_1, NoSwimming\_3, Nymphadora\_1, Peas\_1, PeggyLeg03\_1, Pepperoni\_1, Polly\_1, Pucara\_1, RavenCo17\_1, RootBeer\_1, Rowa\_1, Scotia\_3, Shambre1\_2, Suscepit\_1, SushiChef\_1, Tayonia\_1, ThankyouJordi\_1, TimTam\_1, Trumpet\_1, WelcomeAyanna\_1, Zameen\_1, Zirinka\_1,

### Summary by start number:

Start 5:

- Found in 18 of 206 ( 8.7% ) of genes in pham
- Manual Annotations of this start: 13 of 185
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bridgette\_1 (FA), ChuckDuck\_1 (FA), Constance\_1 (FA), Eileen\_1 (FA), FosterFrank\_1 (FA), GlobiWarming\_1 (FA), Henrique\_1 (FA), HotPotato\_1 (FA), Judy\_1 (FA), Karkharias\_1 (FA), KayMoney\_1 (FA), LilyBell\_1 (FA), LittleRon\_1 (FA), NidoQ\_1 (FA), NikkiHotWheels\_1 (FA), Peas\_1 (FA), PeggyLeg03\_1 (FA), Pucara\_1 (FA),

Start 10:

- Found in 3 of 206 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 3 of 185
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elener\_2 (singleton), NoSwimming\_3 (FO), Scotia\_3 (FO),

Start 12:

- Found in 1 of 206 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 185
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1\_2 (singleton),

Start 13:

- Found in 2 of 206 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 2 of 185
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon\_1 (BL), Nesbitt\_1 (BL),

Start 14:

- Found in 2 of 206 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 2 of 185
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RootBeer\_1 (FA), Rowa\_1 (BL),

Start 16:

- Found in 1 of 206 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 185
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gudmit\_2 (singleton),

Start 17:

- Found in 33 of 206 ( 16.0% ) of genes in pham
- Manual Annotations of this start: 30 of 185
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agueybana\_1 (CZ1), AlumE\_1 (CZ1), Antonio\_1 (CZ1), BatStarr\_1 (CZ1), Bialota\_1 (CZ1), Bosnia\_1 (CZ1), BoyNamedSue\_1 (CZ1), Bunnybear\_1 (CZ), Eudoria\_1 (CZ1), Eviarto\_1 (CZ1), Herod\_1 (CZ1), Hugley\_1 (CZ1), Hyzer\_1 (CZ1), Kita\_1 (CZ1), Madavieve\_1 (CZ1), Madeline\_1 (CZ1), Manasvini\_1 (CZ1), Maridalia\_1 (CZ1), Mcklovin\_1 (CZ4), Neobush\_1 (CZ1), Nymphadora\_1 (CZ1), Pepperoni\_1 (CZ), Polly\_1 (CZ1), RavenCo17\_1 (CZ8), Suscepit\_1 (CZ1), SushiChef\_1 (CZ), Tayonia\_1 (CZ1), ThankyouJordi\_1 (CZ1), TimTam\_1 (CZ1), Trumpet\_1 (CZ1), WelcomeAyanna\_1 (CZ1), Zameen\_1 (CZ1), Zirinka\_1 (CZ1),

Start 19:

- Found in 146 of 206 ( 70.9% ) of genes in pham
- Manual Annotations of this start: 130 of 185
- Called 95.9% of time when present
- Phage (with cluster) where this start called: 244\_6 (E), ABCat\_5 (E), Adnama\_6 (E), Amao\_6 (E), AmericanBeauty\_6 (E), Argent26\_6 (E), Asriel\_5 (E), BaboJay\_6 (E), BadStone\_5 (E), Balomoji\_6 (E), Barbarian\_5 (E), Bask21\_6 (E), Bench\_6 (E), BigBubba\_6 (E), BilboSwaggins\_6 (E), Bogg\_6 (E), Brewer\_6 (E), Bruin\_5 (E), Buck\_6 (E), Budgie\_7 (E), BugsBunny\_5 (E), Cactus\_6 (E), ChosenOne\_5 (E), ChotaBhai\_6 (E), Chymera\_1 (singleton), Cjw1\_5 (E), Command613\_6 (E), Contagion\_5 (E), Cookies\_6 (E), CrystalP\_6 (E), Czyszczonek\_5 (E), Daikon\_5 (E), DoctorDiddles\_5 (E), DrDrey\_6 (E), Dumbo\_5 (E), Dusk\_6 (E), Easy2Say\_6 (E), Elite2014\_5 (E), Elph10\_6 (E), Emmina\_6 (E), Eureka\_5 (E), FairyPath\_6 (E), Filch\_6 (E), FireRed\_5 (E), Flypotenuse\_5 (E), FoghornLeghorn\_5 (E), Gage\_6 (E), Gator\_5 (E), Gemini\_6 (E), Glexan\_5 (E), Goku\_6 (E), GoldenSpark\_6 (E), Goldilocks\_6 (E), GooberAzure\_6 (E), Greep\_6 (E), HanKaySha\_5 (E), Harella\_5 (E), Henry\_6 (E), Highbury\_5 (E), Holt\_6 (E), Hoonter\_6 (E), Hopey\_6 (E), HufflyPuff\_4 (E), IHOP\_6 (E), Icee\_6 (E), Inca\_6 (E), JeTaime\_7 (E), Kanye\_6 (E), Kimchi\_6 (E), Kostya\_6 (E), Lilac\_7 (E), Lilizi\_6 (E), Lilpickle\_5 (E), Liveloughbron\_5 (E), MISSy\_5 (E), MPhalcon\_5 (E), MadamMonkfish\_5 (E), Manda\_5 (E), Marshmallow\_6 (E), Maxxinista\_6 (E), Miniwave\_6 (E), Misfit\_5 (E), Moldemort\_5 (E), MollyToe\_6 (E), Mosby\_5 (E), Murica\_4 (E), Murphy\_5 (E), Myrale\_6 (E), Nala\_5 (E), NelitzaMV\_6 (E), Nimrod\_6 (E), NoSleep\_5 (E), NonchalantPear\_4 (E), OrionPax\_5 (E), PaddyBaddy\_6 (E), Paperbeatsrock\_6 (E), Pat3\_6 (E), Phaja\_6 (E), Pharsalus\_6 (E), PhatBacter\_5 (E), Phaux\_4 (E), Phrux\_5 (E), Policronamos\_5 (E), Ptowny\_5 (E), Pumpkin\_6 (E), Quallification\_6 (E), Rakim\_6 (E), Rimmer\_6 (E), RiverMonster\_5 (E), Saints25\_5 (E), Sassay\_5 (E), ShamWow\_6 (E), ShereKhan\_6 (E), Simpliphy\_5 (E),

SirDuracell\_6 (E), SophKB\_6 (E), Sotrice96\_6 (E), Stank\_6 (E), Stark\_6 (E), StellaBean\_6 (E), StolenFromERC\_6 (E), TBrady12\_6 (E), Tarkin\_6 (E), TeamEdward\_6 (E), TeardropMSU\_5 (E), Teaspoon\_6 (E), Terminus\_5 (E), Thimble\_6 (E), Thresher\_6 (E), Tomaszewski\_5 (E), Toto\_6 (E), Traaww1\_5 (E), Tuco\_6 (E), Ukulele\_5 (E), Wiggin\_6 (E), Willez\_5 (E), Xandras\_6 (E), YassJohnny\_6 (E), Youngblood\_5 (E), xkcd\_6 (E),

Start 25:

- Found in 142 of 206 ( 68.9% ) of genes in pham
- Manual Annotations of this start: 3 of 185
- Called 4.2% of time when present
- Phage (with cluster) where this start called: Becksu\_5 (E), Mindy\_6 (E), Palpatine\_5 (E), Petra64142\_6 (E), Porky\_5 (E), StormChicken\_6 (E),

### **Summary by clusters:**

There are 9 clusters represented in this pham: CZ8, E, CZ, BL, CZ1, singleton, CZ4, FA, FO,

Info for manual annotations of cluster BL:

- Start number 13 was manually annotated 2 times for cluster BL.
- Start number 14 was manually annotated 1 time for cluster BL.

Info for manual annotations of cluster CZ:

- Start number 17 was manually annotated 2 times for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 17 was manually annotated 26 times for cluster CZ1.

Info for manual annotations of cluster CZ4:

- Start number 17 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ8:

- Start number 17 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster E:

- Start number 19 was manually annotated 129 times for cluster E.
- Start number 25 was manually annotated 3 times for cluster E.

Info for manual annotations of cluster FA:

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

Info for manual annotations of cluster FO:

- Start number 10 was manually annotated 2 times for cluster FO.

### **Gene Information:**

Gene: 244\_6 Start: 1149, Stop: 1610, Start Num: 19

Candidate Starts for 244\_6:

(Start: 19 @1149 has 130 MA's), (Start: 25 @1218 has 3 MA's), (31, 1257), (34, 1269), (45, 1353), (49, 1377), (56, 1404), (57, 1407), (67, 1473), (70, 1494),

Gene: ABCat\_5 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for ABCat\_5:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: AbbeyMikolon\_1 Start: 162, Stop: 650, Start Num: 13

Candidate Starts for AbbeyMikolon\_1:

(2, 15), (4, 36), (6, 69), (7, 78), (9, 126), (Start: 13 @162 has 2 MA's), (27, 261), (28, 270), (32, 291), (42, 360), (44, 372), (50, 411), (53, 423), (54, 426), (62, 480), (64, 501),

Gene: Adnama\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Adnama\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Agueybana\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Agueybana\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: AlumE\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for AlumE\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Amao\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Amao\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: AmericanBeauty\_6 Start: 1054, Stop: 1515, Start Num: 19

Candidate Starts for AmericanBeauty\_6:

(Start: 19 @1054 has 130 MA's), (Start: 25 @1123 has 3 MA's), (31, 1162), (34, 1174), (45, 1258), (46, 1267), (49, 1282), (56, 1309), (57, 1312), (67, 1378), (70, 1399),

Gene: Antonio\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Antonio\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Argent26\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Argent26\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Asriel\_5 Start: 1043, Stop: 1504, Start Num: 19

Candidate Starts for Asriel\_5:

(Start: 19 @1043 has 130 MA's), (Start: 25 @1112 has 3 MA's), (34, 1163), (45, 1247), (46, 1256), (56, 1298), (57, 1301), (67, 1367), (70, 1388),

Gene: BaboJay\_6 Start: 928, Stop: 1389, Start Num: 19

Candidate Starts for BaboJay\_6:

(Start: 19 @928 has 130 MA's), (Start: 25 @997 has 3 MA's), (34, 1048), (45, 1132), (46, 1141), (49, 1156), (56, 1183), (57, 1186), (67, 1252), (70, 1273),

Gene: BadStone\_5 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for BadStone\_5:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Balomoji\_6 Start: 1131, Stop: 1592, Start Num: 19

Candidate Starts for Balomoji\_6:

(Start: 19 @1131 has 130 MA's), (Start: 25 @1200 has 3 MA's), (34, 1251), (45, 1335), (46, 1344), (49, 1359), (56, 1386), (57, 1389), (67, 1455), (70, 1476),

Gene: Barbarian\_5 Start: 1043, Stop: 1504, Start Num: 19

Candidate Starts for Barbarian\_5:

(Start: 19 @1043 has 130 MA's), (Start: 25 @1112 has 3 MA's), (34, 1163), (45, 1247), (46, 1256), (56, 1298), (57, 1301), (67, 1367), (70, 1388),

Gene: Bask21\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Bask21\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: BatStarr\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for BatStarr\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Becksu\_5 Start: 845, Stop: 1237, Start Num: 25

Candidate Starts for Becksu\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Bench\_6 Start: 1128, Stop: 1589, Start Num: 19

Candidate Starts for Bench\_6:

(Start: 19 @1128 has 130 MA's), (Start: 25 @1197 has 3 MA's), (31, 1236), (34, 1248), (45, 1332), (49, 1356), (56, 1383), (57, 1386), (67, 1452), (70, 1473),

Gene: Bialota\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Bialota\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: BigBubba\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for BigBubba\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: BilboSwaggins\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for BilboSwaggins\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Bogg\_6 Start: 1169, Stop: 1630, Start Num: 19

Candidate Starts for Bogg\_6:

(Start: 19 @1169 has 130 MA's), (24, 1211), (34, 1289), (45, 1373), (46, 1382), (49, 1397), (56, 1424), (57, 1427), (67, 1493), (70, 1514), (75, 1571),

Gene: Bosnia\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Bosnia\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: BoyNamedSue\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for BoyNamedSue\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Brewer\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Brewer\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Bridgette\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for Bridgette\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (15, 168), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: Bruin\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Bruin\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Buck\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Buck\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Budgie\_7 Start: 1230, Stop: 1688, Start Num: 19

Candidate Starts for Budgie\_7:

(Start: 19 @1230 has 130 MA's), (Start: 25 @1299 has 3 MA's), (34, 1350), (37, 1371), (43, 1413), (45, 1434), (46, 1443), (49, 1458), (57, 1488), (67, 1554), (70, 1575),

Gene: BugsBunny\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for BugsBunny\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Bunnybear\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Bunnybear\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (41, 239), (46, 278), (52, 305), (55, 323), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Cactus\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Cactus\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (31, 1165), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: ChosenOne\_5 Start: 1010, Stop: 1471, Start Num: 19

Candidate Starts for ChosenOne\_5:

(Start: 19 @1010 has 130 MA's), (Start: 25 @1079 has 3 MA's), (34, 1130), (45, 1214), (46, 1223), (49, 1238), (56, 1265), (57, 1268), (67, 1334), (70, 1355),

Gene: ChotaBhai\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for ChotaBhai\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: ChuckDuck\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for ChuckDuck\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: Chymera\_1 Start: 80, Stop: 562, Start Num: 19

Candidate Starts for Chymera\_1:

(11, 62), (15, 74), (Start: 19 @80 has 130 MA's), (37, 224), (42, 263), (71, 458),

Gene: Cjw1\_5 Start: 1158, Stop: 1619, Start Num: 19

Candidate Starts for Cjw1\_5:

(Start: 19 @1158 has 130 MA's), (Start: 25 @1227 has 3 MA's), (31, 1266), (34, 1278), (45, 1362), (46, 1371), (49, 1386), (56, 1413), (57, 1416), (67, 1482), (70, 1503),

Gene: Command613\_6 Start: 928, Stop: 1389, Start Num: 19

Candidate Starts for Command613\_6:

(Start: 19 @928 has 130 MA's), (Start: 25 @997 has 3 MA's), (34, 1048), (45, 1132), (46, 1141), (56, 1183), (57, 1186), (67, 1252), (70, 1273),

Gene: Constance\_1 Start: 52, Stop: 648, Start Num: 5

Candidate Starts for Constance\_1:

(Start: 5 @52 has 13 MA's), (15, 169), (51, 418), (65, 520), (67, 529), (73, 580),

Gene: Contagion\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Contagion\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Cookies\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Cookies\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: CrystalP\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for CrystalP\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Czyszczone1\_5 Start: 1013, Stop: 1474, Start Num: 19

Candidate Starts for Czyszczone1\_5:

(Start: 19 @1013 has 130 MA's), (Start: 25 @1082 has 3 MA's), (31, 1121), (34, 1133), (45, 1217), (46, 1226), (49, 1241), (56, 1268), (57, 1271), (67, 1337), (70, 1358),

Gene: Daikon\_5 Start: 1131, Stop: 1592, Start Num: 19

Candidate Starts for Daikon\_5:

(Start: 19 @1131 has 130 MA's), (Start: 25 @1200 has 3 MA's), (31, 1239), (34, 1251), (45, 1335), (46, 1344), (49, 1359), (56, 1386), (57, 1389), (67, 1455), (70, 1476),

Gene: DoctorDiddles\_5 Start: 1010, Stop: 1471, Start Num: 19

Candidate Starts for DoctorDiddles\_5:

(Start: 19 @1010 has 130 MA's), (Start: 25 @1079 has 3 MA's), (31, 1118), (34, 1130), (45, 1214), (46, 1223), (49, 1238), (56, 1265), (57, 1268), (67, 1334), (70, 1355),

Gene: DrDrey\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for DrDrey\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (31, 1165), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Dumbo\_5 Start: 1152, Stop: 1613, Start Num: 19

Candidate Starts for Dumbo\_5:

(Start: 19 @1152 has 130 MA's), (Start: 25 @1221 has 3 MA's), (31, 1260), (34, 1272), (45, 1356), (46, 1365), (49, 1380), (56, 1407), (57, 1410), (67, 1476), (70, 1497),

Gene: Dusk\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Dusk\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Easy2Say\_6 Start: 1134, Stop: 1595, Start Num: 19

Candidate Starts for Easy2Say\_6:

(Start: 19 @1134 has 130 MA's), (Start: 25 @1203 has 3 MA's), (31, 1242), (34, 1254), (45, 1338), (46, 1347), (49, 1362), (56, 1389), (57, 1392), (67, 1458), (70, 1479),

Gene: Eileen\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for Eileen\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: Elener\_2 Start: 1391, Stop: 1867, Start Num: 10

Candidate Starts for Elener\_2:

(1, 794), (Start: 10 @1391 has 3 MA's), (36, 1547), (37, 1559), (64, 1724), (66, 1742), (67, 1748), (74, 1817),

Gene: Elite2014\_5 Start: 1010, Stop: 1471, Start Num: 19

Candidate Starts for Elite2014\_5:

(Start: 19 @1010 has 130 MA's), (Start: 25 @1079 has 3 MA's), (34, 1130), (45, 1214), (46, 1223), (49, 1238), (56, 1265), (57, 1268), (67, 1334), (70, 1355),

Gene: Elph10\_6 Start: 1152, Stop: 1613, Start Num: 19

Candidate Starts for Elph10\_6:

(Start: 19 @1152 has 130 MA's), (Start: 25 @1221 has 3 MA's), (31, 1260), (34, 1272), (45, 1356), (49, 1380), (56, 1407), (57, 1410), (67, 1476), (70, 1497),

Gene: Emmina\_6 Start: 928, Stop: 1389, Start Num: 19

Candidate Starts for Emmina\_6:

(Start: 19 @928 has 130 MA's), (Start: 25 @997 has 3 MA's), (34, 1048), (45, 1132), (46, 1141), (56, 1183), (57, 1186), (67, 1252), (70, 1273),

Gene: Eudoria\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Eudoria\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Eureka\_5 Start: 999, Stop: 1460, Start Num: 19

Candidate Starts for Eureka\_5:

(Start: 19 @999 has 130 MA's), (24, 1041), (34, 1119), (45, 1203), (46, 1212), (49, 1227), (56, 1254), (57, 1257), (67, 1323), (70, 1344), (75, 1401),

Gene: Eviarto\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Eviarto\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: FairyPath\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for FairyPath\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Filch\_6 Start: 1149, Stop: 1610, Start Num: 19

Candidate Starts for Filch\_6:

(Start: 19 @1149 has 130 MA's), (Start: 25 @1218 has 3 MA's), (31, 1257), (34, 1269), (45, 1353), (49, 1377), (56, 1404), (57, 1407), (67, 1473), (70, 1494),

Gene: FireRed\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for FireRed\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Flypotenuse\_5 Start: 1013, Stop: 1474, Start Num: 19

Candidate Starts for Flypotenuse\_5:

(Start: 19 @1013 has 130 MA's), (Start: 25 @1082 has 3 MA's), (34, 1133), (45, 1217), (46, 1226), (56, 1268), (57, 1271), (67, 1337), (70, 1358),

Gene: FoghornLeghorn\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for FoghornLeghorn\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: FosterFrank\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for FosterFrank\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: Gage\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Gage\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Gator\_5 Start: 1013, Stop: 1474, Start Num: 19

Candidate Starts for Gator\_5:

(Start: 19 @1013 has 130 MA's), (Start: 25 @1082 has 3 MA's), (34, 1133), (45, 1217), (46, 1226), (56, 1268), (57, 1271), (67, 1337), (70, 1358),

Gene: Gemini\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Gemini\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Glexan\_5 Start: 1013, Stop: 1474, Start Num: 19

Candidate Starts for Glexan\_5:

(Start: 19 @1013 has 130 MA's), (Start: 25 @1082 has 3 MA's), (34, 1133), (45, 1217), (46, 1226), (56, 1268), (57, 1271), (67, 1337), (70, 1358),

Gene: GlobiWarming\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for GlobiWarming\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (65, 519), (67, 528), (73, 579),

Gene: Goku\_6 Start: 999, Stop: 1460, Start Num: 19

Candidate Starts for Goku\_6:

(Start: 19 @999 has 130 MA's), (24, 1041), (34, 1119), (45, 1203), (46, 1212), (49, 1227), (56, 1254), (57, 1257), (67, 1323), (70, 1344), (75, 1401),

Gene: GoldenSpark\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for GoldenSpark\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Goldilocks\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Goldilocks\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: GooberAzure\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for GooberAzure\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Greep\_6 Start: 928, Stop: 1389, Start Num: 19

Candidate Starts for Greep\_6:

(Start: 19 @928 has 130 MA's), (Start: 25 @997 has 3 MA's), (34, 1048), (45, 1132), (46, 1141), (49, 1156), (56, 1183), (57, 1186), (67, 1252), (70, 1273),

Gene: Gudmit\_2 Start: 492, Stop: 980, Start Num: 16

Candidate Starts for Gudmit\_2:

(Start: 16 @492 has 1 MA's), (23, 531), (26, 573), (29, 600), (38, 657), (39, 660), (40, 669), (46, 717), (50, 735), (64, 828), (67, 852), (68, 855), (71, 876),

Gene: HanKaySha\_5 Start: 1013, Stop: 1474, Start Num: 19

Candidate Starts for HanKaySha\_5:

(Start: 19 @1013 has 130 MA's), (Start: 25 @1082 has 3 MA's), (31, 1121), (34, 1133), (45, 1217), (46, 1226), (49, 1241), (56, 1268), (57, 1271), (67, 1337), (70, 1358),

Gene: Harella\_5 Start: 1013, Stop: 1474, Start Num: 19

Candidate Starts for Harella\_5:

(Start: 19 @1013 has 130 MA's), (Start: 25 @1082 has 3 MA's), (34, 1133), (45, 1217), (46, 1226), (56, 1268), (57, 1271), (67, 1337), (70, 1358),

Gene: Henrique\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for Henrique\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: Henry\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Henry\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Herod\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Herod\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Highbury\_5 Start: 1022, Stop: 1483, Start Num: 19

Candidate Starts for Highbury\_5:

(Start: 19 @1022 has 130 MA's), (Start: 25 @1091 has 3 MA's), (31, 1130), (34, 1142), (45, 1226), (46, 1235), (49, 1250), (56, 1277), (57, 1280), (67, 1346), (70, 1367),

Gene: Holt\_6 Start: 1128, Stop: 1589, Start Num: 19

Candidate Starts for Holt\_6:

(Start: 19 @1128 has 130 MA's), (Start: 25 @1197 has 3 MA's), (31, 1236), (34, 1248), (45, 1332), (46, 1341), (49, 1356), (56, 1383), (57, 1386), (67, 1452), (70, 1473),

Gene: Hoonter\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Hoonter\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Hokey\_6 Start: 1149, Stop: 1610, Start Num: 19

Candidate Starts for Hokey\_6:

(Start: 19 @1149 has 130 MA's), (Start: 25 @1218 has 3 MA's), (31, 1257), (34, 1269), (45, 1353), (46, 1362), (49, 1377), (56, 1404), (57, 1407), (67, 1473), (70, 1494),

Gene: HotPotato\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for HotPotato\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (15, 168), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: HufflyPuff\_4 Start: 732, Stop: 1193, Start Num: 19

Candidate Starts for HufflyPuff\_4:

(Start: 19 @732 has 130 MA's), (Start: 25 @801 has 3 MA's), (31, 840), (34, 852), (45, 936), (49, 960), (56, 987), (57, 990), (67, 1056), (70, 1077),

Gene: Hugley\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Hugley\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Hyzer\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Hyzer\_1:

(Start: 17 @56 has 30 MA's), (26, 134), (35, 185), (41, 239), (46, 278), (52, 305), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: IHOP\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for IHOP\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Icee\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Icee\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (31, 1165), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Inca\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Inca\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: JeTaime\_7 Start: 1196, Stop: 1657, Start Num: 19

Candidate Starts for JeTaime\_7:

(Start: 19 @1196 has 130 MA's), (Start: 25 @1265 has 3 MA's), (31, 1304), (34, 1316), (45, 1400), (46, 1409), (49, 1424), (56, 1451), (57, 1454), (67, 1520), (70, 1541),

Gene: Judy\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for Judy\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: Kanye\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Kanye\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (31, 1165), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Karkharias\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for Karkharias\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (67, 528), (73, 579),

Gene: KayMoney\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for KayMoney\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (65, 519), (67, 528), (73, 579),

Gene: Kimchi\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Kimchi\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Kita\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Kita\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Kostya\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Kostya\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Lilac\_7 Start: 1175, Stop: 1636, Start Num: 19

Candidate Starts for Lilac\_7:

(Start: 19 @1175 has 130 MA's), (Start: 25 @1244 has 3 MA's), (31, 1283), (34, 1295), (45, 1379), (46, 1388), (49, 1403), (56, 1430), (57, 1433), (67, 1499), (70, 1520),

Gene: Lilizi\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Lilizi\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Lilpickle\_5 Start: 1010, Stop: 1471, Start Num: 19

Candidate Starts for Lilpickle\_5:

(Start: 19 @1010 has 130 MA's), (Start: 25 @1079 has 3 MA's), (34, 1130), (45, 1214), (46, 1223), (49, 1238), (56, 1265), (57, 1268), (67, 1334), (70, 1355),

Gene: LilyBell\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for LilyBell\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: LittleRon\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for LittleRon\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (65, 519), (67, 528), (73, 579),

Gene: Liveloughbron\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Liveloughbron\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: MISSy\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for MISSy\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: MPhalcon\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for MPhalcon\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: MadamMonkfish\_5 Start: 1013, Stop: 1474, Start Num: 19

Candidate Starts for MadamMonkfish\_5:

(Start: 19 @1013 has 130 MA's), (Start: 25 @1082 has 3 MA's), (34, 1133), (45, 1217), (46, 1226), (56, 1268), (57, 1271), (67, 1337), (70, 1358),

Gene: Madavieve\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Madavieve\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (72, 422), (74, 458),

Gene: Madeline\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Madeline\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (41, 239), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Manasvini\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Manasvini\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Manda\_5 Start: 791, Stop: 1252, Start Num: 19

Candidate Starts for Manda\_5:

(8, 740), (Start: 19 @791 has 130 MA's), (Start: 25 @860 has 3 MA's), (31, 899), (34, 911), (45, 995), (46, 1004), (49, 1019), (56, 1046), (57, 1049), (67, 1115), (70, 1136), (75, 1193),

Gene: Maridalia\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Maridalia\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Marshmallow\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Marshmallow\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Maxxinista\_6 Start: 1152, Stop: 1613, Start Num: 19

Candidate Starts for Maxxinista\_6:

(Start: 19 @1152 has 130 MA's), (Start: 25 @1221 has 3 MA's), (31, 1260), (34, 1272), (45, 1356), (49, 1380), (56, 1407), (57, 1410), (67, 1476), (70, 1497),

Gene: Mcklovin\_1 Start: 57, Stop: 521, Start Num: 17

Candidate Starts for Mcklovin\_1:

(Start: 17 @57 has 30 MA's), (22, 90), (35, 186), (46, 279), (55, 324), (58, 339), (64, 366), (66, 384), (71, 414), (72, 423), (74, 459), (75, 465),

Gene: Mindy\_6 Start: 997, Stop: 1389, Start Num: 25

Candidate Starts for Mindy\_6:

(Start: 19 @928 has 130 MA's), (Start: 25 @997 has 3 MA's), (34, 1048), (45, 1132), (46, 1141), (49, 1156), (56, 1183), (57, 1186), (67, 1252), (70, 1273),

Gene: Miniwave\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Miniwave\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Misfit\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Misfit\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Moldemort\_5 Start: 1013, Stop: 1474, Start Num: 19

Candidate Starts for Moldemort\_5:

(Start: 19 @1013 has 130 MA's), (Start: 25 @1082 has 3 MA's), (31, 1121), (34, 1133), (45, 1217), (46, 1226), (49, 1241), (56, 1268), (57, 1271), (67, 1337), (70, 1358),

Gene: MollyToe\_6 Start: 1054, Stop: 1515, Start Num: 19

Candidate Starts for MollyToe\_6:

(Start: 19 @1054 has 130 MA's), (Start: 25 @1123 has 3 MA's), (31, 1162), (34, 1174), (45, 1258), (46, 1267), (49, 1282), (56, 1309), (57, 1312), (67, 1378), (70, 1399),

Gene: Mosby\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Mosby\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Murica\_4 Start: 732, Stop: 1193, Start Num: 19

Candidate Starts for Murica\_4:

(Start: 19 @732 has 130 MA's), (Start: 25 @801 has 3 MA's), (31, 840), (34, 852), (45, 936), (49, 960), (56, 987), (57, 990), (67, 1056), (70, 1077),

Gene: Murphy\_5 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Murphy\_5:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Myrale\_6 Start: 928, Stop: 1389, Start Num: 19

Candidate Starts for Myrale\_6:

(Start: 19 @928 has 130 MA's), (Start: 25 @997 has 3 MA's), (34, 1048), (45, 1132), (46, 1141), (49, 1156), (56, 1183), (57, 1186), (67, 1252), (70, 1273),

Gene: Nala\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Nala\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: NelitzaMV\_6 Start: 928, Stop: 1389, Start Num: 19

Candidate Starts for NelitzaMV\_6:

(Start: 19 @928 has 130 MA's), (Start: 25 @997 has 3 MA's), (34, 1048), (45, 1132), (46, 1141), (49, 1156), (56, 1183), (57, 1186), (67, 1252), (70, 1273),

Gene: Neobush\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Neobush\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Nesbitt\_1 Start: 162, Stop: 650, Start Num: 13

Candidate Starts for Nesbitt\_1:

(2, 15), (6, 69), (9, 126), (Start: 13 @162 has 2 MA's), (27, 261), (28, 270), (32, 291), (42, 360), (44, 372), (50, 411), (53, 423), (54, 426), (62, 480), (64, 501),

Gene: NidoQ\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for NidoQ\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: NikkiHotWheels\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for NikkiHotWheels\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (63, 486), (65, 519), (67, 528), (73, 579),

Gene: Nimrod\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Nimrod\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: NoSleep\_5 Start: 1010, Stop: 1471, Start Num: 19

Candidate Starts for NoSleep\_5:

(Start: 19 @1010 has 130 MA's), (Start: 25 @1079 has 3 MA's), (31, 1118), (34, 1130), (45, 1214), (49, 1238), (56, 1265), (57, 1268), (67, 1334), (70, 1355),

Gene: NoSwimming\_3 Start: 1735, Stop: 2208, Start Num: 10

Candidate Starts for NoSwimming\_3:

(Start: 10 @1735 has 3 MA's), (40, 1927), (46, 1975), (47, 1978), (51, 1996), (66, 2077), (69, 2092), (76, 2161),

Gene: NonchalantPear\_4 Start: 762, Stop: 1223, Start Num: 19

Candidate Starts for NonchalantPear\_4:

(Start: 19 @762 has 130 MA's), (Start: 25 @831 has 3 MA's), (31, 870), (34, 882), (45, 966), (46, 975), (49, 990), (56, 1017), (57, 1020), (67, 1086), (70, 1107),

Gene: Nymphadora\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Nymphadora\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: OrionPax\_5 Start: 1013, Stop: 1474, Start Num: 19

Candidate Starts for OrionPax\_5:

(Start: 19 @1013 has 130 MA's), (Start: 25 @1082 has 3 MA's), (31, 1121), (34, 1133), (45, 1217), (46, 1226), (49, 1241), (56, 1268), (57, 1271), (67, 1337), (70, 1358),

Gene: PaddyBaddy\_6 Start: 1149, Stop: 1610, Start Num: 19

Candidate Starts for PaddyBaddy\_6:

(Start: 19 @1149 has 130 MA's), (Start: 25 @1218 has 3 MA's), (31, 1257), (34, 1269), (45, 1353), (49, 1377), (56, 1404), (57, 1407), (67, 1473), (70, 1494),

Gene: Palpatine\_5 Start: 845, Stop: 1237, Start Num: 25

Candidate Starts for Palpatine\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Paperbeatsrock\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Paperbeatsrock\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Pat3\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Pat3\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Peas\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for Peas\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: PeggyLeg03\_1 Start: 52, Stop: 648, Start Num: 5

Candidate Starts for PeggyLeg03\_1:

(Start: 5 @52 has 13 MA's), (15, 169), (51, 418), (65, 520), (67, 529), (73, 580),

Gene: Pepperoni\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Pepperoni\_1:

(Start: 17 @56 has 30 MA's), (20, 83), (26, 134), (35, 185), (41, 239), (42, 245), (46, 278), (52, 305), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Petra64142\_6 Start: 1126, Stop: 1518, Start Num: 25

Candidate Starts for Petra64142\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Phaja\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Phaja\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Pharsalus\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Pharsalus\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: PhatBacter\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for PhatBacter\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Phaux\_4 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Phaux\_4:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Phrux\_5 Start: 1135, Stop: 1596, Start Num: 19

Candidate Starts for Phrux\_5:

(Start: 19 @1135 has 130 MA's), (Start: 25 @1204 has 3 MA's), (31, 1243), (34, 1255), (45, 1339), (46, 1348), (49, 1363), (56, 1390), (57, 1393), (67, 1459), (70, 1480),

Gene: Policronamos\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Policronamos\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Polly\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Polly\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Porky\_5 Start: 997, Stop: 1389, Start Num: 25

Candidate Starts for Porky\_5:

(Start: 19 @928 has 130 MA's), (Start: 25 @997 has 3 MA's), (34, 1048), (45, 1132), (46, 1141), (56, 1183), (57, 1186), (67, 1252), (70, 1273),

Gene: Ptowny\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Ptowny\_5:

(8, 725), (Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (46, 989), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Pucara\_1 Start: 51, Stop: 647, Start Num: 5

Candidate Starts for Pucara\_1:

(3, 33), (Start: 5 @51 has 13 MA's), (51, 417), (65, 519), (67, 528), (73, 579),

Gene: Pumpkin\_6 Start: 1153, Stop: 1614, Start Num: 19

Candidate Starts for Pumpkin\_6:

(Start: 19 @1153 has 130 MA's), (Start: 25 @1222 has 3 MA's), (31, 1261), (34, 1273), (45, 1357), (46, 1366), (49, 1381), (56, 1408), (57, 1411), (67, 1477), (70, 1498),

Gene: Quallification\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Quallification\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (31, 1165), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Rakim\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Rakim\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: RavenCo17\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for RavenCo17\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Rimmer\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Rimmer\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: RiverMonster\_5 Start: 1149, Stop: 1610, Start Num: 19

Candidate Starts for RiverMonster\_5:

(Start: 19 @1149 has 130 MA's), (Start: 25 @1218 has 3 MA's), (31, 1257), (34, 1269), (45, 1353), (49, 1377), (56, 1404), (57, 1407), (67, 1473), (70, 1494),

Gene: RootBeer\_1 Start: 41, Stop: 505, Start Num: 14

Candidate Starts for RootBeer\_1:

(Start: 14 @41 has 2 MA's), (26, 128), (33, 167), (43, 242), (59, 338),

Gene: Rowa\_1 Start: 67, Stop: 552, Start Num: 14

Candidate Starts for Rowa\_1:

(Start: 14 @67 has 2 MA's), (18, 79), (21, 103), (30, 190), (38, 235), (48, 307), (60, 364), (61, 379), (63, 385), (77, 541),

Gene: Saints25\_5 Start: 1022, Stop: 1483, Start Num: 19

Candidate Starts for Saints25\_5:

(Start: 19 @1022 has 130 MA's), (Start: 25 @1091 has 3 MA's), (31, 1130), (34, 1142), (45, 1226), (46, 1235), (49, 1250), (56, 1277), (57, 1280), (67, 1346), (70, 1367),

Gene: Sassay\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Sassay\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Scotia\_3 Start: 1735, Stop: 2208, Start Num: 10

Candidate Starts for Scotia\_3:

(Start: 10 @1735 has 3 MA's), (40, 1927), (46, 1975), (47, 1978), (51, 1996), (66, 2077), (69, 2092), (76, 2161),

Gene: ShamWow\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for ShamWow\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Shambre1\_2 Start: 1495, Stop: 1965, Start Num: 12

Candidate Starts for Shambre1\_2:

(Start: 12 @1495 has 1 MA's), (26, 1588), (31, 1624), (37, 1660),

Gene: ShereKhan\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for ShereKhan\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (31, 1165), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Simpliphy\_5 Start: 1013, Stop: 1474, Start Num: 19

Candidate Starts for Simpliphy\_5:

(Start: 19 @1013 has 130 MA's), (Start: 25 @1082 has 3 MA's), (31, 1121), (34, 1133), (45, 1217), (46, 1226), (49, 1241), (56, 1268), (57, 1271), (67, 1337), (70, 1358),

Gene: SirDuracell\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for SirDuracell\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: SophKB\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for SophKB\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Sotrice96\_6 Start: 1131, Stop: 1592, Start Num: 19

Candidate Starts for Sotrice96\_6:

(Start: 19 @1131 has 130 MA's), (Start: 25 @1200 has 3 MA's), (31, 1239), (34, 1251), (45, 1335), (46, 1344), (49, 1359), (56, 1386), (57, 1389), (67, 1455), (70, 1476),

Gene: Stank\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Stank\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (31, 1165), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Stark\_6 Start: 1149, Stop: 1610, Start Num: 19

Candidate Starts for Stark\_6:

(Start: 19 @1149 has 130 MA's), (Start: 25 @1218 has 3 MA's), (31, 1257), (34, 1269), (45, 1353), (46, 1362), (49, 1377), (56, 1404), (57, 1407), (67, 1473), (70, 1494),

Gene: StellaBean\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for StellaBean\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: StolenFromERC\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for StolenFromERC\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: StormChicken\_6 Start: 1126, Stop: 1518, Start Num: 25

Candidate Starts for StormChicken\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (31, 1165), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Suscepit\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Suscepit\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: SushiChef\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for SushiChef\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458),

Gene: TBrady12\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for TBrady12\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Tarkin\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Tarkin\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Tayonia\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Tayonia\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: TeamEdward\_6 Start: 1054, Stop: 1515, Start Num: 19

Candidate Starts for TeamEdward\_6:

(Start: 19 @1054 has 130 MA's), (Start: 25 @1123 has 3 MA's), (31, 1162), (34, 1174), (45, 1258), (46, 1267), (49, 1282), (56, 1309), (57, 1312), (67, 1378), (70, 1399),

Gene: TeardropMSU\_5 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for TeardropMSU\_5:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Teaspoon\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Teaspoon\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Terminus\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Terminus\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: ThankyouJordi\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for ThankyouJordi\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (41, 239), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Thimble\_6 Start: 1128, Stop: 1589, Start Num: 19

Candidate Starts for Thimble\_6:

(Start: 19 @1128 has 130 MA's), (Start: 25 @1197 has 3 MA's), (31, 1236), (34, 1248), (45, 1332), (46, 1341), (49, 1356), (56, 1383), (57, 1386), (67, 1452), (70, 1473),

Gene: Thresher\_6 Start: 1149, Stop: 1610, Start Num: 19

Candidate Starts for Thresher\_6:

(Start: 19 @1149 has 130 MA's), (Start: 25 @1218 has 3 MA's), (31, 1257), (34, 1269), (45, 1353), (46, 1362), (49, 1377), (56, 1404), (57, 1407), (67, 1473), (70, 1494),

Gene: TimTam\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for TimTam\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Tomaszewski\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Tomaszewski\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Toto\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Toto\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (49, 1285), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Traaww1\_5 Start: 1043, Stop: 1504, Start Num: 19

Candidate Starts for Traaww1\_5:

(Start: 19 @1043 has 130 MA's), (Start: 25 @1112 has 3 MA's), (34, 1163), (45, 1247), (46, 1256), (56, 1298), (57, 1301), (67, 1367), (70, 1388),

Gene: Trumpet\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Trumpet\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Tuco\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Tuco\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Ukulele\_5 Start: 1152, Stop: 1613, Start Num: 19

Candidate Starts for Ukulele\_5:

(Start: 19 @1152 has 130 MA's), (Start: 25 @1221 has 3 MA's), (31, 1260), (34, 1272), (45, 1356), (46, 1365), (49, 1380), (56, 1407), (57, 1410), (67, 1476), (70, 1497),

Gene: WelcomeAyanna\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for WelcomeAyanna\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (41, 239), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Wiggin\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Wiggin\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Willez\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Willez\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Xandras\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for Xandras\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: YassJohnny\_6 Start: 1057, Stop: 1518, Start Num: 19

Candidate Starts for YassJohnny\_6:

(Start: 19 @1057 has 130 MA's), (Start: 25 @1126 has 3 MA's), (34, 1177), (45, 1261), (46, 1270), (56, 1312), (57, 1315), (67, 1381), (70, 1402),

Gene: Youngblood\_5 Start: 776, Stop: 1237, Start Num: 19

Candidate Starts for Youngblood\_5:

(Start: 19 @776 has 130 MA's), (Start: 25 @845 has 3 MA's), (31, 884), (34, 896), (45, 980), (46, 989), (49, 1004), (56, 1031), (57, 1034), (67, 1100), (70, 1121),

Gene: Zameen\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Zameen\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: Zirinka\_1 Start: 56, Stop: 520, Start Num: 17

Candidate Starts for Zirinka\_1:

(Start: 17 @56 has 30 MA's), (35, 185), (42, 245), (46, 278), (55, 323), (58, 338), (64, 365), (66, 383), (71, 413), (72, 422), (74, 458), (75, 464),

Gene: xkcd\_6 Start: 928, Stop: 1389, Start Num: 19

Candidate Starts for xkcd\_6:

(Start: 19 @928 has 130 MA's), (Start: 25 @997 has 3 MA's), (31, 1036), (34, 1048), (45, 1132), (46, 1141), (49, 1156), (56, 1183), (57, 1186), (67, 1252), (70, 1273),