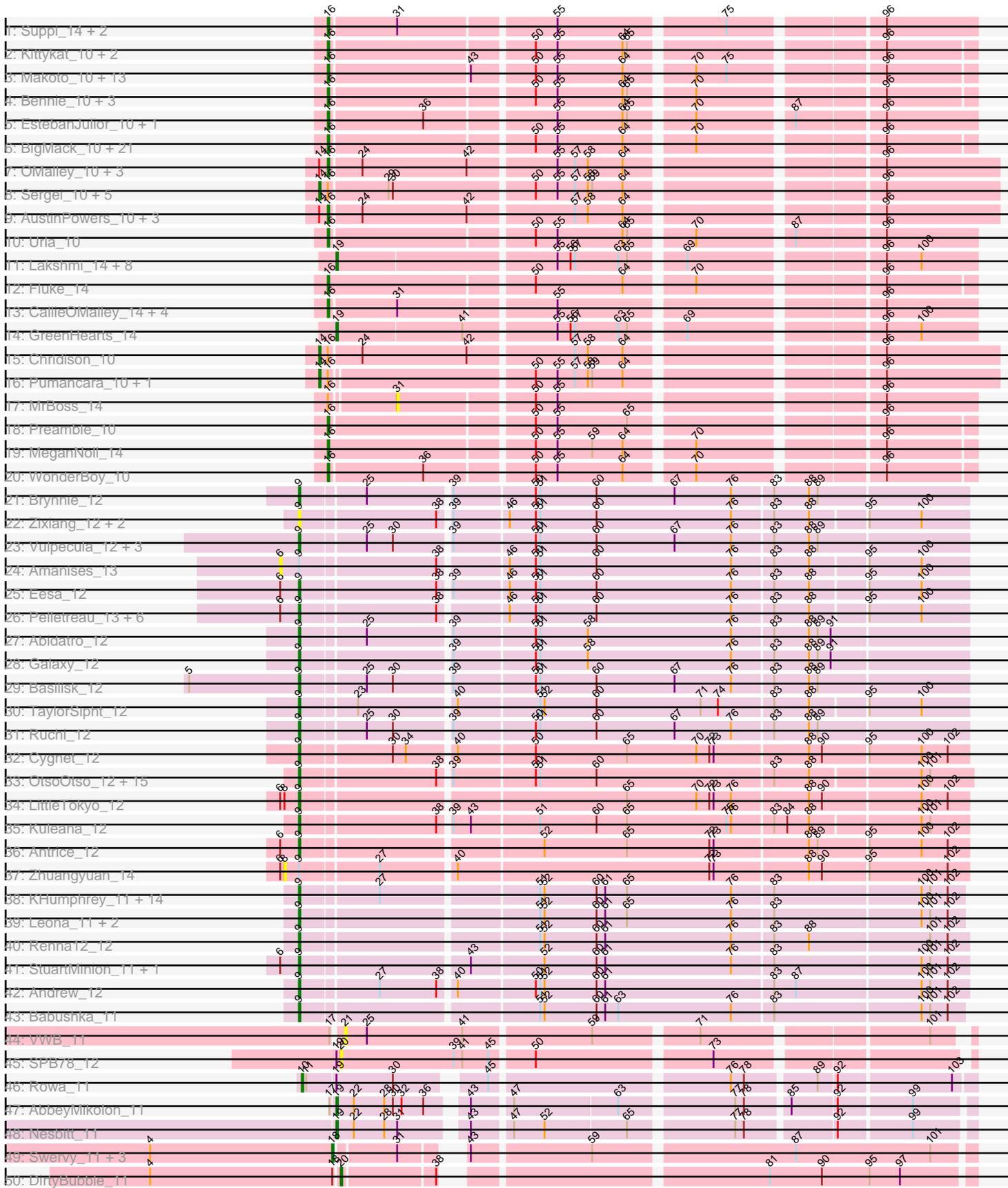
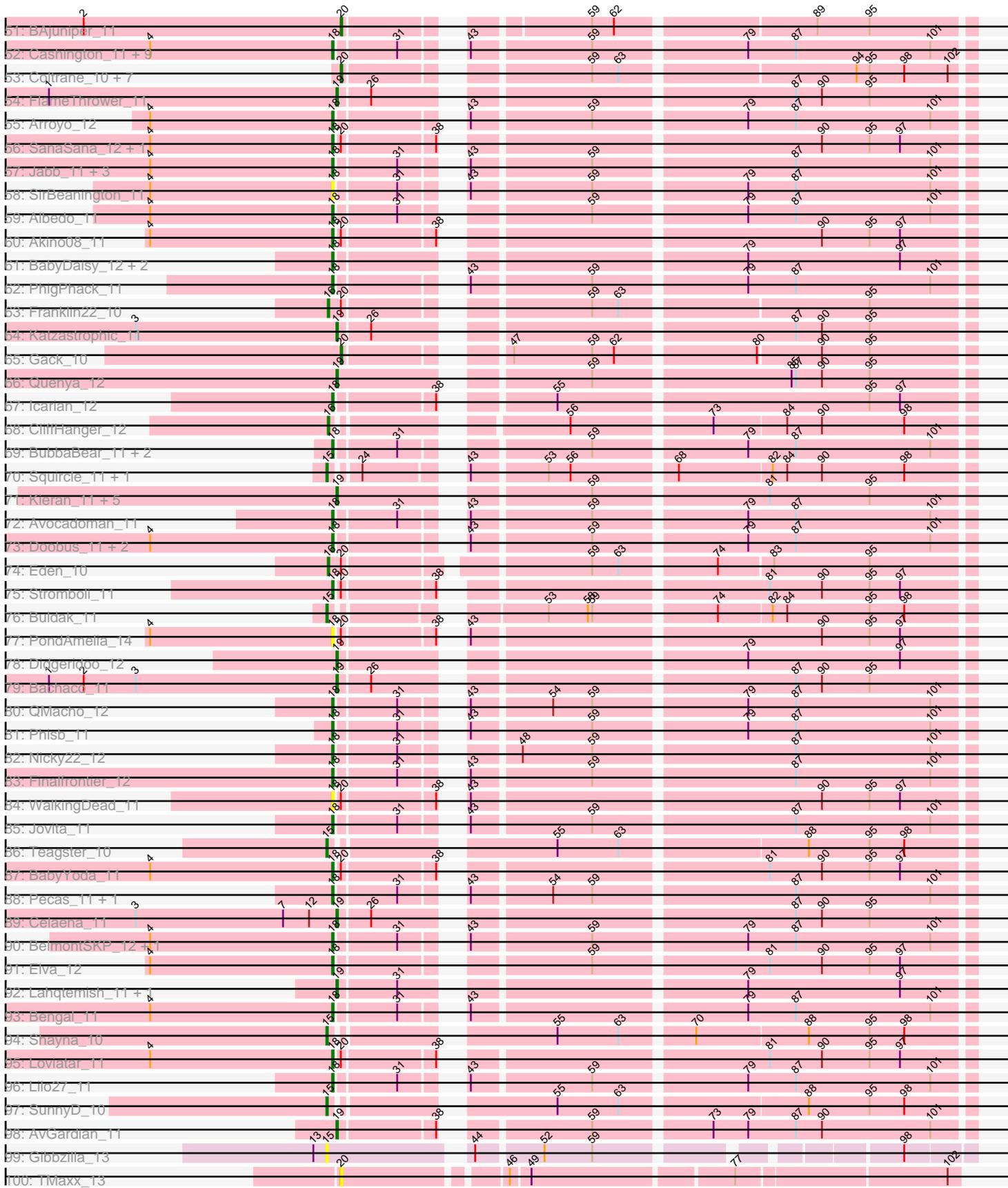


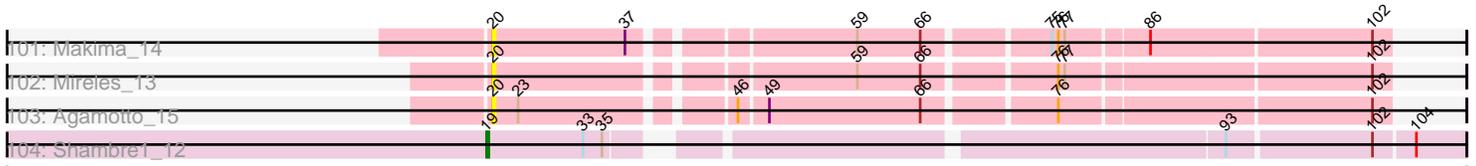
Pham 283452



Pham 283452



Pham 283452



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 283452 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 283452 has 251 members, 42 are drafts.

Phages represented in each track:

- Track 1 : Suppi\_14, Canowicakte\_14, Wayne\_14
- Track 2 : Kittykat\_10, DreamTeam\_10, Gisselle\_10
- Track 3 : Makoto\_10, CristinaYang\_10, PitaDog\_10, Lasagna\_10, Christian\_10, LilStuart\_10, DrRobert\_10, Nancia\_10, Bodacious\_10, Lucy\_10, Lennox\_10, ChewChew\_10, Pterodactyl\_10, OurGirlNessie\_10
- Track 4 : Bennie\_10, Huckleberry\_10, HeadNerd\_10, Moki\_10
- Track 5 : EstebanJulior\_10, MamaPearl\_10
- Track 6 : BigMack\_10, Scuttle\_14, Carpal\_14, RAP15\_14, Potatoes\_14, Rozby\_14, Cholula\_14, Korra\_14, Dino\_14, Wawa\_14, Glenn\_14, Jumboset\_14, Vallejo\_14, TattModd\_14, MrGloopy\_14, Riverdale\_14, Savage2526\_14, BrotherBLo\_14, Immaculata\_14, Beethoven\_14, Kalizoi\_14, Zorro\_14
- Track 7 : OMalley\_10, Eunoia\_10, Aledel\_10, Riovina\_10
- Track 8 : Sergei\_10, KingBob\_10, Daiboju\_10, Herb\_10, Temper16\_10, Maria1952\_10
- Track 9 : AustinPowers\_10, HunterDalle\_10, Vulture\_10, Supakev\_10
- Track 10 : Urla\_10
- Track 11 : Lakshmi\_14, Albanese\_14, Oxyfrius\_14, Greenhouse\_14, RcigaStruga\_14, Huntingdon\_14, Joann\_14, Nubia\_14, Misaeng\_14
- Track 12 : Fluke\_14
- Track 13 : CallieOMalley\_14, Litotes\_14, PartyCup\_14, Graynor\_14, AppleCider\_14
- Track 14 : GreenHearts\_14
- Track 15 : Chridison\_10
- Track 16 : Pumancara\_10, PinkFriday\_10
- Track 17 : MrBoss\_14
- Track 18 : Preamble\_10
- Track 19 : MeganNoll\_14
- Track 20 : WonderBoy\_10
- Track 21 : Brynnie\_12
- Track 22 : Zixiang\_12, Niblet\_12, Chicken\_12
- Track 23 : Vulpecula\_12, Jamun\_12, Chickaboom\_11, WileyE\_11
- Track 24 : Amanises\_13
- Track 25 : Eesa\_12

- Track 26 : Pelletreau\_13, Gravel\_13, Toad24\_13, KendraB23\_13, Westrich\_13, Shen\_13, Orcanus\_12
- Track 27 : Abidatro\_12
- Track 28 : Galaxy\_12
- Track 29 : Basilisk\_12
- Track 30 : TaylorSipht\_12
- Track 31 : Ruchi\_12
- Track 32 : Cygnet\_12
- Track 33 : OtsoOtso\_12, Melons\_13, Polka\_12, Pineda\_13, Cote\_13, Bibble12\_13, Amelia\_13, Bedetta\_13, PhirstandPhine\_13, Lunar\_13, Daob\_13, Coral\_12, Colusalem\_12, Kepler\_12, HannahPhantana\_13, Jerole\_13
- Track 34 : LittleTokyo\_12
- Track 35 : Kuleana\_12
- Track 36 : Antrice\_12
- Track 37 : Zhuangyuan\_14
- Track 38 : KHumphrey\_11, Amphitrite\_11, HamCheese\_11, Glotell\_11, Fingolfin\_11, Oppalora\_11, AmiCi24\_11, Laphuphu24k\_11, DanHam62\_11, Juno112\_11, PhluffyCoco\_11, AdoptaAdorbs\_11, Atlantica\_11, RedFox\_11, Camara\_11
- Track 39 : Leona\_11, Azaz\_11, Rattail\_11
- Track 40 : Renna12\_12
- Track 41 : StuartMinion\_11, AlexMinion\_11
- Track 42 : Andrew\_12
- Track 43 : Babushka\_11
- Track 44 : VWB\_11
- Track 45 : SPB78\_12
- Track 46 : Rowa\_11
- Track 47 : AbbeyMikolon\_11
- Track 48 : Nesbitt\_11
- Track 49 : Swervy\_11, AylexOG\_12, Slay\_11, SarBear\_11
- Track 50 : DirtyBubble\_11
- Track 51 : BAjuniper\_11
- Track 52 : Cashington\_11, Abigail\_11, Burritobowl\_11, DickRichards\_11, Softsoap\_11, Johnathan\_11, SansAfet\_11, LimaBean\_11, Solea\_12, Milomuff\_12
- Track 53 : Coltrane\_10, Armstrong\_10, Clayda5\_10, Rollins\_10, Vitas\_10, Brahms\_10, Bernstein\_10, Skylord\_10
- Track 54 : FlameThrower\_11
- Track 55 : Arroyo\_12
- Track 56 : SanaSana\_12, Stoor\_11
- Track 57 : Jabb\_11, TukTuk\_11, CupcakePrincess\_11, MsUbiquitous\_11
- Track 58 : SirBeanington\_11
- Track 59 : Albedo\_11
- Track 60 : Akino08\_11
- Track 61 : BabyDaisy\_12, Kate33\_11, IndyLu\_11
- Track 62 : PhigPhack\_11
- Track 63 : Franklin22\_10
- Track 64 : Katzastrophic\_11
- Track 65 : Gack\_10
- Track 66 : Quenya\_12
- Track 67 : Icarian\_12
- Track 68 : CliffHanger\_12
- Track 69 : BubbaBear\_11, Kenzers\_11, Lynlen\_11
- Track 70 : Squircle\_11, Olliecat\_11

- Track 71 : Kieran\_11, Rona\_11, ChiliPepper\_11, Kamdara\_11, Dismas\_11, Sharkboy\_11
- Track 72 : Avocadoman\_11
- Track 73 : Doobus\_11, Albright\_11, CroZenni\_11
- Track 74 : Eden\_10
- Track 75 : Stromboli\_11
- Track 76 : Buldak\_11
- Track 77 : PondAmelia\_14
- Track 78 : Didgeridoo\_12
- Track 79 : Bachaco\_11
- Track 80 : QMacho\_12
- Track 81 : Phisb\_11
- Track 82 : Nicky22\_12
- Track 83 : Finalfrontier\_12
- Track 84 : WalkingDead\_11
- Track 85 : Jovita\_11
- Track 86 : Teagster\_10
- Track 87 : BabyYoda\_11
- Track 88 : Pecas\_11, Eula\_11
- Track 89 : Celaena\_11
- Track 90 : BelmontSKP\_12, AnnaLie\_12
- Track 91 : Elva\_12
- Track 92 : Lahqtemish\_11, PastaFagioli\_11
- Track 93 : Bengal\_11
- Track 94 : Shayna\_10
- Track 95 : Loviatar\_11
- Track 96 : Lilo27\_11
- Track 97 : SunnyD\_10
- Track 98 : AvGardian\_11
- Track 99 : Gibbzilla\_13
- Track 100 : TMaxx\_13
- Track 101 : Makima\_14
- Track 102 : Mireles\_13
- Track 103 : Agamoto\_15
- Track 104 : Shambre1\_12

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

The start number called the most often in the published annotations is 16, it was called in 68 of the 209 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aledel\_10, AppleCider\_14, AustinPowers\_10, Beethoven\_14, Bennie\_10, BigMack\_10, Bodacious\_10, BrotherBLo\_14, CallieOMalley\_14, Canowicakte\_14, Carpal\_14, ChewChew\_10, Cholula\_14, Christian\_10, CliffHanger\_12, CristinaYang\_10, Dino\_14, DrRobert\_10, DreamTeam\_10, Eden\_10, EstebanJulior\_10, Eunoia\_10, Fluke\_14, Franklin22\_10, Gisselle\_10, Glenn\_14, Graynor\_14, HeadNerd\_10, Huckleberry\_10, HunterDalle\_10, Immaculata\_14, Jumboset\_14, Kalizoi\_14, Kittykat\_10, Korra\_14, Lasagna\_10, Lennox\_10, LilStuart\_10, Litotes\_14, Lucy\_10, Makoto\_10, MamaPearl\_10, MeganNoll\_14,

Moki\_10, MrGloopy\_14, Nancia\_10, OMalley\_10, OurGirlNessie\_10, PartyCup\_14, PitaDog\_10, Potatoes\_14, Preamble\_10, Pterodactyl\_10, RAP15\_14, Rivovina\_10, Riverdale\_14, Rozby\_14, Savage2526\_14, Scuttle\_14, Supakev\_10, Suppi\_14, TattModd\_14, Urla\_10, Vallejo\_14, Vulture\_10, Wawa\_14, Wayne\_14, WonderBoy\_10, Zorro\_14,

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

- Chridison\_10, Daiboju\_10, Herb\_10, KingBob\_10, Maria1952\_10, MrBoss\_14, PinkFriday\_10, Pumancara\_10, Sergei\_10, Temper16\_10,

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

- AbbeyMikolon\_11, Abidatro\_12, Abigail\_11, AdoptaAdorbs\_11, Agamoto\_15, Akino08\_11, Albanese\_14, Albedo\_11, Albright\_11, AlexMinion\_11, Amanises\_13, Amelia\_13, AmiCi24\_11, Amphitrite\_11, Andrew\_12, AnnaLie\_12, Antrice\_12, Armstrong\_10, Arroyo\_12, Atlantica\_11, AvGardian\_11, Avocadoman\_11, AylexOG\_12, Azaz\_11, BAjuniper\_11, Babushka\_11, BabyDaisy\_12, BabyYoda\_11, Bachaco\_11, Basilisk\_12, Bedetta\_13, BelmontSKP\_12, Bengal\_11, Bernstein\_10, Bibble12\_13, Brahms\_10, Brynnie\_12, BubbaBear\_11, Buldak\_11, Burritobowl\_11, Camara\_11, Cashington\_11, Celaena\_11, Chickaboom\_11, Chicken\_12, ChiliPepper\_11, Clayda5\_10, Coltrane\_10, Colusalem\_12, Coral\_12, Cote\_13, CroZenni\_11, CupcakePrincess\_11, Cygnet\_12, DanHam62\_11, Daob\_13, DickRichards\_11, Didgeridoo\_12, DirtyBubble\_11, Dismas\_11, Doobus\_11, Eesa\_12, Elva\_12, Eula\_11, Finalfrontier\_12, Fingolfin\_11, FlameThrower\_11, Gack\_10, Galaxy\_12, Gibbzilla\_13, Glotell\_11, Gravel\_13, GreenHearts\_14, Greenhouse\_14, HamCheese\_11, HannahPhantana\_13, Huntingdon\_14, Icarian\_12, IndyLu\_11, Jabb\_11, Jamun\_12, Jerole\_13, Joann\_14, Johnathan\_11, Jovita\_11, Juno112\_11, KHumphrey\_11, Kamdara\_11, Kate33\_11, Katzastrophic\_11, KendraB23\_13, Kenzers\_11, Kepler\_12, Kieran\_11, Kuleana\_12, Lahqtemish\_11, Lakshmi\_14, Laphuphu24k\_11, Leona\_11, Lilo27\_11, LimaBean\_11, LittleTokyo\_12, Loviatar\_11, Lunar\_13, Lynlen\_11, Makima\_14, Melons\_13, Milomuff\_12, Mireles\_13, Misaeng\_14, MsUbiquitous\_11, Nesbitt\_11, Niblet\_12, Nicky22\_12, Nubia\_14, Olliecat\_11, Oppalora\_11, Orcanus\_12, OtsoOtso\_12, Oxynfrius\_14, PastaFagioli\_11, Pecas\_11, Pelletreau\_13, PhigPhack\_11, PhirstandPhine\_13, Phisb\_11, PhluffyCoco\_11, Pineda\_13, Polka\_12, PondAmelia\_14, QMacho\_12, Quenya\_12, Rattail\_11, RcigaStruga\_14, RedFox\_11, Renna12\_12, Rollins\_10, Rona\_11, Rowa\_11, Ruchi\_12, SPB78\_12, SanaSana\_12, SansAfet\_11, SarBear\_11, Shambre1\_12, Sharkboy\_11, Shayna\_10, Shen\_13, SirBeanington\_11, Skylord\_10, Slay\_11, Softsoap\_11, Solea\_12, Squircle\_11, Stoor\_11, Stromboli\_11, StuartMinion\_11, SunnyD\_10, Swervy\_11, TMaxx\_13, TaylorSipht\_12, Teagster\_10, Toad24\_13, TukTuk\_11, VWB\_11, Vitas\_10, Vulpecula\_12, WalkingDead\_11, Westrich\_13, WileyE\_11, Zhuangyuan\_14, Zixiang\_12,

### Summary by start number:

Start 6:

- Found in 14 of 251 ( 5.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Amanises\_13 (AS1),

Start 8:

- Found in 2 of 251 ( 0.8% ) of genes in pham
- No Manual Annotations of this start.

- Called 50.0% of time when present
- Phage (with cluster) where this start called: Zhuangyuan\_14 (AS2),

#### Start 9:

- Found in 66 of 251 ( 26.3% ) of genes in pham
- Manual Annotations of this start: 42 of 209
- Called 97.0% of time when present
- Phage (with cluster) where this start called: Abidatro\_12 (AS1), AdoptaAdorbs\_11 (AS3), AlexMinion\_11 (AS3), Amelia\_13 (AS2), AmiCi24\_11 (AS3), Amphitrite\_11 (AS3), Andrew\_12 (AS3), Antrice\_12 (AS2), Atlantica\_11 (AS3), Azaz\_11 (AS3), Babushka\_11 (AS3), Basilisk\_12 (AS1), Bedetta\_13 (AS2), Bibble12\_13 (AS2), Brynnie\_12 (AS1), Camara\_11 (AS3), Chickaboom\_11 (AS1), Chicken\_12 (AS1), Colusalem\_12 (AS2), Coral\_12 (AS2), Cote\_13 (AS2), Cygnet\_12 (AS2), DanHam62\_11 (AS3), Daob\_13 (AS2), Eesa\_12 (AS1), Fingolfin\_11 (AS3), Galaxy\_12 (AS1), Glotell\_11 (AS3), Gravel\_13 (AS1), HamCheese\_11 (AS3), HannahPhantana\_13 (AS2), Jamun\_12 (AS1), Jerole\_13 (AS2), Juno112\_11 (AS3), KHumphrey\_11 (AS3), KendraB23\_13 (AS1), Kepler\_12 (AS2), Kuleana\_12 (AS2), Laphuphu24k\_11 (AS3), Leona\_11 (AS3), LittleTokyo\_12 (AS2), Lunar\_13 (AS2), Melons\_13 (AS2), Niblet\_12 (AS1), Oppalora\_11 (AS3), Orcanus\_12 (AS1), OtsoOtso\_12 (AS2), Pelletreau\_13 (AS1), PhirstandPhine\_13 (AS2), PhluffyCoco\_11 (AS3), Pineda\_13 (AS2), Polka\_12 (AS2), Rattail\_11 (AS3), RedFox\_11 (AS3), Renna12\_12 (AS3), Ruchi\_12 (AS1), Shen\_13 (AS1), StuartMinion\_11 (AS3), TaylorSipht\_12 (AS1), Toad24\_13 (AS1), Vulpecula\_12 (AS1), Westrich\_13 (AS1), WileyE\_11 (AS1), Zixiang\_12 (AS1),

#### Start 10:

- Found in 1 of 251 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 209
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rowa\_11 (BL),

#### Start 14:

- Found in 17 of 251 ( 6.8% ) of genes in pham
- Manual Annotations of this start: 9 of 209
- Called 52.9% of time when present
- Phage (with cluster) where this start called: Chridison\_10 (AK), Daiboju\_10 (AK), Herb\_10 (AK), KingBob\_10 (AK), Maria1952\_10 (AK), PinkFriday\_10 (AK), Pumancara\_10 (AK), Sergei\_10 (AK), Temper16\_10 (AK),

#### Start 15:

- Found in 7 of 251 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 6 of 209
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Buldak\_11 (EB), Gibbzilla\_13 (FB), Olliecat\_11 (EB), Shayna\_10 (EB), Squircle\_11 (EB), SunnyD\_10 (EB), Teagster\_10 (EB),

#### Start 16:

- Found in 79 of 251 ( 31.5% ) of genes in pham
- Manual Annotations of this start: 68 of 209
- Called 87.3% of time when present
- Phage (with cluster) where this start called: Aledel\_10 (AK), AppleCider\_14 (AK), AustinPowers\_10 (AK), Beethoven\_14 (AK), Bennie\_10 (AK), BigMack\_10 (AK),

Bodacious\_10 (AK), BrotherBLo\_14 (AK), CallieOMalley\_14 (AK), Canowicakte\_14 (AK), Carpal\_14 (AK), ChewChew\_10 (AK), Cholula\_14 (AK), Christian\_10 (AK), CliffHanger\_12 (EB), CristinaYang\_10 (AK), Dino\_14 (AK), DrRobert\_10 (AK), DreamTeam\_10 (AK), Eden\_10 (EB), EstebanJulior\_10 (AK), Eunoia\_10 (AK), Fluke\_14 (AK), Franklin22\_10 (EB), Gisselle\_10 (AK), Glenn\_14 (AK), Graynor\_14 (AK), HeadNerd\_10 (AK), Huckleberry\_10 (AK), HunterDalle\_10 (AK), Immaculata\_14 (AK), Jumboset\_14 (AK), Kalizoi\_14 (AK), Kittykat\_10 (AK), Korra\_14 (AK), Lasagna\_10 (AK), Lennox\_10 (AK), LilStuart\_10 (AK), Litotes\_14 (AK), Lucy\_10 (AK), Makoto\_10 (AK), MamaPearl\_10 (AK), MeganNoll\_14 (AK), Moki\_10 (AK), MrGloopy\_14 (AK), Nancia\_10 (AK), OMalley\_10 (AK), OurGirlNessie\_10 (AK), PartyCup\_14 (AK), PitaDog\_10 (AK), Potatoes\_14 (AK), Preamble\_10 (AK), Pterodactyl\_10 (AK), RAP15\_14 (AK), Rivovina\_10 (AK), Riverdale\_14 (AK), Rozby\_14 (AK), Savage2526\_14 (AK), Scuttle\_14 (AK), Supakev\_10 (AK), Suppi\_14 (AK), TattModd\_14 (AK), Urla\_10 (AK), Vallejo\_14 (AK), Vulture\_10 (AK), Wawa\_14 (AK), Wayne\_14 (AK), WonderBoy\_10 (AK), Zorro\_14 (AK),

#### Start 18:

- Found in 54 of 251 ( 21.5% ) of genes in pham
- Manual Annotations of this start: 45 of 209
- Called 98.1% of time when present
- Phage (with cluster) where this start called: Abigail\_11 (EB), Akino08\_11 (EB), Albedo\_11 (EB), Albright\_11 (EB), AnnaLie\_12 (EB), Arroyo\_12 (EB), Avocadoman\_11 (EB), AylexOG\_12 (EB), BabyDaisy\_12 (EB), BabyYoda\_11 (EB), BelmontSKP\_12 (EB), Bengal\_11 (EB), BubbaBear\_11 (EB), Burritobowl\_11 (EB), Cashington\_11 (EB), CroZenni\_11 (EB), CupcakePrincess\_11 (EB), DickRichards\_11 (EB), Doobus\_11 (EB), Elva\_12 (EB), Eula\_11 (EB), Finalfrontier\_12 (EB), Icarian\_12 (EB), IndyLu\_11 (EB), Jabb\_11 (EB), Johnathan\_11 (EB), Jovita\_11 (EB), Kate33\_11 (EB), Kenzers\_11 (EB), Lilo27\_11 (EB), LimaBean\_11 (EB), Loviatar\_11 (EB), Lynlen\_11 (EB), Milomuff\_12 (EB), MsUbiquitous\_11 (EB), Nicky22\_12 (EB), Pecas\_11 (EB), PhigPhack\_11 (EB), Phisb\_11 (EB), PondAmelia\_14 (EB), QMacho\_12 (EB), SanaSana\_12 (EB), SansAfet\_11 (EB), SarBear\_11 (EB), SirBeanington\_11 (EB), Slay\_11 (EB), Softsoap\_11 (EB), Solea\_12 (EB), Stoor\_11 (EB), Stromboli\_11 (EB), Swervy\_11 (EB), TukTuk\_11 (EB), WalkingDead\_11 (EB),

#### Start 19:

- Found in 30 of 251 ( 12.0% ) of genes in pham
- Manual Annotations of this start: 27 of 209
- Called 93.3% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon\_11 (BL), Albanese\_14 (AK), AvGardian\_11 (EB), Bachaco\_11 (EB), Celaena\_11 (EB), ChiliPepper\_11 (EB), Didgeridoo\_12 (EB), Dismas\_11 (EB), FlameThrower\_11 (EB), GreenHearts\_14 (AK), Greenhouse\_14 (AK), Huntingdon\_14 (AK), Joann\_14 (AK), Kamdara\_11 (EB), Katzastrophic\_11 (EB), Kieran\_11 (EB), Lahqtemish\_11 (EB), Lakshmi\_14 (AK), Misaeng\_14 (AK), Nesbitt\_11 (BL), Nubia\_14 (AK), Oxyntrius\_14 (AK), PastaFagioli\_11 (EB), Quenya\_12 (EB), RcigaStruga\_14 (AK), Rona\_11 (EB), Shambre1\_12 (singleton), Sharkboy\_11 (EB),

#### Start 20:

- Found in 26 of 251 ( 10.4% ) of genes in pham
- Manual Annotations of this start: 11 of 209
- Called 61.5% of time when present
- Phage (with cluster) where this start called: Agamoto\_15 (FR), Armstrong\_10 (EB), BAjuniper\_11 (EB), Bernstein\_10 (EB), Brahms\_10 (EB), Clayda5\_10 (EB),

Coltrane\_10 (EB), DirtyBubble\_11 (EB), Gack\_10 (EB), Makima\_14 (FR), Mireles\_13 (FR), Rollins\_10 (EB), SPB78\_12 (BA), Skylord\_10 (EB), TMaxx\_13 (FR), Vitas\_10 (EB),

Start 21:

- Found in 1 of 251 ( 0.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: VWB\_11 (BA),

Start 31:

- Found in 47 of 251 ( 18.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 2.1% of time when present
- Phage (with cluster) where this start called: MrBoss\_14 (AK),

### **Summary by clusters:**

There are 10 clusters represented in this pham: AS3, AS2, FR, BA, BL, AK, AS1, EB, FB, singleton,

Info for manual annotations of cluster AK:

- Start number 14 was manually annotated 9 times for cluster AK.
- Start number 16 was manually annotated 65 times for cluster AK.
- Start number 19 was manually annotated 10 times for cluster AK.

Info for manual annotations of cluster AS1:

- Start number 9 was manually annotated 12 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 9 was manually annotated 16 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 9 was manually annotated 14 times for cluster AS3.

Info for manual annotations of cluster BL:

- Start number 10 was manually annotated 1 time for cluster BL.
- Start number 19 was manually annotated 2 times for cluster BL.

Info for manual annotations of cluster EB:

- Start number 15 was manually annotated 6 times for cluster EB.
- Start number 16 was manually annotated 3 times for cluster EB.
- Start number 18 was manually annotated 45 times for cluster EB.
- Start number 19 was manually annotated 14 times for cluster EB.
- Start number 20 was manually annotated 11 times for cluster EB.

### **Gene Information:**

Gene: AbbeyMikolon\_11 Start: 7783, Stop: 8178, Start Num: 19

Candidate Starts for AbbeyMikolon\_11:

(17, 7780), (Start: 19 @7783 has 27 MA's), (22, 7795), (28, 7816), (30, 7822), (32, 7828), (36, 7843), (43, 7864), (47, 7888), (63, 7957), (77, 8029), (78, 8035), (85, 8062), (92, 8092), (99, 8140),

Gene: Abidatro\_12 Start: 8321, Stop: 8764, Start Num: 9

Candidate Starts for Abidatro\_12:

(Start: 9 @8321 has 42 MA's), (25, 8363), (39, 8417), (50, 8471), (51, 8474), (58, 8507), (76, 8606), (83, 8633), (88, 8657), (89, 8663), (91, 8672),

Gene: Abigail\_11 Start: 8030, Stop: 8425, Start Num: 18

Candidate Starts for Abigail\_11:

(4, 7904), (Start: 18 @8030 has 45 MA's), (31, 8069), (43, 8096), (59, 8174), (79, 8273), (87, 8306), (101, 8399),

Gene: AdoptaAdorbs\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for AdoptaAdorbs\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: Agamoto\_15 Start: 10788, Stop: 11180, Start Num: 20

Candidate Starts for Agamoto\_15:

(Start: 20 @10788 has 11 MA's), (23, 10800), (46, 10890), (49, 10902), (66, 10974), (76, 11031), (102, 11172),

Gene: Akino08\_11 Start: 8216, Stop: 8611, Start Num: 18

Candidate Starts for Akino08\_11:

(4, 8090), (Start: 18 @8216 has 45 MA's), (Start: 20 @8219 has 11 MA's), (38, 8279), (90, 8510), (95, 8543), (97, 8564),

Gene: Albanese\_14 Start: 10476, Stop: 10886, Start Num: 19

Candidate Starts for Albanese\_14:

(Start: 19 @10476 has 27 MA's), (55, 10620), (56, 10629), (57, 10632), (63, 10662), (65, 10668), (69, 10701), (96, 10824), (100, 10848),

Gene: Albedo\_11 Start: 7905, Stop: 8300, Start Num: 18

Candidate Starts for Albedo\_11:

(4, 7779), (Start: 18 @7905 has 45 MA's), (31, 7944), (59, 8049), (79, 8148), (87, 8181), (101, 8274),

Gene: Albright\_11 Start: 7911, Stop: 8306, Start Num: 18

Candidate Starts for Albright\_11:

(4, 7785), (Start: 18 @7911 has 45 MA's), (43, 7977), (59, 8055), (79, 8154), (87, 8187), (101, 8280),

Gene: Aledel\_10 Start: 7551, Stop: 7982, Start Num: 16

Candidate Starts for Aledel\_10:

(Start: 14 @7545 has 9 MA's), (Start: 16 @7551 has 68 MA's), (24, 7572), (42, 7644), (55, 7701), (57, 7713), (58, 7722), (64, 7746), (96, 7905),

Gene: AlexMinion\_11 Start: 7928, Stop: 8371, Start Num: 9

Candidate Starts for AlexMinion\_11:

(6, 7916), (Start: 9 @7928 has 42 MA's), (43, 8036), (52, 8084), (60, 8120), (61, 8126), (76, 8213), (83, 8240), (100, 8339), (101, 8345), (102, 8357),

Gene: Amanises\_13 Start: 8480, Stop: 8932, Start Num: 6

Candidate Starts for Amanises\_13:

(6, 8480), (Start: 9 @8492 has 42 MA's), (38, 8582), (46, 8624), (50, 8642), (51, 8645), (60, 8684), (76, 8777), (83, 8804), (88, 8828), (95, 8864), (100, 8900),

Gene: Amelia\_13 Start: 8497, Stop: 8940, Start Num: 9

Candidate Starts for Amelia\_13:

(Start: 9 @8497 has 42 MA's), (38, 8587), (39, 8593), (50, 8647), (51, 8650), (60, 8689), (83, 8809), (88, 8833), (100, 8905), (101, 8911),

Gene: AmiCi24\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for AmiCi24\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: Amphitrite\_11 Start: 7900, Stop: 8340, Start Num: 9

Candidate Starts for Amphitrite\_11:

(Start: 9 @7900 has 42 MA's), (27, 7951), (51, 8053), (52, 8056), (60, 8092), (61, 8098), (65, 8113), (76, 8185), (83, 8212), (100, 8311), (101, 8317), (102, 8329),

Gene: Andrew\_12 Start: 8281, Stop: 8724, Start Num: 9

Candidate Starts for Andrew\_12:

(Start: 9 @8281 has 42 MA's), (27, 8332), (38, 8371), (40, 8380), (50, 8431), (51, 8434), (52, 8437), (60, 8473), (61, 8479), (83, 8593), (87, 8608), (100, 8692), (101, 8698), (102, 8710),

Gene: AnnaLie\_12 Start: 8320, Stop: 8715, Start Num: 18

Candidate Starts for AnnaLie\_12:

(4, 8194), (Start: 18 @8320 has 45 MA's), (31, 8359), (43, 8386), (59, 8464), (79, 8563), (87, 8596), (101, 8689),

Gene: Antrice\_12 Start: 8237, Stop: 8680, Start Num: 9

Candidate Starts for Antrice\_12:

(6, 8225), (Start: 9 @8237 has 42 MA's), (52, 8393), (65, 8450), (72, 8507), (73, 8510), (88, 8573), (89, 8579), (95, 8612), (100, 8648), (102, 8666),

Gene: AppleCider\_14 Start: 10411, Stop: 10824, Start Num: 16

Candidate Starts for AppleCider\_14:

(Start: 16 @10411 has 68 MA's), (31, 10456), (55, 10558), (96, 10762),

Gene: Armstrong\_10 Start: 7692, Stop: 8081, Start Num: 20

Candidate Starts for Armstrong\_10:

(Start: 20 @7692 has 11 MA's), (59, 7833), (63, 7851), (94, 8004), (95, 8013), (98, 8037), (102, 8067),

Gene: Arroyo\_12 Start: 8381, Stop: 8776, Start Num: 18

Candidate Starts for Arroyo\_12:

(4, 8255), (Start: 18 @8381 has 45 MA's), (43, 8447), (59, 8525), (79, 8624), (87, 8657), (101, 8750),

Gene: Atlantica\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for Atlantica\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: AustinPowers\_10 Start: 7552, Stop: 7983, Start Num: 16

Candidate Starts for AustinPowers\_10:

(Start: 14 @7546 has 9 MA's), (Start: 16 @7552 has 68 MA's), (24, 7573), (42, 7645), (57, 7714), (58, 7723), (64, 7747), (96, 7906),

Gene: AvGardian\_11 Start: 7970, Stop: 8365, Start Num: 19

Candidate Starts for AvGardian\_11:

(Start: 19 @7970 has 27 MA's), (38, 8033), (59, 8114), (73, 8189), (79, 8213), (87, 8246), (90, 8264), (101, 8339),

Gene: Avocadoman\_11 Start: 7969, Stop: 8364, Start Num: 18

Candidate Starts for Avocadoman\_11:

(Start: 18 @7969 has 45 MA's), (31, 8008), (43, 8035), (59, 8113), (79, 8212), (87, 8245), (101, 8338),

Gene: AylexOG\_12 Start: 8256, Stop: 8651, Start Num: 18

Candidate Starts for AylexOG\_12:

(4, 8130), (Start: 18 @8256 has 45 MA's), (31, 8295), (43, 8322), (59, 8400), (87, 8532), (101, 8625),

Gene: Azaz\_11 Start: 7953, Stop: 8393, Start Num: 9

Candidate Starts for Azaz\_11:

(Start: 9 @7953 has 42 MA's), (51, 8106), (52, 8109), (60, 8145), (61, 8151), (65, 8166), (76, 8238), (83, 8265), (100, 8364), (101, 8370), (102, 8382),

Gene: BAjuniper\_11 Start: 7857, Stop: 8243, Start Num: 20

Candidate Starts for BAjuniper\_11:

(2, 7680), (Start: 20 @7857 has 11 MA's), (59, 7995), (62, 8010), (89, 8139), (95, 8175),

Gene: Babushka\_11 Start: 7950, Stop: 8390, Start Num: 9

Candidate Starts for Babushka\_11:

(Start: 9 @7950 has 42 MA's), (51, 8103), (52, 8106), (60, 8142), (61, 8148), (63, 8157), (76, 8235), (83, 8262), (100, 8361), (101, 8367), (102, 8379),

Gene: BabyDaisy\_12 Start: 8133, Stop: 8531, Start Num: 18

Candidate Starts for BabyDaisy\_12:

(Start: 18 @8133 has 45 MA's), (79, 8379), (97, 8484),

Gene: BabyYoda\_11 Start: 8162, Stop: 8557, Start Num: 18

Candidate Starts for BabyYoda\_11:

(4, 8036), (Start: 18 @8162 has 45 MA's), (Start: 20 @8165 has 11 MA's), (38, 8225), (81, 8420), (90, 8456), (95, 8489), (97, 8510),

Gene: Bachaco\_11 Start: 8051, Stop: 8449, Start Num: 19

Candidate Starts for Bachaco\_11:

(1, 7853), (2, 7877), (3, 7913), (Start: 19 @8051 has 27 MA's), (26, 8072), (87, 8330), (90, 8348), (95, 8381),

Gene: Basilisk\_12 Start: 8645, Stop: 9088, Start Num: 9

Candidate Starts for Basilisk\_12:

(5, 8570), (Start: 9 @8645 has 42 MA's), (25, 8687), (30, 8705), (39, 8741), (50, 8795), (51, 8798), (60, 8837), (67, 8891), (76, 8930), (83, 8957), (88, 8981), (89, 8987),

Gene: Bedetta\_13 Start: 8497, Stop: 8940, Start Num: 9

Candidate Starts for Bedetta\_13:

(Start: 9 @8497 has 42 MA's), (38, 8587), (39, 8593), (50, 8647), (51, 8650), (60, 8689), (83, 8809), (88, 8833), (100, 8905), (101, 8911),

Gene: Beethoven\_14 Start: 10371, Stop: 10784, Start Num: 16

Candidate Starts for Beethoven\_14:

(Start: 16 @10371 has 68 MA's), (50, 10506), (55, 10521), (64, 10566), (70, 10608), (96, 10725),

Gene: BelmontSKP\_12 Start: 8320, Stop: 8715, Start Num: 18

Candidate Starts for BelmontSKP\_12:

(4, 8194), (Start: 18 @8320 has 45 MA's), (31, 8359), (43, 8386), (59, 8464), (79, 8563), (87, 8596), (101, 8689),

Gene: Bengal\_11 Start: 7911, Stop: 8306, Start Num: 18

Candidate Starts for Bengal\_11:

(4, 7785), (Start: 18 @7911 has 45 MA's), (31, 7950), (43, 7977), (79, 8154), (87, 8187), (101, 8280),

Gene: Bennie\_10 Start: 7516, Stop: 7926, Start Num: 16

Candidate Starts for Bennie\_10:

(Start: 16 @7516 has 68 MA's), (50, 7648), (55, 7663), (64, 7708), (65, 7711), (70, 7750), (96, 7867),

Gene: Bernstein\_10 Start: 7752, Stop: 8141, Start Num: 20

Candidate Starts for Bernstein\_10:

(Start: 20 @7752 has 11 MA's), (59, 7893), (63, 7911), (94, 8064), (95, 8073), (98, 8097), (102, 8127),

Gene: Bible12\_13 Start: 8500, Stop: 8943, Start Num: 9

Candidate Starts for Bible12\_13:

(Start: 9 @8500 has 42 MA's), (38, 8590), (39, 8596), (50, 8650), (51, 8653), (60, 8692), (83, 8812), (88, 8836), (100, 8908), (101, 8914),

Gene: BigMack\_10 Start: 7516, Stop: 7926, Start Num: 16

Candidate Starts for BigMack\_10:

(Start: 16 @7516 has 68 MA's), (50, 7648), (55, 7663), (64, 7708), (70, 7750), (96, 7867),

Gene: Bodacious\_10 Start: 7514, Stop: 7924, Start Num: 16

Candidate Starts for Bodacious\_10:

(Start: 16 @7514 has 68 MA's), (43, 7607), (50, 7646), (55, 7661), (64, 7706), (70, 7748), (75, 7769), (96, 7865),

Gene: Brahms\_10 Start: 7692, Stop: 8081, Start Num: 20

Candidate Starts for Brahms\_10:

(Start: 20 @7692 has 11 MA's), (59, 7833), (63, 7851), (94, 8004), (95, 8013), (98, 8037), (102, 8067),

Gene: BrotherBLo\_14 Start: 10378, Stop: 10791, Start Num: 16

Candidate Starts for BrotherBLo\_14:

(Start: 16 @10378 has 68 MA's), (50, 10513), (55, 10528), (64, 10573), (70, 10615), (96, 10732),

Gene: Brynnie\_12 Start: 8457, Stop: 8900, Start Num: 9

Candidate Starts for Brynnie\_12:

(Start: 9 @8457 has 42 MA's), (25, 8499), (39, 8553), (50, 8607), (51, 8610), (60, 8649), (67, 8703), (76, 8742), (83, 8769), (88, 8793), (89, 8799),

Gene: BubbaBear\_11 Start: 7905, Stop: 8300, Start Num: 18

Candidate Starts for BubbaBear\_11:

(Start: 18 @7905 has 45 MA's), (31, 7944), (59, 8049), (79, 8148), (87, 8181), (101, 8274),

Gene: Buldak\_11 Start: 8189, Stop: 8584, Start Num: 15

Candidate Starts for Buldak\_11:

(Start: 15 @8189 has 6 MA's), (53, 8306), (58, 8333), (59, 8336), (74, 8414), (82, 8450), (84, 8459), (95, 8516), (98, 8540),

Gene: Burritobowl\_11 Start: 7938, Stop: 8333, Start Num: 18

Candidate Starts for Burritobowl\_11:

(4, 7812), (Start: 18 @7938 has 45 MA's), (31, 7977), (43, 8004), (59, 8082), (79, 8181), (87, 8214), (101, 8307),

Gene: CallieOMalley\_14 Start: 10411, Stop: 10824, Start Num: 16

Candidate Starts for CallieOMalley\_14:

(Start: 16 @10411 has 68 MA's), (31, 10456), (55, 10558), (96, 10762),

Gene: Camara\_11 Start: 7903, Stop: 8343, Start Num: 9

Candidate Starts for Camara\_11:

(Start: 9 @7903 has 42 MA's), (27, 7954), (51, 8056), (52, 8059), (60, 8095), (61, 8101), (65, 8116), (76, 8188), (83, 8215), (100, 8314), (101, 8320), (102, 8332),

Gene: Canowicakte\_14 Start: 10446, Stop: 10859, Start Num: 16

Candidate Starts for Canowicakte\_14:

(Start: 16 @10446 has 68 MA's), (31, 10491), (55, 10593), (75, 10701), (96, 10797),

Gene: Carpal\_14 Start: 10378, Stop: 10791, Start Num: 16

Candidate Starts for Carpal\_14:

(Start: 16 @10378 has 68 MA's), (50, 10513), (55, 10528), (64, 10573), (70, 10615), (96, 10732),

Gene: Cashington\_11 Start: 7928, Stop: 8323, Start Num: 18

Candidate Starts for Cashington\_11:

(4, 7802), (Start: 18 @7928 has 45 MA's), (31, 7967), (43, 7994), (59, 8072), (79, 8171), (87, 8204), (101, 8297),

Gene: Celaena\_11 Start: 7988, Stop: 8386, Start Num: 19

Candidate Starts for Celaena\_11:

(3, 7850), (7, 7952), (12, 7970), (Start: 19 @7988 has 27 MA's), (26, 8009), (87, 8267), (90, 8285), (95, 8318),

Gene: ChewChew\_10 Start: 7513, Stop: 7923, Start Num: 16

Candidate Starts for ChewChew\_10:

(Start: 16 @7513 has 68 MA's), (43, 7606), (50, 7645), (55, 7660), (64, 7705), (70, 7747), (75, 7768), (96, 7864),

Gene: Chickaboom\_11 Start: 8002, Stop: 8445, Start Num: 9

Candidate Starts for Chickaboom\_11:

(Start: 9 @8002 has 42 MA's), (25, 8044), (30, 8062), (39, 8098), (50, 8152), (51, 8155), (60, 8194), (67, 8248), (76, 8287), (83, 8314), (88, 8338), (89, 8344),

Gene: Chicken\_12 Start: 8281, Stop: 8721, Start Num: 9

Candidate Starts for Chicken\_12:

(Start: 9 @8281 has 42 MA's), (38, 8371), (39, 8377), (46, 8413), (50, 8431), (51, 8434), (60, 8473), (76, 8566), (83, 8593), (88, 8617), (95, 8653), (100, 8689),

Gene: ChiliPepper\_11 Start: 8141, Stop: 8542, Start Num: 19  
Candidate Starts for ChiliPepper\_11:  
(Start: 19 @8141 has 27 MA's), (59, 8291), (81, 8405), (95, 8474),

Gene: Cholula\_14 Start: 10423, Stop: 10836, Start Num: 16  
Candidate Starts for Cholula\_14:  
(Start: 16 @10423 has 68 MA's), (50, 10558), (55, 10573), (64, 10618), (70, 10660), (96, 10777),

Gene: Chridison\_10 Start: 7546, Stop: 7983, Start Num: 14  
Candidate Starts for Chridison\_10:  
(Start: 14 @7546 has 9 MA's), (Start: 16 @7552 has 68 MA's), (24, 7573), (42, 7645), (57, 7714), (58, 7723), (64, 7747), (96, 7906),

Gene: Christian\_10 Start: 7514, Stop: 7924, Start Num: 16  
Candidate Starts for Christian\_10:  
(Start: 16 @7514 has 68 MA's), (43, 7607), (50, 7646), (55, 7661), (64, 7706), (70, 7748), (75, 7769), (96, 7865),

Gene: Clayda5\_10 Start: 7692, Stop: 8081, Start Num: 20  
Candidate Starts for Clayda5\_10:  
(Start: 20 @7692 has 11 MA's), (59, 7833), (63, 7851), (94, 8004), (95, 8013), (98, 8037), (102, 8067),

Gene: CliffHanger\_12 Start: 7883, Stop: 8278, Start Num: 16  
Candidate Starts for CliffHanger\_12:  
(Start: 16 @7883 has 68 MA's), (56, 8015), (73, 8105), (84, 8153), (90, 8177), (98, 8234),

Gene: Coltrane\_10 Start: 7692, Stop: 8081, Start Num: 20  
Candidate Starts for Coltrane\_10:  
(Start: 20 @7692 has 11 MA's), (59, 7833), (63, 7851), (94, 8004), (95, 8013), (98, 8037), (102, 8067),

Gene: Colusalem\_12 Start: 8336, Stop: 8779, Start Num: 9  
Candidate Starts for Colusalem\_12:  
(Start: 9 @8336 has 42 MA's), (38, 8426), (39, 8432), (50, 8486), (51, 8489), (60, 8528), (83, 8648), (88, 8672), (100, 8744), (101, 8750),

Gene: Coral\_12 Start: 8336, Stop: 8779, Start Num: 9  
Candidate Starts for Coral\_12:  
(Start: 9 @8336 has 42 MA's), (38, 8426), (39, 8432), (50, 8486), (51, 8489), (60, 8528), (83, 8648), (88, 8672), (100, 8744), (101, 8750),

Gene: Cote\_13 Start: 8497, Stop: 8940, Start Num: 9  
Candidate Starts for Cote\_13:  
(Start: 9 @8497 has 42 MA's), (38, 8587), (39, 8593), (50, 8647), (51, 8650), (60, 8689), (83, 8809), (88, 8833), (100, 8905), (101, 8911),

Gene: CristinaYang\_10 Start: 7514, Stop: 7924, Start Num: 16  
Candidate Starts for CristinaYang\_10:  
(Start: 16 @7514 has 68 MA's), (43, 7607), (50, 7646), (55, 7661), (64, 7706), (70, 7748), (75, 7769), (96, 7865),

Gene: CroZenni\_11 Start: 7911, Stop: 8306, Start Num: 18  
Candidate Starts for CroZenni\_11:

(4, 7785), (Start: 18 @7911 has 45 MA's), (43, 7977), (59, 8055), (79, 8154), (87, 8187), (101, 8280),

Gene: CupcakePrincess\_11 Start: 7951, Stop: 8346, Start Num: 18

Candidate Starts for CupcakePrincess\_11:

(4, 7825), (Start: 18 @7951 has 45 MA's), (31, 7990), (43, 8017), (59, 8095), (87, 8227), (101, 8320),

Gene: Cygnet\_12 Start: 8279, Stop: 8722, Start Num: 9

Candidate Starts for Cygnet\_12:

(Start: 9 @8279 has 42 MA's), (30, 8339), (34, 8348), (40, 8378), (50, 8429), (65, 8492), (70, 8540), (72, 8549), (73, 8552), (88, 8615), (90, 8624), (95, 8654), (100, 8690), (102, 8708),

Gene: Daiboju\_10 Start: 7547, Stop: 7984, Start Num: 14

Candidate Starts for Daiboju\_10:

(Start: 14 @7547 has 9 MA's), (Start: 16 @7553 has 68 MA's), (29, 7592), (30, 7595), (50, 7688), (55, 7703), (57, 7715), (58, 7724), (59, 7727), (64, 7748), (96, 7907),

Gene: DanHam62\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for DanHam62\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: Daob\_13 Start: 8500, Stop: 8943, Start Num: 9

Candidate Starts for Daob\_13:

(Start: 9 @8500 has 42 MA's), (38, 8590), (39, 8596), (50, 8650), (51, 8653), (60, 8692), (83, 8812), (88, 8836), (100, 8908), (101, 8914),

Gene: DickRichards\_11 Start: 8405, Stop: 8800, Start Num: 18

Candidate Starts for DickRichards\_11:

(4, 8279), (Start: 18 @8405 has 45 MA's), (31, 8444), (43, 8471), (59, 8549), (79, 8648), (87, 8681), (101, 8774),

Gene: Didgeridoo\_12 Start: 8135, Stop: 8533, Start Num: 19

Candidate Starts for Didgeridoo\_12:

(Start: 19 @8135 has 27 MA's), (79, 8381), (97, 8486),

Gene: Dino\_14 Start: 10377, Stop: 10790, Start Num: 16

Candidate Starts for Dino\_14:

(Start: 16 @10377 has 68 MA's), (50, 10512), (55, 10527), (64, 10572), (70, 10614), (96, 10731),

Gene: DirtyBubble\_11 Start: 8173, Stop: 8565, Start Num: 20

Candidate Starts for DirtyBubble\_11:

(4, 8044), (Start: 18 @8170 has 45 MA's), (Start: 20 @8173 has 11 MA's), (38, 8233), (81, 8428), (90, 8464), (95, 8497), (97, 8518),

Gene: Dismas\_11 Start: 8141, Stop: 8542, Start Num: 19

Candidate Starts for Dismas\_11:

(Start: 19 @8141 has 27 MA's), (59, 8291), (81, 8405), (95, 8474),

Gene: Doobus\_11 Start: 8142, Stop: 8537, Start Num: 18

Candidate Starts for Doobus\_11:

(4, 8016), (Start: 18 @8142 has 45 MA's), (43, 8208), (59, 8286), (79, 8385), (87, 8418), (101, 8511),

Gene: DrRobert\_10 Start: 7514, Stop: 7924, Start Num: 16

Candidate Starts for DrRobert\_10:

(Start: 16 @7514 has 68 MA's), (43, 7607), (50, 7646), (55, 7661), (64, 7706), (70, 7748), (75, 7769), (96, 7865),

Gene: DreamTeam\_10 Start: 7581, Stop: 7991, Start Num: 16

Candidate Starts for DreamTeam\_10:

(Start: 16 @7581 has 68 MA's), (50, 7713), (55, 7728), (64, 7773), (65, 7776), (96, 7932),

Gene: Eden\_10 Start: 7777, Stop: 8181, Start Num: 16

Candidate Starts for Eden\_10:

(Start: 16 @7777 has 68 MA's), (Start: 20 @7783 has 11 MA's), (59, 7933), (63, 7951), (74, 8011), (83, 8047), (95, 8113),

Gene: Eesa\_12 Start: 8495, Stop: 8935, Start Num: 9

Candidate Starts for Eesa\_12:

(6, 8483), (Start: 9 @8495 has 42 MA's), (38, 8585), (39, 8591), (46, 8627), (50, 8645), (51, 8648), (60, 8687), (76, 8780), (83, 8807), (88, 8831), (95, 8867), (100, 8903),

Gene: Elva\_12 Start: 8225, Stop: 8620, Start Num: 18

Candidate Starts for Elva\_12:

(4, 8099), (Start: 18 @8225 has 45 MA's), (59, 8369), (81, 8483), (90, 8519), (95, 8552), (97, 8573),

Gene: EstebanJulior\_10 Start: 7558, Stop: 7971, Start Num: 16

Candidate Starts for EstebanJulior\_10:

(Start: 16 @7558 has 68 MA's), (36, 7621), (55, 7705), (64, 7750), (65, 7753), (70, 7792), (87, 7852), (96, 7909),

Gene: Eula\_11 Start: 7912, Stop: 8307, Start Num: 18

Candidate Starts for Eula\_11:

(Start: 18 @7912 has 45 MA's), (31, 7951), (43, 7978), (54, 8029), (59, 8056), (87, 8188), (101, 8281),

Gene: Eunoia\_10 Start: 7551, Stop: 7982, Start Num: 16

Candidate Starts for Eunoia\_10:

(Start: 14 @7545 has 9 MA's), (Start: 16 @7551 has 68 MA's), (24, 7572), (42, 7644), (55, 7701), (57, 7713), (58, 7722), (64, 7746), (96, 7905),

Gene: Finalfrontier\_12 Start: 8424, Stop: 8819, Start Num: 18

Candidate Starts for Finalfrontier\_12:

(Start: 18 @8424 has 45 MA's), (31, 8463), (43, 8490), (59, 8568), (87, 8700), (101, 8793),

Gene: Fingolfin\_11 Start: 7903, Stop: 8343, Start Num: 9

Candidate Starts for Fingolfin\_11:

(Start: 9 @7903 has 42 MA's), (27, 7954), (51, 8056), (52, 8059), (60, 8095), (61, 8101), (65, 8116), (76, 8188), (83, 8215), (100, 8314), (101, 8320), (102, 8332),

Gene: FlameThrower\_11 Start: 7876, Stop: 8274, Start Num: 19

Candidate Starts for FlameThrower\_11:

(1, 7678), (Start: 19 @7876 has 27 MA's), (26, 7897), (87, 8155), (90, 8173), (95, 8206),

Gene: Fluke\_14 Start: 10419, Stop: 10832, Start Num: 16

Candidate Starts for Fluke\_14:

(Start: 16 @10419 has 68 MA's), (50, 10554), (64, 10614), (70, 10656), (96, 10773),

Gene: Franklin22\_10 Start: 7758, Stop: 8153, Start Num: 16

Candidate Starts for Franklin22\_10:

(Start: 16 @7758 has 68 MA's), (Start: 20 @7764 has 11 MA's), (59, 7905), (63, 7923), (95, 8085),

Gene: Gack\_10 Start: 7830, Stop: 8219, Start Num: 20

Candidate Starts for Gack\_10:

(Start: 20 @7830 has 11 MA's), (47, 7917), (59, 7971), (62, 7986), (80, 8076), (90, 8118), (95, 8151),

Gene: Galaxy\_12 Start: 8328, Stop: 8771, Start Num: 9

Candidate Starts for Galaxy\_12:

(Start: 9 @8328 has 42 MA's), (39, 8424), (50, 8478), (51, 8481), (58, 8514), (76, 8613), (83, 8640), (88, 8664), (89, 8670), (91, 8679),

Gene: Gibbzilla\_13 Start: 7779, Stop: 8162, Start Num: 15

Candidate Starts for Gibbzilla\_13:

(13, 7770), (Start: 15 @7779 has 6 MA's), (44, 7863), (52, 7905), (59, 7938), (98, 8118),

Gene: Gisselle\_10 Start: 7581, Stop: 7991, Start Num: 16

Candidate Starts for Gisselle\_10:

(Start: 16 @7581 has 68 MA's), (50, 7713), (55, 7728), (64, 7773), (65, 7776), (96, 7932),

Gene: Glenn\_14 Start: 10429, Stop: 10842, Start Num: 16

Candidate Starts for Glenn\_14:

(Start: 16 @10429 has 68 MA's), (50, 10564), (55, 10579), (64, 10624), (70, 10666), (96, 10783),

Gene: Glotell\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for Glotell\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: Gravel\_13 Start: 8491, Stop: 8931, Start Num: 9

Candidate Starts for Gravel\_13:

(6, 8479), (Start: 9 @8491 has 42 MA's), (38, 8581), (46, 8623), (50, 8641), (51, 8644), (60, 8683), (76, 8776), (83, 8803), (88, 8827), (95, 8863), (100, 8899),

Gene: Graynor\_14 Start: 10435, Stop: 10845, Start Num: 16

Candidate Starts for Graynor\_14:

(Start: 16 @10435 has 68 MA's), (31, 10477), (55, 10579), (96, 10783),

Gene: GreenHearts\_14 Start: 10522, Stop: 10932, Start Num: 19

Candidate Starts for GreenHearts\_14:

(Start: 19 @10522 has 27 MA's), (41, 10606), (55, 10666), (56, 10675), (57, 10678), (63, 10708), (65, 10714), (69, 10747), (96, 10870), (100, 10894),

Gene: Greenhouse\_14 Start: 10447, Stop: 10857, Start Num: 19

Candidate Starts for Greenhouse\_14:

(Start: 19 @10447 has 27 MA's), (55, 10591), (56, 10600), (57, 10603), (63, 10633), (65, 10639), (69, 10672), (96, 10795), (100, 10819),

Gene: HamCheese\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for HamCheese\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: HannahPhantana\_13 Start: 8500, Stop: 8943, Start Num: 9

Candidate Starts for HannahPhantana\_13:

(Start: 9 @8500 has 42 MA's), (38, 8590), (39, 8596), (50, 8650), (51, 8653), (60, 8692), (83, 8812), (88, 8836), (100, 8908), (101, 8914),

Gene: HeadNerd\_10 Start: 7516, Stop: 7926, Start Num: 16

Candidate Starts for HeadNerd\_10:

(Start: 16 @7516 has 68 MA's), (50, 7648), (55, 7663), (64, 7708), (65, 7711), (70, 7750), (96, 7867),

Gene: Herb\_10 Start: 7547, Stop: 7984, Start Num: 14

Candidate Starts for Herb\_10:

(Start: 14 @7547 has 9 MA's), (Start: 16 @7553 has 68 MA's), (29, 7592), (30, 7595), (50, 7688), (55, 7703), (57, 7715), (58, 7724), (59, 7727), (64, 7748), (96, 7907),

Gene: Huckleberry\_10 Start: 7516, Stop: 7926, Start Num: 16

Candidate Starts for Huckleberry\_10:

(Start: 16 @7516 has 68 MA's), (50, 7648), (55, 7663), (64, 7708), (65, 7711), (70, 7750), (96, 7867),

Gene: HunterDalle\_10 Start: 7551, Stop: 7982, Start Num: 16

Candidate Starts for HunterDalle\_10:

(Start: 14 @7545 has 9 MA's), (Start: 16 @7551 has 68 MA's), (24, 7572), (42, 7644), (57, 7713), (58, 7722), (64, 7746), (96, 7905),

Gene: Huntingdon\_14 Start: 10433, Stop: 10843, Start Num: 19

Candidate Starts for Huntingdon\_14:

(Start: 19 @10433 has 27 MA's), (55, 10577), (56, 10586), (57, 10589), (63, 10619), (65, 10625), (69, 10658), (96, 10781), (100, 10805),

Gene: Icarian\_12 Start: 8152, Stop: 8547, Start Num: 18

Candidate Starts for Icarian\_12:

(Start: 18 @8152 has 45 MA's), (38, 8215), (55, 8272), (95, 8479), (97, 8500),

Gene: Immaculata\_14 Start: 10423, Stop: 10836, Start Num: 16

Candidate Starts for Immaculata\_14:

(Start: 16 @10423 has 68 MA's), (50, 10558), (55, 10573), (64, 10618), (70, 10660), (96, 10777),

Gene: IndyLu\_11 Start: 7957, Stop: 8355, Start Num: 18

Candidate Starts for IndyLu\_11:

(Start: 18 @7957 has 45 MA's), (79, 8203), (97, 8308),

Gene: Jabb\_11 Start: 7951, Stop: 8346, Start Num: 18

Candidate Starts for Jabb\_11:

(4, 7825), (Start: 18 @7951 has 45 MA's), (31, 7990), (43, 8017), (59, 8095), (87, 8227), (101, 8320),

Gene: Jamun\_12 Start: 8669, Stop: 9112, Start Num: 9

Candidate Starts for Jamun\_12:

(Start: 9 @8669 has 42 MA's), (25, 8711), (30, 8729), (39, 8765), (50, 8819), (51, 8822), (60, 8861), (67, 8915), (76, 8954), (83, 8981), (88, 9005), (89, 9011),

Gene: Jerole\_13 Start: 8497, Stop: 8940, Start Num: 9

Candidate Starts for Jerole\_13:

(Start: 9 @8497 has 42 MA's), (38, 8587), (39, 8593), (50, 8647), (51, 8650), (60, 8689), (83, 8809), (88, 8833), (100, 8905), (101, 8911),

Gene: Joann\_14 Start: 10425, Stop: 10835, Start Num: 19

Candidate Starts for Joann\_14:

(Start: 19 @10425 has 27 MA's), (55, 10569), (56, 10578), (57, 10581), (63, 10611), (65, 10617), (69, 10650), (96, 10773), (100, 10797),

Gene: Johnathan\_11 Start: 7911, Stop: 8306, Start Num: 18

Candidate Starts for Johnathan\_11:

(4, 7785), (Start: 18 @7911 has 45 MA's), (31, 7950), (43, 7977), (59, 8055), (79, 8154), (87, 8187), (101, 8280),

Gene: Jovita\_11 Start: 8013, Stop: 8408, Start Num: 18

Candidate Starts for Jovita\_11:

(Start: 18 @8013 has 45 MA's), (31, 8052), (43, 8079), (59, 8157), (87, 8289), (101, 8382),

Gene: Jumboset\_14 Start: 10372, Stop: 10785, Start Num: 16

Candidate Starts for Jumboset\_14:

(Start: 16 @10372 has 68 MA's), (50, 10507), (55, 10522), (64, 10567), (70, 10609), (96, 10726),

Gene: Juno112\_11 Start: 7903, Stop: 8343, Start Num: 9

Candidate Starts for Juno112\_11:

(Start: 9 @7903 has 42 MA's), (27, 7954), (51, 8056), (52, 8059), (60, 8095), (61, 8101), (65, 8116), (76, 8188), (83, 8215), (100, 8314), (101, 8320), (102, 8332),

Gene: KHumphrey\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for KHumphrey\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: Kalizoi\_14 Start: 10371, Stop: 10784, Start Num: 16

Candidate Starts for Kalizoi\_14:

(Start: 16 @10371 has 68 MA's), (50, 10506), (55, 10521), (64, 10566), (70, 10608), (96, 10725),

Gene: Kamdara\_11 Start: 8140, Stop: 8541, Start Num: 19

Candidate Starts for Kamdara\_11:

(Start: 19 @8140 has 27 MA's), (59, 8290), (81, 8404), (95, 8473),

Gene: Kate33\_11 Start: 7956, Stop: 8354, Start Num: 18

Candidate Starts for Kate33\_11:

(Start: 18 @7956 has 45 MA's), (79, 8202), (97, 8307),

Gene: Katzastrophic\_11 Start: 8051, Stop: 8449, Start Num: 19

Candidate Starts for Katzastrophic\_11:

(3, 7913), (Start: 19 @8051 has 27 MA's), (26, 8072), (87, 8330), (90, 8348), (95, 8381),

Gene: KendraB23\_13 Start: 8492, Stop: 8932, Start Num: 9

Candidate Starts for KendraB23\_13:

(6, 8480), (Start: 9 @8492 has 42 MA's), (38, 8582), (46, 8624), (50, 8642), (51, 8645), (60, 8684), (76, 8777), (83, 8804), (88, 8828), (95, 8864), (100, 8900),

Gene: Kenzers\_11 Start: 7928, Stop: 8323, Start Num: 18

Candidate Starts for Kenzers\_11:

(Start: 18 @7928 has 45 MA's), (31, 7967), (59, 8072), (79, 8171), (87, 8204), (101, 8297),

Gene: Kepler\_12 Start: 8335, Stop: 8778, Start Num: 9

Candidate Starts for Kepler\_12:

(Start: 9 @8335 has 42 MA's), (38, 8425), (39, 8431), (50, 8485), (51, 8488), (60, 8527), (83, 8647), (88, 8671), (100, 8743), (101, 8749),

Gene: Kieran\_11 Start: 8144, Stop: 8545, Start Num: 19

Candidate Starts for Kieran\_11:

(Start: 19 @8144 has 27 MA's), (59, 8294), (81, 8408), (95, 8477),

Gene: KingBob\_10 Start: 7547, Stop: 7984, Start Num: 14

Candidate Starts for KingBob\_10:

(Start: 14 @7547 has 9 MA's), (Start: 16 @7553 has 68 MA's), (29, 7592), (30, 7595), (50, 7688), (55, 7703), (57, 7715), (58, 7724), (59, 7727), (64, 7748), (96, 7907),

Gene: Kittykat\_10 Start: 7557, Stop: 7967, Start Num: 16

Candidate Starts for Kittykat\_10:

(Start: 16 @7557 has 68 MA's), (50, 7689), (55, 7704), (64, 7749), (65, 7752), (96, 7908),

Gene: Korra\_14 Start: 10377, Stop: 10790, Start Num: 16

Candidate Starts for Korra\_14:

(Start: 16 @10377 has 68 MA's), (50, 10512), (55, 10527), (64, 10572), (70, 10614), (96, 10731),

Gene: Kuleana\_12 Start: 8295, Stop: 8735, Start Num: 9

Candidate Starts for Kuleana\_12:

(Start: 9 @8295 has 42 MA's), (38, 8385), (39, 8391), (43, 8403), (51, 8448), (60, 8487), (65, 8508), (75, 8577), (76, 8580), (83, 8607), (84, 8616), (88, 8631), (100, 8703), (101, 8709),

Gene: Lahqtemish\_11 Start: 8003, Stop: 8401, Start Num: 19

Candidate Starts for Lahqtemish\_11:

(Start: 19 @8003 has 27 MA's), (31, 8042), (79, 8249), (97, 8354),

Gene: Lakshmi\_14 Start: 10452, Stop: 10862, Start Num: 19

Candidate Starts for Lakshmi\_14:

(Start: 19 @10452 has 27 MA's), (55, 10596), (56, 10605), (57, 10608), (63, 10638), (65, 10644), (69, 10677), (96, 10800), (100, 10824),

Gene: Laphuphu24k\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for Laphuphu24k\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: Lasagna\_10 Start: 7514, Stop: 7924, Start Num: 16

Candidate Starts for Lasagna\_10:

(Start: 16 @7514 has 68 MA's), (43, 7607), (50, 7646), (55, 7661), (64, 7706), (70, 7748), (75, 7769), (96, 7865),

Gene: Lennox\_10 Start: 7514, Stop: 7924, Start Num: 16

Candidate Starts for Lennox\_10:

(Start: 16 @7514 has 68 MA's), (43, 7607), (50, 7646), (55, 7661), (64, 7706), (70, 7748), (75, 7769), (96, 7865),

Gene: Leona\_11 Start: 7953, Stop: 8393, Start Num: 9

Candidate Starts for Leona\_11:

(Start: 9 @7953 has 42 MA's), (51, 8106), (52, 8109), (60, 8145), (61, 8151), (65, 8166), (76, 8238), (83, 8265), (100, 8364), (101, 8370), (102, 8382),

Gene: LilStuart\_10 Start: 7514, Stop: 7924, Start Num: 16

Candidate Starts for LilStuart\_10:

(Start: 16 @7514 has 68 MA's), (43, 7607), (50, 7646), (55, 7661), (64, 7706), (70, 7748), (75, 7769), (96, 7865),

Gene: Lilo27\_11 Start: 7888, Stop: 8283, Start Num: 18

Candidate Starts for Lilo27\_11:

(Start: 18 @7888 has 45 MA's), (31, 7927), (43, 7954), (59, 8032), (79, 8131), (87, 8164), (101, 8257),

Gene: LimaBean\_11 Start: 7911, Stop: 8306, Start Num: 18

Candidate Starts for LimaBean\_11:

(4, 7785), (Start: 18 @7911 has 45 MA's), (31, 7950), (43, 7977), (59, 8055), (79, 8154), (87, 8187), (101, 8280),

Gene: Litotes\_14 Start: 10399, Stop: 10809, Start Num: 16

Candidate Starts for Litotes\_14:

(Start: 16 @10399 has 68 MA's), (31, 10441), (55, 10543), (96, 10747),

Gene: LittleTokyo\_12 Start: 8235, Stop: 8678, Start Num: 9

Candidate Starts for LittleTokyo\_12:

(6, 8223), (8, 8226), (Start: 9 @8235 has 42 MA's), (65, 8448), (70, 8496), (72, 8505), (73, 8508), (76, 8520), (88, 8571), (90, 8580), (100, 8646), (102, 8664),

Gene: Loviatar\_11 Start: 8231, Stop: 8626, Start Num: 18

Candidate Starts for Loviatar\_11:

(4, 8105), (Start: 18 @8231 has 45 MA's), (Start: 20 @8234 has 11 MA's), (38, 8294), (81, 8489), (90, 8525), (95, 8558), (97, 8579),

Gene: Lucy\_10 Start: 7505, Stop: 7915, Start Num: 16

Candidate Starts for Lucy\_10:

(Start: 16 @7505 has 68 MA's), (43, 7598), (50, 7637), (55, 7652), (64, 7697), (70, 7739), (75, 7760), (96, 7856),

Gene: Lunar\_13 Start: 8497, Stop: 8940, Start Num: 9

Candidate Starts for Lunar\_13:

(Start: 9 @8497 has 42 MA's), (38, 8587), (39, 8593), (50, 8647), (51, 8650), (60, 8689), (83, 8809), (88, 8833), (100, 8905), (101, 8911),

Gene: Lynlen\_11 Start: 7928, Stop: 8323, Start Num: 18

Candidate Starts for Lynlen\_11:

(Start: 18 @7928 has 45 MA's), (31, 7967), (59, 8072), (79, 8171), (87, 8204), (101, 8297),

Gene: Makima\_14 Start: 9103, Stop: 9495, Start Num: 20

Candidate Starts for Makima\_14:

(Start: 20 @9103 has 11 MA's), (37, 9166), (59, 9259), (66, 9289), (75, 9343), (76, 9346), (77, 9349), (86, 9385), (102, 9487),

Gene: Makoto\_10 Start: 7514, Stop: 7924, Start Num: 16  
Candidate Starts for Makoto\_10:  
(Start: 16 @7514 has 68 MA's), (43, 7607), (50, 7646), (55, 7661), (64, 7706), (70, 7748), (75, 7769),  
(96, 7865),

Gene: MamaPearl\_10 Start: 7558, Stop: 7971, Start Num: 16  
Candidate Starts for MamaPearl\_10:  
(Start: 16 @7558 has 68 MA's), (36, 7621), (55, 7705), (64, 7750), (65, 7753), (70, 7792), (87, 7852),  
(96, 7909),

Gene: Maria1952\_10 Start: 7547, Stop: 7984, Start Num: 14  
Candidate Starts for Maria1952\_10:  
(Start: 14 @7547 has 9 MA's), (Start: 16 @7553 has 68 MA's), (29, 7592), (30, 7595), (50, 7688), (55,  
7703), (57, 7715), (58, 7724), (59, 7727), (64, 7748), (96, 7907),

Gene: MeganNoll\_14 Start: 10429, Stop: 10842, Start Num: 16  
Candidate Starts for MeganNoll\_14:  
(Start: 16 @10429 has 68 MA's), (50, 10564), (55, 10579), (59, 10603), (64, 10624), (70, 10666), (96,  
10783),

Gene: Melons\_13 Start: 8497, Stop: 8940, Start Num: 9  
Candidate Starts for Melons\_13:  
(Start: 9 @8497 has 42 MA's), (38, 8587), (39, 8593), (50, 8647), (51, 8650), (60, 8689), (83, 8809),  
(88, 8833), (100, 8905), (101, 8911),

Gene: Milomuff\_12 Start: 8297, Stop: 8692, Start Num: 18  
Candidate Starts for Milomuff\_12:  
(4, 8171), (Start: 18 @8297 has 45 MA's), (31, 8336), (43, 8363), (59, 8441), (79, 8540), (87, 8573),  
(101, 8666),

Gene: Mireles\_13 Start: 7499, Stop: 7891, Start Num: 20  
Candidate Starts for Mireles\_13:  
(Start: 20 @7499 has 11 MA's), (59, 7655), (66, 7685), (76, 7742), (77, 7745), (102, 7883),

Gene: Misaeng\_14 Start: 10498, Stop: 10908, Start Num: 19  
Candidate Starts for Misaeng\_14:  
(Start: 19 @10498 has 27 MA's), (55, 10642), (56, 10651), (57, 10654), (63, 10684), (65, 10690), (69,  
10723), (96, 10846), (100, 10870),

Gene: Moki\_10 Start: 7516, Stop: 7926, Start Num: 16  
Candidate Starts for Moki\_10:  
(Start: 16 @7516 has 68 MA's), (50, 7648), (55, 7663), (64, 7708), (65, 7711), (70, 7750), (96, 7867),

Gene: MrBoss\_14 Start: 10441, Stop: 10809, Start Num: 31  
Candidate Starts for MrBoss\_14:  
(Start: 16 @10399 has 68 MA's), (31, 10441), (50, 10528), (55, 10543), (96, 10747),

Gene: MrGloopy\_14 Start: 10362, Stop: 10775, Start Num: 16  
Candidate Starts for MrGloopy\_14:  
(Start: 16 @10362 has 68 MA's), (50, 10497), (55, 10512), (64, 10557), (70, 10599), (96, 10716),

Gene: MsUbiquitous\_11 Start: 7951, Stop: 8346, Start Num: 18  
Candidate Starts for MsUbiquitous\_11:

(4, 7825), (Start: 18 @7951 has 45 MA's), (31, 7990), (43, 8017), (59, 8095), (87, 8227), (101, 8320),

Gene: Nancia\_10 Start: 7514, Stop: 7924, Start Num: 16

Candidate Starts for Nancia\_10:

(Start: 16 @7514 has 68 MA's), (43, 7607), (50, 7646), (55, 7661), (64, 7706), (70, 7748), (75, 7769), (96, 7865),

Gene: Nesbitt\_11 Start: 7855, Stop: 8250, Start Num: 19

Candidate Starts for Nesbitt\_11:

(Start: 19 @7855 has 27 MA's), (22, 7867), (28, 7888), (31, 7897), (43, 7936), (47, 7960), (52, 7981), (65, 8035), (77, 8101), (78, 8107), (92, 8164), (99, 8212),

Gene: Niblet\_12 Start: 8281, Stop: 8721, Start Num: 9

Candidate Starts for Niblet\_12:

(Start: 9 @8281 has 42 MA's), (38, 8371), (39, 8377), (46, 8413), (50, 8431), (51, 8434), (60, 8473), (76, 8566), (83, 8593), (88, 8617), (95, 8653), (100, 8689),

Gene: Nicky22\_12 Start: 8359, Stop: 8754, Start Num: 18

Candidate Starts for Nicky22\_12:

(Start: 18 @8359 has 45 MA's), (31, 8398), (48, 8455), (59, 8503), (87, 8635), (101, 8728),

Gene: Nubia\_14 Start: 10412, Stop: 10822, Start Num: 19

Candidate Starts for Nubia\_14:

(Start: 19 @10412 has 27 MA's), (55, 10556), (56, 10565), (57, 10568), (63, 10598), (65, 10604), (69, 10637), (96, 10760), (100, 10784),

Gene: OMalley\_10 Start: 7551, Stop: 7982, Start Num: 16

Candidate Starts for OMalley\_10:

(Start: 14 @7545 has 9 MA's), (Start: 16 @7551 has 68 MA's), (24, 7572), (42, 7644), (55, 7701), (57, 7713), (58, 7722), (64, 7746), (96, 7905),

Gene: Olliecat\_11 Start: 8144, Stop: 8536, Start Num: 15

Candidate Starts for Olliecat\_11:

(Start: 15 @8144 has 6 MA's), (24, 8159), (43, 8210), (53, 8258), (56, 8273), (68, 8339), (82, 8402), (84, 8411), (90, 8435), (98, 8492),

Gene: Oppalora\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for Oppalora\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: Orcanus\_12 Start: 8285, Stop: 8725, Start Num: 9

Candidate Starts for Orcanus\_12:

(6, 8273), (Start: 9 @8285 has 42 MA's), (38, 8375), (46, 8417), (50, 8435), (51, 8438), (60, 8477), (76, 8570), (83, 8597), (88, 8621), (95, 8657), (100, 8693),

Gene: OtsoOtso\_12 Start: 8336, Stop: 8779, Start Num: 9

Candidate Starts for OtsoOtso\_12:

(Start: 9 @8336 has 42 MA's), (38, 8426), (39, 8432), (50, 8486), (51, 8489), (60, 8528), (83, 8648), (88, 8672), (100, 8744), (101, 8750),

Gene: OurGirlNessie\_10 Start: 7505, Stop: 7915, Start Num: 16

Candidate Starts for OurGirlNessie\_10:

(Start: 16 @7505 has 68 MA's), (43, 7598), (50, 7637), (55, 7652), (64, 7697), (70, 7739), (75, 7760), (96, 7856),

Gene: Oxynfrius\_14 Start: 10425, Stop: 10835, Start Num: 19

Candidate Starts for Oxynfrius\_14:

(Start: 19 @10425 has 27 MA's), (55, 10569), (56, 10578), (57, 10581), (63, 10611), (65, 10617), (69, 10650), (96, 10773), (100, 10797),

Gene: PartyCup\_14 Start: 10446, Stop: 10856, Start Num: 16

Candidate Starts for PartyCup\_14:

(Start: 16 @10446 has 68 MA's), (31, 10488), (55, 10590), (96, 10794),

Gene: PastaFagioli\_11 Start: 7991, Stop: 8389, Start Num: 19

Candidate Starts for PastaFagioli\_11:

(Start: 19 @7991 has 27 MA's), (31, 8030), (79, 8237), (97, 8342),

Gene: Pecas\_11 Start: 7912, Stop: 8307, Start Num: 18

Candidate Starts for Pecas\_11:

(Start: 18 @7912 has 45 MA's), (31, 7951), (43, 7978), (54, 8029), (59, 8056), (87, 8188), (101, 8281),

Gene: Pelletreau\_13 Start: 8491, Stop: 8931, Start Num: 9

Candidate Starts for Pelletreau\_13:

(6, 8479), (Start: 9 @8491 has 42 MA's), (38, 8581), (46, 8623), (50, 8641), (51, 8644), (60, 8683), (76, 8776), (83, 8803), (88, 8827), (95, 8863), (100, 8899),

Gene: PhigPhack\_11 Start: 7940, Stop: 8335, Start Num: 18

Candidate Starts for PhigPhack\_11:

(Start: 18 @7940 has 45 MA's), (43, 8006), (59, 8084), (79, 8183), (87, 8216), (101, 8309),

Gene: PhirstandPhine\_13 Start: 8497, Stop: 8940, Start Num: 9

Candidate Starts for PhirstandPhine\_13:

(Start: 9 @8497 has 42 MA's), (38, 8587), (39, 8593), (50, 8647), (51, 8650), (60, 8689), (83, 8809), (88, 8833), (100, 8905), (101, 8911),

Gene: Phisb\_11 Start: 7905, Stop: 8300, Start Num: 18

Candidate Starts for Phisb\_11:

(Start: 18 @7905 has 45 MA's), (31, 7944), (43, 7971), (59, 8049), (79, 8148), (87, 8181), (101, 8274),

Gene: PhluffyCoco\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for PhluffyCoco\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: Pineda\_13 Start: 8497, Stop: 8940, Start Num: 9

Candidate Starts for Pineda\_13:

(Start: 9 @8497 has 42 MA's), (38, 8587), (39, 8593), (50, 8647), (51, 8650), (60, 8689), (83, 8809), (88, 8833), (100, 8905), (101, 8911),

Gene: PinkFriday\_10 Start: 7548, Stop: 7982, Start Num: 14

Candidate Starts for PinkFriday\_10:

(Start: 14 @7548 has 9 MA's), (Start: 16 @7554 has 68 MA's), (50, 7686), (55, 7701), (57, 7713), (58, 7722), (59, 7725), (64, 7746), (96, 7905),

Gene: PitaDog\_10 Start: 7505, Stop: 7915, Start Num: 16

Candidate Starts for PitaDog\_10:

(Start: 16 @7505 has 68 MA's), (43, 7598), (50, 7637), (55, 7652), (64, 7697), (70, 7739), (75, 7760), (96, 7856),

Gene: Polka\_12 Start: 8336, Stop: 8779, Start Num: 9

Candidate Starts for Polka\_12:

(Start: 9 @8336 has 42 MA's), (38, 8426), (39, 8432), (50, 8486), (51, 8489), (60, 8528), (83, 8648), (88, 8672), (100, 8744), (101, 8750),

Gene: PondAmelia\_14 Start: 8160, Stop: 8555, Start Num: 18

Candidate Starts for PondAmelia\_14:

(4, 8034), (Start: 18 @8160 has 45 MA's), (Start: 20 @8163 has 11 MA's), (38, 8223), (43, 8226), (90, 8454), (95, 8487), (97, 8508),

Gene: Potatoes\_14 Start: 10423, Stop: 10836, Start Num: 16

Candidate Starts for Potatoes\_14:

(Start: 16 @10423 has 68 MA's), (50, 10558), (55, 10573), (64, 10618), (70, 10660), (96, 10777),

Gene: Preamble\_10 Start: 7515, Stop: 7925, Start Num: 16

Candidate Starts for Preamble\_10:

(Start: 16 @7515 has 68 MA's), (50, 7647), (55, 7662), (65, 7710), (96, 7866),

Gene: Pterodactyl\_10 Start: 7506, Stop: 7916, Start Num: 16

Candidate Starts for Pterodactyl\_10:

(Start: 16 @7506 has 68 MA's), (43, 7599), (50, 7638), (55, 7653), (64, 7698), (70, 7740), (75, 7761), (96, 7857),

Gene: Pumancara\_10 Start: 7547, Stop: 7981, Start Num: 14

Candidate Starts for Pumancara\_10:

(Start: 14 @7547 has 9 MA's), (Start: 16 @7553 has 68 MA's), (50, 7685), (55, 7700), (57, 7712), (58, 7721), (59, 7724), (64, 7745), (96, 7904),

Gene: QMacho\_12 Start: 8395, Stop: 8790, Start Num: 18

Candidate Starts for QMacho\_12:

(Start: 18 @8395 has 45 MA's), (31, 8434), (43, 8461), (54, 8512), (59, 8539), (79, 8638), (87, 8671), (101, 8764),

Gene: Quenya\_12 Start: 8046, Stop: 8447, Start Num: 19

Candidate Starts for Quenya\_12:

(Start: 19 @8046 has 27 MA's), (59, 8196), (85, 8325), (87, 8328), (90, 8346), (95, 8379),

Gene: RAP15\_14 Start: 10429, Stop: 10842, Start Num: 16

Candidate Starts for RAP15\_14:

(Start: 16 @10429 has 68 MA's), (50, 10564), (55, 10579), (64, 10624), (70, 10666), (96, 10783),

Gene: Rattail\_11 Start: 7953, Stop: 8393, Start Num: 9

Candidate Starts for Rattail\_11:

(Start: 9 @7953 has 42 MA's), (51, 8106), (52, 8109), (60, 8145), (61, 8151), (65, 8166), (76, 8238), (83, 8265), (100, 8364), (101, 8370), (102, 8382),

Gene: RcigaStruga\_14 Start: 10433, Stop: 10843, Start Num: 19

Candidate Starts for RcigaStruga\_14:

(Start: 19 @10433 has 27 MA's), (55, 10577), (56, 10586), (57, 10589), (63, 10619), (65, 10625), (69, 10658), (96, 10781), (100, 10805),

Gene: RedFox\_11 Start: 7902, Stop: 8342, Start Num: 9

Candidate Starts for RedFox\_11:

(Start: 9 @7902 has 42 MA's), (27, 7953), (51, 8055), (52, 8058), (60, 8094), (61, 8100), (65, 8115), (76, 8187), (83, 8214), (100, 8313), (101, 8319), (102, 8331),

Gene: Renna12\_12 Start: 8102, Stop: 8545, Start Num: 9

Candidate Starts for Renna12\_12:

(Start: 9 @8102 has 42 MA's), (51, 8255), (52, 8258), (60, 8294), (61, 8300), (76, 8387), (83, 8414), (88, 8438), (101, 8519), (102, 8531),

Gene: Riovina\_10 Start: 7551, Stop: 7982, Start Num: 16

Candidate Starts for Riovina\_10:

(Start: 14 @7545 has 9 MA's), (Start: 16 @7551 has 68 MA's), (24, 7572), (42, 7644), (55, 7701), (57, 7713), (58, 7722), (64, 7746), (96, 7905),

Gene: Riverdale\_14 Start: 10360, Stop: 10773, Start Num: 16

Candidate Starts for Riverdale\_14:

(Start: 16 @10360 has 68 MA's), (50, 10495), (55, 10510), (64, 10555), (70, 10597), (96, 10714),

Gene: Rollins\_10 Start: 7752, Stop: 8141, Start Num: 20

Candidate Starts for Rollins\_10:

(Start: 20 @7752 has 11 MA's), (59, 7893), (63, 7911), (94, 8064), (95, 8073), (98, 8097), (102, 8127),

Gene: Rona\_11 Start: 8141, Stop: 8542, Start Num: 19

Candidate Starts for Rona\_11:

(Start: 19 @8141 has 27 MA's), (59, 8291), (81, 8405), (95, 8474),

Gene: Rowa\_11 Start: 7599, Stop: 8018, Start Num: 10

Candidate Starts for Rowa\_11:

(Start: 10 @7599 has 1 MA's), (11, 7602), (Start: 19 @7620 has 27 MA's), (30, 7659), (45, 7710), (76, 7863), (78, 7872), (89, 7917), (92, 7929), (103, 8004),

Gene: Rozby\_14 Start: 10360, Stop: 10773, Start Num: 16

Candidate Starts for Rozby\_14:

(Start: 16 @10360 has 68 MA's), (50, 10495), (55, 10510), (64, 10555), (70, 10597), (96, 10714),

Gene: Ruchi\_12 Start: 8591, Stop: 9034, Start Num: 9

Candidate Starts for Ruchi\_12:

(Start: 9 @8591 has 42 MA's), (25, 8633), (30, 8651), (39, 8687), (50, 8741), (51, 8744), (60, 8783), (67, 8837), (76, 8876), (83, 8903), (88, 8927), (89, 8933),

Gene: SPB78\_12 Start: 8026, Stop: 8427, Start Num: 20

Candidate Starts for SPB78\_12:

(Start: 19 @8023 has 27 MA's), (Start: 20 @8026 has 11 MA's), (39, 8104), (41, 8110), (45, 8128), (50, 8155), (73, 8269),

Gene: SanaSana\_12 Start: 8160, Stop: 8555, Start Num: 18

Candidate Starts for SanaSana\_12:

(4, 8034), (Start: 18 @8160 has 45 MA's), (Start: 20 @8163 has 11 MA's), (38, 8223), (90, 8454), (95, 8487), (97, 8508),

Gene: SansAfet\_11 Start: 7922, Stop: 8317, Start Num: 18

Candidate Starts for SansAfet\_11:

(4, 7796), (Start: 18 @7922 has 45 MA's), (31, 7961), (43, 7988), (59, 8066), (79, 8165), (87, 8198), (101, 8291),

Gene: SarBear\_11 Start: 7888, Stop: 8283, Start Num: 18

Candidate Starts for SarBear\_11:

(4, 7762), (Start: 18 @7888 has 45 MA's), (31, 7927), (43, 7954), (59, 8032), (87, 8164), (101, 8257),

Gene: Savage2526\_14 Start: 10423, Stop: 10836, Start Num: 16

Candidate Starts for Savage2526\_14:

(Start: 16 @10423 has 68 MA's), (50, 10558), (55, 10573), (64, 10618), (70, 10660), (96, 10777),

Gene: Scuttle\_14 Start: 10429, Stop: 10842, Start Num: 16

Candidate Starts for Scuttle\_14:

(Start: 16 @10429 has 68 MA's), (50, 10564), (55, 10579), (64, 10624), (70, 10666), (96, 10783),

Gene: Sergei\_10 Start: 7547, Stop: 7984, Start Num: 14

Candidate Starts for Sergei\_10:

(Start: 14 @7547 has 9 MA's), (Start: 16 @7553 has 68 MA's), (29, 7592), (30, 7595), (50, 7688), (55, 7703), (57, 7715), (58, 7724), (59, 7727), (64, 7748), (96, 7907),

Gene: Shambre1\_12 Start: 8782, Stop: 9204, Start Num: 19

Candidate Starts for Shambre1\_12:

(Start: 19 @8782 has 27 MA's), (33, 8827), (35, 8836), (93, 9097), (102, 9163), (104, 9181),

Gene: Sharkboy\_11 Start: 8140, Stop: 8541, Start Num: 19

Candidate Starts for Sharkboy\_11:

(Start: 19 @8140 has 27 MA's), (59, 8290), (81, 8404), (95, 8473),

Gene: Shayna\_10 Start: 7746, Stop: 8147, Start Num: 15

Candidate Starts for Shayna\_10:

(Start: 15 @7746 has 6 MA's), (55, 7875), (63, 7917), (70, 7962), (88, 8037), (95, 8079), (98, 8103),

Gene: Shen\_13 Start: 8492, Stop: 8932, Start Num: 9

Candidate Starts for Shen\_13:

(6, 8480), (Start: 9 @8492 has 42 MA's), (38, 8582), (46, 8624), (50, 8642), (51, 8645), (60, 8684), (76, 8777), (83, 8804), (88, 8828), (95, 8864), (100, 8900),

Gene: SirBeanington\_11 Start: 7914, Stop: 8309, Start Num: 18

Candidate Starts for SirBeanington\_11:

(4, 7788), (Start: 18 @7914 has 45 MA's), (31, 7953), (43, 7980), (59, 8058), (79, 8157), (87, 8190), (101, 8283),

Gene: Skylord\_10 Start: 7692, Stop: 8081, Start Num: 20

Candidate Starts for Skylord\_10:

(Start: 20 @7692 has 11 MA's), (59, 7833), (63, 7851), (94, 8004), (95, 8013), (98, 8037), (102, 8067),

Gene: Slay\_11 Start: 8364, Stop: 8759, Start Num: 18

Candidate Starts for Slay\_11:

(4, 8238), (Start: 18 @8364 has 45 MA's), (31, 8403), (43, 8430), (59, 8508), (87, 8640), (101, 8733),

Gene: Softsoap\_11 Start: 7911, Stop: 8306, Start Num: 18

Candidate Starts for Softsoap\_11:

(4, 7785), (Start: 18 @7911 has 45 MA's), (31, 7950), (43, 7977), (59, 8055), (79, 8154), (87, 8187), (101, 8280),

Gene: Solea\_12 Start: 8297, Stop: 8692, Start Num: 18

Candidate Starts for Solea\_12:

(4, 8171), (Start: 18 @8297 has 45 MA's), (31, 8336), (43, 8363), (59, 8441), (79, 8540), (87, 8573), (101, 8666),

Gene: Squircle\_11 Start: 8143, Stop: 8535, Start Num: 15

Candidate Starts for Squircle\_11:

(Start: 15 @8143 has 6 MA's), (24, 8158), (43, 8209), (53, 8257), (56, 8272), (68, 8338), (82, 8401), (84, 8410), (90, 8434), (98, 8491),

Gene: Stoor\_11 Start: 8157, Stop: 8552, Start Num: 18

Candidate Starts for Stoor\_11:

(4, 8031), (Start: 18 @8157 has 45 MA's), (Start: 20 @8160 has 11 MA's), (38, 8220), (90, 8451), (95, 8484), (97, 8505),

Gene: Stromboli\_11 Start: 8161, Stop: 8556, Start Num: 18

Candidate Starts for Stromboli\_11:

(Start: 18 @8161 has 45 MA's), (Start: 20 @8164 has 11 MA's), (38, 8224), (81, 8419), (90, 8455), (95, 8488), (97, 8509),

Gene: StuartMinion\_11 Start: 7928, Stop: 8371, Start Num: 9

Candidate Starts for StuartMinion\_11:

(6, 7916), (Start: 9 @7928 has 42 MA's), (43, 8036), (52, 8084), (60, 8120), (61, 8126), (76, 8213), (83, 8240), (100, 8339), (101, 8345), (102, 8357),

Gene: SunnyD\_10 Start: 7746, Stop: 8147, Start Num: 15

Candidate Starts for SunnyD\_10:

(Start: 15 @7746 has 6 MA's), (55, 7875), (63, 7917), (88, 8037), (95, 8079), (98, 8103),

Gene: Supakev\_10 Start: 7553, Stop: 7984, Start Num: 16

Candidate Starts for Supakev\_10:

(Start: 14 @7547 has 9 MA's), (Start: 16 @7553 has 68 MA's), (24, 7574), (42, 7646), (57, 7715), (58, 7724), (64, 7748), (96, 7907),

Gene: Suppi\_14 Start: 10446, Stop: 10859, Start Num: 16

Candidate Starts for Suppi\_14:

(Start: 16 @10446 has 68 MA's), (31, 10491), (55, 10593), (75, 10701), (96, 10797),

Gene: Swervy\_11 Start: 7888, Stop: 8283, Start Num: 18

Candidate Starts for Swervy\_11:

(4, 7762), (Start: 18 @7888 has 45 MA's), (31, 7927), (43, 7954), (59, 8032), (87, 8164), (101, 8257),

Gene: TMaxx\_13 Start: 7597, Stop: 7989, Start Num: 20

Candidate Starts for TMaxx\_13:

(Start: 20 @7597 has 11 MA's), (46, 7699), (49, 7711), (77, 7843), (102, 7981),

Gene: TattModd\_14 Start: 10423, Stop: 10836, Start Num: 16

Candidate Starts for TattModd\_14:

(Start: 16 @10423 has 68 MA's), (50, 10558), (55, 10573), (64, 10618), (70, 10660), (96, 10777),

Gene: TaylorSipht\_12 Start: 8370, Stop: 8810, Start Num: 9

Candidate Starts for TaylorSipht\_12:

(Start: 9 @8370 has 42 MA's), (23, 8406), (40, 8469), (51, 8523), (52, 8526), (60, 8562), (71, 8634), (74, 8646), (83, 8682), (88, 8706), (95, 8742), (100, 8778),

Gene: Teagster\_10 Start: 7746, Stop: 8147, Start Num: 15

Candidate Starts for Teagster\_10:

(Start: 15 @7746 has 6 MA's), (55, 7875), (63, 7917), (88, 8037), (95, 8079), (98, 8103),

Gene: Temper16\_10 Start: 7547, Stop: 7984, Start Num: 14

Candidate Starts for Temper16\_10:

(Start: 14 @7547 has 9 MA's), (Start: 16 @7553 has 68 MA's), (29, 7592), (30, 7595), (50, 7688), (55, 7703), (57, 7715), (58, 7724), (59, 7727), (64, 7748), (96, 7907),

Gene: Toad24\_13 Start: 8492, Stop: 8932, Start Num: 9

Candidate Starts for Toad24\_13:

(6, 8480), (Start: 9 @8492 has 42 MA's), (38, 8582), (46, 8624), (50, 8642), (51, 8645), (60, 8684), (76, 8777), (83, 8804), (88, 8828), (95, 8864), (100, 8900),

Gene: TukTuk\_11 Start: 7948, Stop: 8343, Start Num: 18

Candidate Starts for TukTuk\_11:

(4, 7822), (Start: 18 @7948 has 45 MA's), (31, 7987), (43, 8014), (59, 8092), (87, 8224), (101, 8317),

Gene: Urla\_10 Start: 7561, Stop: 7974, Start Num: 16

Candidate Starts for Urla\_10:

(Start: 16 @7561 has 68 MA's), (50, 7693), (55, 7708), (64, 7753), (65, 7756), (70, 7795), (87, 7855), (96, 7912),

Gene: VWB\_11 Start: 8079, Stop: 8474, Start Num: 21

Candidate Starts for VWB\_11:

(17, 8073), (21, 8079), (25, 8094), (41, 8160), (59, 8244), (71, 8310), (101, 8454),

Gene: Vallejo\_14 Start: 10361, Stop: 10774, Start Num: 16

Candidate Starts for Vallejo\_14:

(Start: 16 @10361 has 68 MA's), (50, 10496), (55, 10511), (64, 10556), (70, 10598), (96, 10715),

Gene: Vitas\_10 Start: 7692, Stop: 8081, Start Num: 20

Candidate Starts for Vitas\_10:

(Start: 20 @7692 has 11 MA's), (59, 7833), (63, 7851), (94, 8004), (95, 8013), (98, 8037), (102, 8067),

Gene: Vulpecula\_12 Start: 8667, Stop: 9110, Start Num: 9

Candidate Starts for Vulpecula\_12:

(Start: 9 @8667 has 42 MA's), (25, 8709), (30, 8727), (39, 8763), (50, 8817), (51, 8820), (60, 8859), (67, 8913), (76, 8952), (83, 8979), (88, 9003), (89, 9009),

Gene: Vulture\_10 Start: 7551, Stop: 7982, Start Num: 16

Candidate Starts for Vulture\_10:

(Start: 14 @7545 has 9 MA's), (Start: 16 @7551 has 68 MA's), (24, 7572), (42, 7644), (57, 7713), (58, 7722), (64, 7746), (96, 7905),

Gene: WalkingDead\_11 Start: 8148, Stop: 8543, Start Num: 18

Candidate Starts for WalkingDead\_11:

(Start: 18 @8148 has 45 MA's), (Start: 20 @8151 has 11 MA's), (38, 8211), (43, 8214), (90, 8442), (95, 8475), (97, 8496),

Gene: Wawa\_14 Start: 10398, Stop: 10811, Start Num: 16

Candidate Starts for Wawa\_14:

(Start: 16 @10398 has 68 MA's), (50, 10533), (55, 10548), (64, 10593), (70, 10635), (96, 10752),

Gene: Wayne\_14 Start: 10492, Stop: 10905, Start Num: 16

Candidate Starts for Wayne\_14:

(Start: 16 @10492 has 68 MA's), (31, 10537), (55, 10639), (75, 10747), (96, 10843),

Gene: Westrich\_13 Start: 8480, Stop: 8920, Start Num: 9

Candidate Starts for Westrich\_13:

(6, 8468), (Start: 9 @8480 has 42 MA's), (38, 8570), (46, 8612), (50, 8630), (51, 8633), (60, 8672), (76, 8765), (83, 8792), (88, 8816), (95, 8852), (100, 8888),

Gene: WileyE\_11 Start: 8002, Stop: 8445, Start Num: 9

Candidate Starts for WileyE\_11:

(Start: 9 @8002 has 42 MA's), (25, 8044), (30, 8062), (39, 8098), (50, 8152), (51, 8155), (60, 8194), (67, 8248), (76, 8287), (83, 8314), (88, 8338), (89, 8344),

Gene: WonderBoy\_10 Start: 7514, Stop: 7924, Start Num: 16

Candidate Starts for WonderBoy\_10:

(Start: 16 @7514 has 68 MA's), (36, 7577), (50, 7646), (55, 7661), (64, 7706), (70, 7748), (96, 7865),

Gene: Zhuangyuan\_14 Start: 8650, Stop: 9102, Start Num: 8

Candidate Starts for Zhuangyuan\_14:

(6, 8647), (8, 8650), (Start: 9 @8659 has 42 MA's), (27, 8710), (40, 8758), (72, 8929), (73, 8932), (88, 8995), (90, 9004), (95, 9034), (102, 9088),

Gene: Zixiang\_12 Start: 8281, Stop: 8721, Start Num: 9

Candidate Starts for Zixiang\_12:

(Start: 9 @8281 has 42 MA's), (38, 8371), (39, 8377), (46, 8413), (50, 8431), (51, 8434), (60, 8473), (76, 8566), (83, 8593), (88, 8617), (95, 8653), (100, 8689),

Gene: Zorro\_14 Start: 10377, Stop: 10790, Start Num: 16

Candidate Starts for Zorro\_14:

(Start: 16 @10377 has 68 MA's), (50, 10512), (55, 10527), (64, 10572), (70, 10614), (96, 10731),