





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 311205 Report

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

Pham number 311205 has 237 members, 21 are drafts.

Phages represented in each track:

- Track 1 : GreenHearts\_26
- Track 2 : Albanese\_26, Lakshmi\_26
- Track 3 : Immaculata\_26, Cholula\_26, Potatoes\_26
- Track 4 : Preamble\_22, Kittykat\_22
- Track 5 : Glenn\_26, Rozby\_26, Wawa\_26, Riverdale\_26, Beethoven\_26, TattModd\_26, MrGloopy\_26, Vallejo\_26, Carpal\_26
- Track 6 : RAP15\_26, MeganNoll\_26, Savage2526\_26, Jumboset\_26, BrotherBLo\_26
- Track 7 : Aledel\_22, Eunoia\_22, HunterDalle\_22, Supakev\_22, Riovina\_22, Vulture\_22, OMalley\_22, Chridison\_22
- Track 8 : Gisselle\_22, DreamTeam\_22
- Track 9 : DrRobert\_22
- Track 10 : Lucy\_22, Lasagna\_22, OurGirlNessie\_22
- Track 11 : Bodacious\_22, Nancia\_22, CristinaYang\_22, LilStuart\_22
- Track 12 : Christian\_22, ChewChew\_22
- Track 13 : Greenhouse\_26
- Track 14 : PinkFriday\_22, Pumancara\_22
- Track 15 : Litotes\_26, AppleCider\_26, MrBoss\_26, Canowicakte\_26, Suppi\_26, PartyCup\_26
- Track 16 : Herb\_22, Maria1952\_22, Daiboju\_22, Temper16\_22, KingBob\_22, Sergei\_22
- Track 17 : PitaDog\_22
- Track 18 : HeadNerd\_22, Moki\_22, Bennie\_22, Huckleberry\_22
- Track 19 : Korra\_27
- Track 20 : CallieOMalley\_26, Graynor\_26, Wayne\_26
- Track 21 : Fluke\_26
- Track 22 : WonderBoy\_22
- Track 23 : Nubia\_26
- Track 24 : Kalizoi\_26, Zorro\_26
- Track 25 : AustinPowers\_22
- Track 26 : EstebanJulior\_22, MamaPearl\_22
- Track 27 : Oxynfrius\_26, Joann\_26
- Track 28 : Dino\_26
- Track 29 : Misaeng\_26
- Track 30 : Scuttle\_26
- Track 31 : Pterodactyl\_22
- Track 32 : RcigaStruga\_26, Huntingdon\_26

- Track 33 : BigMack\_22
- Track 34 : Makoto\_22
- Track 35 : Lennox\_22
- Track 36 : Urla\_22
- Track 37 : KBurrousTX\_32
- Track 38 : Tophat\_32, PrincessTrina\_32, Kabreeze\_32, Chipper1996\_320, Chubster\_32, EdgarPoe\_32, Mordred\_32, Conboy\_32, JaNo\_32, Linus\_32, RosiePosie\_32, HumptyDumpty\_32, Chocolat\_32, Scavito\_32, JayCookie\_32, MoyaNatalis\_32
- Track 39 : Colucci\_31
- Track 40 : Lymara\_32
- Track 41 : DrYang\_32
- Track 42 : ArV1\_027
- Track 43 : Kitkat\_2, BeatusComedenti\_2
- Track 44 : Kellezio\_2
- Track 45 : Scissor2024\_26
- Track 46 : Penta\_25, WestPM\_25
- Track 47 : Tinyman4\_26, HerculesXL\_26
- Track 48 : Schimmels22\_26
- Track 49 : Ixel\_26
- Track 50 : Kavo\_25
- Track 51 : LilTerminator\_26, QuadZero\_26, Fulton\_26, Zepp\_27, Greenlvy\_26, Wardwill\_28, BaronJohn\_26, Hasitha\_26, Zayuliv\_26
- Track 52 : Librie\_26, CaptainRex\_26
- Track 53 : TwoBits\_26
- Track 54 : WilliamStrong\_25
- Track 55 : KatChan\_27, Luna18\_27
- Track 56 : Chepli\_27
- Track 57 : Jemerald\_27, Juicer\_27
- Track 58 : Morigan\_27
- Track 59 : CrazyRich\_45, Selwyn23\_47, Lucretia\_46, Ramiel05\_45, Glorp\_47, Ganandorf\_45, Honeyfin\_47, SirFrank\_45, Busephilis\_45, PierreOrion\_46, Jefe\_46, BeagleBug\_45, Kowalski\_45, Piperis\_46, ClearAsMud\_48, Cranjis\_47, Antares\_46, KaiHaiDragon\_46, EarickHC\_46, Crisis\_47, Phorgeous\_45, Quhwah\_49, Onika\_45, Phrancesco\_46, Shotgun\_45, BrazzalePHS\_45, Rockwell\_45, PhedwardCullen\_45, Paschalis\_45, Savannah\_45, Scumberland\_47, Yeti\_46, Jollipop\_46, LittleFortune\_47, PiperSansNom\_46
- Track 60 : RobsFeet\_48, Tyumbra\_45, Fireman\_47
- Track 61 : Shrubaron\_47, Metamorphoo\_47
- Track 62 : Gina\_47, Teamocil\_47
- Track 63 : Hermeonysus\_45, Pulchra\_47
- Track 64 : Merry\_, Sunny\_
- Track 65 : Skugga\_44
- Track 66 : Ariadne\_54, Smarties\_54
- Track 67 : NoodlelyBoi\_46
- Track 68 : Jayden\_47
- Track 69 : Germa\_47
- Track 70 : Megan\_40
- Track 71 : Zapato\_45
- Track 72 : Nicole72\_41
- Track 73 : Haunter\_38
- Track 74 : Tongui\_37

- Track 75 : Chivey\_37, DannyDe\_37, Kate\_38, Hiddenleaf\_37, SilentWarrior\_37, Poultruss\_37, OhDear\_38, JingleBells\_37, FreddieHg\_37, Aesir\_37, JDawG\_37, Annapurna\_37, Crestdrop\_37, MortySmith\_36
- Track 76 : Pharpay\_38, Neptune\_38, Snakehole\_38, CoolCookie\_38, Anakin\_38, OverHedge\_38, Rachella\_38, AnnaSerena\_38, PhunaPhoke\_38, Artiphact\_38, Gilda\_38, Tedro\_38, Cybele\_38, Tiggy93\_38, NarutoRun\_38, Krampus\_38, Potty\_38
- Track 77 : FountainFog\_37, Karate\_37
- Track 78 : Rie18\_38
- Track 79 : Sunshine23\_26
- Track 80 : Maruru\_24
- Track 81 : Mufasa8\_25
- Track 82 : Sonali\_24
- Track 83 : ValentiniPuff\_79
- Track 84 : JrWilcox\_81
- Track 85 : Bubbykins\_31
- Track 86 : Shrew\_41
- Track 87 : CMP1\_37

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

The start number called the most often in the published annotations is 8, it was called in 81 of the 216 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aesir\_37, Anakin\_38, AnnaSerena\_38, Annapurna\_37, Antares\_46, Ariadne\_54, Artiphact\_38, BeagleBug\_45, BrazzalePHS\_45, Busephilis\_45, Chivey\_37, ClearAsMud\_48, CoolCookie\_38, Cranjjs\_47, CrazyRich\_45, Crestdrop\_37, Crisis\_47, Cybele\_38, DannyDe\_37, EarickHC\_46, Fireman\_47, FountainFog\_37, FreddieHg\_37, Ganandorf\_45, Germa\_47, Gilda\_38, Gina\_47, Glorp\_47, Haunter\_38, Hermeonysus\_45, Hiddenleaf\_37, Honeyfin\_47, JDawG\_37, Jayden\_47, Jefe\_46, JingleBells\_37, Jollipop\_46, KaiHaiDragon\_46, Karate\_37, Kate\_38, Kowalski\_45, Krampus\_38, LittleFortune\_47, Lucretia\_46, Megan\_40, Merry\_, Metamorphoo\_47, MortySmith\_36, NarutoRun\_38, Neptune\_38, Nicole72\_41, NoodlelyBoi\_46, OhDear\_38, Onika\_45, OverHedge\_38, Paschalis\_45, Pharpay\_38, PhedwardCullen\_45, Phorgeous\_45, Phrancesco\_46, PhunaPhoke\_38, PierreOrion\_46, PiperSansNom\_46, Piperis\_46, Potty\_38, Poultruss\_37, Pulchra\_47, Quhwah\_49, Rachella\_38, Ramiel05\_45, Rie18\_38, RobsFeet\_48, Rockwell\_45, Savannah\_45, Scumberland\_47, Selwyn23\_47, Shotgun\_45, Shrubaron\_47, SilentWarrior\_37, SirFrank\_45, Skugga\_44, Smarties\_54, Snakehole\_38, Sunny\_, Teamocil\_47, Tedro\_38, Tiggy93\_38, Tongui\_37, Tyrumbra\_45, Yeti\_46, Zapato\_45,

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

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

- Albanese\_26, Aledel\_22, AppleCider\_26, ArV1\_027, AustinPowers\_22, BaronJohn\_26, BeatusComedenti\_2, Beethoven\_26, Bennie\_22, BigMack\_22, Bodacious\_22, BrotherBLo\_26, Bubbykins\_31, CMP1\_37, CallieOMalley\_26, Canowicakte\_26, CaptainRex\_26, Carpal\_26, Chepli\_27, ChewChew\_22, Chipper1996\_320, Chocolat\_32, Cholula\_26, Chridison\_22, Christian\_22,

Chubster\_32, Colucci\_31, Conboy\_32, CristinaYang\_22, Daiboju\_22, Dino\_26, DrRobert\_22, DrYang\_32, DreamTeam\_22, EdgarPoe\_32, EstebanJulior\_22, Eunoia\_22, Fluke\_26, Fulton\_26, Gisselle\_22, Glenn\_26, Graynor\_26, GreenHearts\_26, Greenlvy\_26, Greenhouse\_26, Hasitha\_26, HeadNerd\_22, Herb\_22, HerculesXL\_26, Huckleberry\_22, HumptyDumpty\_32, HunterDalle\_22, Huntingdon\_26, Immaculata\_26, Ixel\_26, JaNo\_32, JayCookie\_32, Jemerald\_27, Joann\_26, JrWilcox\_81, Juicer\_27, Jumboset\_26, KBurroustX\_32, Kabreeze\_32, Kalizoi\_26, KatChan\_27, Kavo\_25, KelleEzio\_2, KingBob\_22, Kitkat\_2, Kittykat\_22, Korra\_27, Lakshmi\_26, Lasagna\_22, Lennox\_22, Librie\_26, LilStuart\_22, LilTerminator\_26, Linus\_32, Litotes\_26, Lucy\_22, Luna18\_27, Lymara\_32, Makoto\_22, MamaPearl\_22, Maria1952\_22, Maruru\_24, MeganNoll\_26, Misaeng\_26, Moki\_22, Mordred\_32, Morrigan\_27, MoyaNatalis\_32, MrBoss\_26, MrGloopy\_26, Mufasa8\_25, Nancia\_22, Nubia\_26, OMalley\_22, OurGirlNessie\_22, Oxyfrieus\_26, PartyCup\_26, Penta\_25, PinkFriday\_22, PitaDog\_22, Potatoes\_26, Preamble\_22, PrincessTrina\_32, Pterodactyl\_22, Pumancara\_22, QuadZero\_26, RAP15\_26, RcigaStruga\_26, Riovina\_22, Riverdale\_26, RosiePosie\_32, Rozby\_26, Savage2526\_26, Scavito\_32, Schimmels22\_26, Scissor2024\_26, Scuttle\_26, Sergei\_22, Shrew\_41, Sonali\_24, Sunshine23\_26, Supakev\_22, Suppi\_26, TattModd\_26, Temper16\_22, Tinyman4\_26, Tophat\_32, TwoBits\_26, Urla\_22, ValentiniPuff\_79, Vallejo\_26, Vulture\_22, Wardwill\_28, Wawa\_26, Wayne\_26, WestPM\_25, WilliamStrong\_25, WonderBoy\_22, Zayuliv\_26, Zepp\_27, Zorro\_26,

### Summary by start number:

Start 8:

- Found in 91 of 237 ( 38.4% ) of genes in pham
- Manual Annotations of this start: 81 of 216
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aesir\_37 (EF), Anakin\_38 (EF), AnnaSerena\_38 (EF), Annapurna\_37 (EF), Antares\_46 (EC), Ariadne\_54 (EC), Artiphact\_38 (EF), BeagleBug\_45 (EC), BrazzalePHS\_45 (EC), Busephilis\_45 (EC), Chivey\_37 (EF), ClearAsMud\_48 (EC), CoolCookie\_38 (EF), Cranjjs\_47 (EC), CrazyRich\_45 (EC), Crestdrop\_37 (EF), Crisis\_47 (EC), Cybele\_38 (EF), DannyDe\_37 (EF), EarickHC\_46 (EC), Fireman\_47 (EC), FountainFog\_37 (EF), FreddieHg\_37 (EF), Ganandorf\_45 (EC), Germa\_47 (EC), Gilda\_38 (EF), Gina\_47 (EC), Glorp\_47 (EC), Haunter\_38 (EF), Hermeonysus\_45 (EC), Hiddenleaf\_37 (EF), Honeyfin\_47 (EC), JDawG\_37 (EF), Jayden\_47 (EC), Jefe\_46 (EC), JingleBells\_37 (EF), Jollipop\_46 (EC), KaiHaiDragon\_46 (EC), Karate\_37 (EF), Kate\_38 (EF), Kowalski\_45 (EC), Krampus\_38 (EF), LittleFortune\_47 (EC), Lucretia\_46 (EC), Megan\_40 (EC), Merry\_ (EC), Metamorphoo\_47 (EC), MortySmith\_36 (EF), NarutoRun\_38 (EF), Neptune\_38 (EF), Nicole72\_41 (EC), NoodlelyBoi\_46 (EC), OhDear\_38 (EF), Onika\_45 (EC), OverHedge\_38 (EF), Paschalis\_45 (EC), Pharpay\_38 (EF), PhedwardCullen\_45 (EC), Phorgeous\_45 (EC), Phrancesco\_46 (EC), PhunaPhoke\_38 (EF), PierreOrion\_46 (EC), PiperSansNom\_46 (EC), Piperis\_46 (EC), Potty\_38 (EF), Poultruss\_37 (EF), Pulchra\_47 (EC), Quhwah\_49 (EC), Rachella\_38 (EF), Ramiel05\_45 (EC), Rie18\_38 (EF), RobsFeet\_48 (EC), Rockwell\_45 (EC), Savannah\_45 (EC), Scumberland\_47 (EC), Selwyn23\_47 (EC), Shotgun\_45 (EC), Shrubaron\_47 (EC), SilentWarrior\_37 (EF), SirFrank\_45 (EC), Skugga\_44 (EC), Smarties\_54 (EC), Snakehole\_38 (EF), Sunny\_ (EC), Teamocil\_47 (EC), Tedro\_38 (EF), Tiggy93\_38 (EF), Tongui\_37 (EF), Tyumbra\_45 (EC), Yeti\_46 (EC), Zapato\_45 (EC),

Start 14:

- Found in 6 of 237 ( 2.5% ) of genes in pham
- Manual Annotations of this start: 3 of 216
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BeatusComedenti\_2 (AT), Kellezio\_2 (AT), Kitkat\_2 (AT),

#### Start 15:

- Found in 33 of 237 ( 13.9% ) of genes in pham
- Manual Annotations of this start: 5 of 216
- Called 15.2% of time when present
- Phage (with cluster) where this start called: Dino\_26 (AK), Fluke\_26 (AK), Joann\_26 (AK), Nubia\_26 (AK), Oxynfrius\_26 (AK),

#### Start 17:

- Found in 2 of 237 ( 0.8% ) of genes in pham
- Manual Annotations of this start: 1 of 216
- Called 50.0% of time when present
- Phage (with cluster) where this start called: DrYang\_32 (AR),

#### Start 18:

- Found in 87 of 237 ( 36.7% ) of genes in pham
- Manual Annotations of this start: 75 of 216
- Called 94.3% of time when present
- Phage (with cluster) where this start called: Aledel\_22 (AK), ArV1\_027 (AR), AustinPowers\_22 (AK), BaronJohn\_26 (EA5), Beethoven\_26 (AK), BrotherBLo\_26 (AK), Bubbykins\_31 (UNK), CMP1\_37 (singleton), CaptainRex\_26 (EA5), Carpal\_26 (AK), Chepli\_27 (EA6), Chipper1996\_320 (AR), Chocolat\_32 (AR), Cholula\_26 (AK), Chridison\_22 (AK), Chubster\_32 (AR), Colucci\_31 (AR), Conboy\_32 (AR), EdgarPoe\_32 (AR), EstebanJulior\_22 (AK), Eunoia\_22 (AK), Fulton\_26 (EA5), Glenn\_26 (AK), Greenlvy\_26 (EA5), Hasitha\_26 (EA5), HerculesXL\_26 (EA11), HumptyDumpty\_32 (AR), HunterDalle\_22 (AK), Immaculata\_26 (AK), Ixel\_26 (EA11), JaNo\_32 (AR), JayCookie\_32 (AR), Jemerald\_27 (EA6), Juicer\_27 (EA6), Jumboset\_26 (AK), KBurroustX\_32 (AR), Kabreeze\_32 (AR), Kalizoi\_26 (AK), KatChan\_27 (EA6), Kavo\_25 (EA11), Korra\_27 (AK), Librie\_26 (EA5), LilTerminator\_26 (EA5), Linus\_32 (AR), Luna18\_27 (EA6), Lymara\_32 (AR), MamaPearl\_22 (AK), MeganNoll\_26 (AK), Mordred\_32 (AR), Morrigan\_27 (EA6), MoyaNatalis\_32 (AR), MrGloopy\_26 (AK), OMalley\_22 (AK), Penta\_25 (EA11), Potatoes\_26 (AK), PrincessTrina\_32 (AR), QuadZero\_26 (EA5), RAP15\_26 (AK), Rivovina\_22 (AK), Riverdale\_26 (AK), RosiePosie\_32 (AR), Rozby\_26 (AK), Savage2526\_26 (AK), Scavito\_32 (AR), Schimmels22\_26 (EA11), Scissor2024\_26 (EA11), Scuttle\_26 (AK), Supakev\_22 (AK), TattModd\_26 (AK), Tinyman4\_26 (EA11), Tophat\_32 (AR), TwoBits\_26 (EA5), Urla\_22 (AK), Vallejo\_26 (AK), Vulture\_22 (AK), Wardwill\_28 (EA5), Wawa\_26 (AK), WestPM\_25 (EA11), WilliamStrong\_25 (EA6), Zayuliv\_26 (EA5), Zepp\_27 (EA5), Zorro\_26 (AK),

#### Start 19:

- Found in 34 of 237 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 30 of 216
- Called 97.1% of time when present
- Phage (with cluster) where this start called: AppleCider\_26 (AK), Bennie\_22 (AK), BigMack\_22 (AK), Bodacious\_22 (AK), CallieOMalley\_26 (AK), Canowicakte\_26 (AK), ChewChew\_22 (AK), Christian\_22 (AK), CristinaYang\_22 (AK), DreamTeam\_22 (AK), Gisselle\_22 (AK), Graynor\_26 (AK), HeadNerd\_22 (AK), Huckleberry\_22 (AK),

Kittykat\_22 (AK), Lasagna\_22 (AK), Lennox\_22 (AK), LilStuart\_22 (AK), Litotes\_26 (AK), Lucy\_22 (AK), Makoto\_22 (AK), Moki\_22 (AK), MrBoss\_26 (AK), Nancia\_22 (AK), OurGirlNessie\_22 (AK), PartyCup\_26 (AK), PitaDog\_22 (AK), Preamble\_22 (AK), Sonali\_24 (FG), Sunshine23\_26 (FG), Suppi\_26 (AK), Wayne\_26 (AK), WonderBoy\_22 (AK),

Start 20:

- Found in 16 of 237 ( 6.8% ) of genes in pham
- Manual Annotations of this start: 12 of 216
- Called 81.2% of time when present
- Phage (with cluster) where this start called: Albanese\_26 (AK), GreenHearts\_26 (AK), Greenhouse\_26 (AK), Huntingdon\_26 (AK), JrWilcox\_81 (GL), Lakshmi\_26 (AK), Maruru\_24 (FG), Misaeng\_26 (AK), Mufasa8\_25 (FG), Pterodactyl\_22 (AK), RcigaStruga\_26 (AK), Shrew\_41 (singleton), ValentiniPuff\_79 (GL),

Start 21:

- Found in 35 of 237 ( 14.8% ) of genes in pham
- Manual Annotations of this start: 9 of 216
- Called 25.7% of time when present
- Phage (with cluster) where this start called: Daiboju\_22 (AK), DrRobert\_22 (AK), Herb\_22 (AK), KingBob\_22 (AK), Maria1952\_22 (AK), PinkFriday\_22 (AK), Pumancara\_22 (AK), Sergei\_22 (AK), Temper16\_22 (AK),

### **Summary by clusters:**

There are 12 clusters represented in this pham: singleton, UNK, EA11, AK, EF, EC, AR, AT, FG, GL, EA5, EA6,

Info for manual annotations of cluster AK:

- Start number 15 was manually annotated 5 times for cluster AK.
- Start number 18 was manually annotated 33 times for cluster AK.
- Start number 19 was manually annotated 29 times for cluster AK.
- Start number 20 was manually annotated 8 times for cluster AK.
- Start number 21 was manually annotated 9 times for cluster AK.

Info for manual annotations of cluster AR:

- Start number 17 was manually annotated 1 time for cluster AR.
- Start number 18 was manually annotated 18 times for cluster AR.

Info for manual annotations of cluster AT:

- Start number 14 was manually annotated 3 times for cluster AT.

Info for manual annotations of cluster EA11:

- Start number 18 was manually annotated 5 times for cluster EA11.

Info for manual annotations of cluster EA5:

- Start number 18 was manually annotated 12 times for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 18 was manually annotated 7 times for cluster EA6.

Info for manual annotations of cluster EC:

- Start number 8 was manually annotated 49 times for cluster EC.

Info for manual annotations of cluster EF:

- Start number 8 was manually annotated 32 times for cluster EF.

Info for manual annotations of cluster FG:

- Start number 19 was manually annotated 1 time for cluster FG.
- Start number 20 was manually annotated 2 times for cluster FG.

Info for manual annotations of cluster GL:

- Start number 20 was manually annotated 1 time for cluster GL.

### **Gene Information:**

Gene: Aesir\_37 Start: 24476, Stop: 24877, Start Num: 8

Candidate Starts for Aesir\_37:

(Start: 8 @24476 has 81 MA's), (10, 24500), (32, 24587), (43, 24650), (62, 24743), (71, 24779), (78, 24830), (80, 24836),

Gene: Albanese\_26 Start: 20891, Stop: 21394, Start Num: 20

Candidate Starts for Albanese\_26:

(Start: 15 @20879 has 5 MA's), (Start: 20 @20891 has 12 MA's), (35, 20957), (39, 20981), (51, 21041), (63, 21110), (67, 21128), (70, 21137), (72, 21149), (90, 21269), (91, 21278), (100, 21329),

Gene: Aledel\_22 Start: 19276, Stop: 19779, Start Num: 18

Candidate Starts for Aledel\_22:

(Start: 18 @19276 has 75 MA's), (26, 19306), (39, 19366), (43, 19393), (47, 19405), (49, 19414), (59, 19477), (62, 19492), (63, 19495), (64, 19501), (65, 19504), (67, 19513), (70, 19522), (90, 19654), (93, 19687), (100, 19714), (104, 19747),

Gene: Anakin\_38 Start: 24796, Stop: 25197, Start Num: 8

Candidate Starts for Anakin\_38:

(Start: 8 @24796 has 81 MA's), (10, 24820), (32, 24907), (43, 24970), (62, 25063), (70, 25093), (71, 25099), (78, 25150), (80, 25156),

Gene: AnnaSerena\_38 Start: 24831, Stop: 25232, Start Num: 8

Candidate Starts for AnnaSerena\_38:

(Start: 8 @24831 has 81 MA's), (10, 24855), (32, 24942), (43, 25005), (62, 25098), (70, 25128), (71, 25134), (78, 25185), (80, 25191),

Gene: Annapurna\_37 Start: 23938, Stop: 24339, Start Num: 8

Candidate Starts for Annapurna\_37:

(Start: 8 @23938 has 81 MA's), (10, 23962), (32, 24049), (43, 24112), (62, 24205), (71, 24241), (78, 24292), (80, 24298),

Gene: Antares\_46 Start: 32014, Stop: 32415, Start Num: 8

Candidate Starts for Antares\_46:

(3, 31891), (Start: 8 @32014 has 81 MA's), (28, 32113), (32, 32128), (36, 32143), (41, 32179), (46, 32200), (57, 32257), (60, 32275), (71, 32320),

Gene: AppleCider\_26 Start: 20900, Stop: 21400, Start Num: 19

Candidate Starts for AppleCider\_26:

(Start: 19 @20900 has 30 MA's), (22, 20903), (26, 20927), (28, 20936), (39, 20987), (49, 21035), (58, 21089), (63, 21116), (67, 21134), (90, 21275), (104, 21368),

Gene: ArV1\_027 Start: 26868, Stop: 27326, Start Num: 18

Candidate Starts for ArV1\_027:

(Start: 18 @26868 has 75 MA's), (33, 26928), (36, 26940), (38, 26949), (39, 26961), (43, 26988), (48, 27006), (53, 27033), (59, 27066), (65, 27093), (68, 27105), (74, 27132), (80, 27174), (89, 27246), (101, 27300), (102, 27306),

Gene: Ariadne\_54 Start: 33634, Stop: 34035, Start Num: 8

Candidate Starts for Ariadne\_54:

(3, 33511), (Start: 8 @33634 has 81 MA's), (27, 33727), (28, 33733), (32, 33748), (36, 33763), (41, 33799), (55, 33865), (60, 33895), (62, 33904), (68, 33928), (71, 33940),

Gene: Artiphact\_38 Start: 24820, Stop: 25221, Start Num: 8

Candidate Starts for Artiphact\_38:

(Start: 8 @24820 has 81 MA's), (10, 24844), (32, 24931), (43, 24994), (62, 25087), (70, 25117), (71, 25123), (78, 25174), (80, 25180),

Gene: AustinPowers\_22 Start: 19277, Stop: 19780, Start Num: 18

Candidate Starts for AustinPowers\_22:

(Start: 18 @19277 has 75 MA's), (26, 19307), (39, 19367), (43, 19394), (47, 19406), (49, 19415), (59, 19478), (62, 19493), (63, 19496), (64, 19502), (65, 19505), (67, 19514), (70, 19523), (90, 19655), (100, 19715), (104, 19748),

Gene: BaronJohn\_26 Start: 19174, Stop: 19521, Start Num: 18

Candidate Starts for BaronJohn\_26:

(Start: 18 @19174 has 75 MA's), (54, 19342), (71, 19423), (78, 19474),

Gene: BeagleBug\_45 Start: 31795, Stop: 32196, Start Num: 8

Candidate Starts for BeagleBug\_45:

(3, 31672), (Start: 8 @31795 has 81 MA's), (28, 31894), (32, 31909), (36, 31924), (41, 31960), (46, 31981), (57, 32038), (60, 32056), (71, 32101),

Gene: BeatusComedenti\_2 Start: 788, Stop: 1213, Start Num: 14

Candidate Starts for BeatusComedenti\_2:

(Start: 14 @788 has 3 MA's), (Start: 18 @803 has 75 MA's), (Start: 21 @806 has 9 MA's), (24, 818), (25, 827), (49, 941), (51, 950), (52, 953), (55, 974), (56, 977), (62, 1013), (64, 1022), (69, 1043), (78, 1100), (79, 1103), (81, 1133), (82, 1136),

Gene: Beethoven\_26 Start: 20860, Stop: 21363, Start Num: 18

Candidate Starts for Beethoven\_26:

(5, 20749), (6, 20770), (Start: 15 @20851 has 5 MA's), (Start: 18 @20860 has 75 MA's), (26, 20890), (28, 20899), (39, 20950), (49, 20998), (63, 21079), (67, 21097), (72, 21118), (90, 21238), (100, 21298), (104, 21331),

Gene: Bennie\_22 Start: 19317, Stop: 19835, Start Num: 19

Candidate Starts for Bennie\_22:

(Start: 19 @19317 has 30 MA's), (26, 19344), (33, 19371), (39, 19404), (49, 19452), (63, 19533), (67, 19551), (70, 19560), (72, 19572), (90, 19701), (93, 19734), (100, 19761),

Gene: BigMack\_22 Start: 19311, Stop: 19829, Start Num: 19

Candidate Starts for BigMack\_22:

(Start: 19 @19311 has 30 MA's), (26, 19338), (28, 19347), (39, 19398), (49, 19446), (63, 19527), (67, 19545), (72, 19566), (90, 19695), (95, 19740), (97, 19746), (98, 19749), (100, 19755),

Gene: Bodacious\_22 Start: 19328, Stop: 19849, Start Num: 19

Candidate Starts for Bodacious\_22:

(Start: 19 @19328 has 30 MA's), (Start: 21 @19331 has 9 MA's), (26, 19358), (33, 19385), (39, 19418), (49, 19466), (63, 19547), (67, 19565), (70, 19574), (72, 19586), (90, 19715), (100, 19775), (105, 19820),

Gene: BrazzalePHS\_45 Start: 31809, Stop: 32210, Start Num: 8

Candidate Starts for BrazzalePHS\_45:

(3, 31686), (Start: 8 @31809 has 81 MA's), (28, 31908), (32, 31923), (36, 31938), (41, 31974), (46, 31995), (57, 32052), (60, 32070), (71, 32115),

Gene: BrotherBLo\_26 Start: 20866, Stop: 21369, Start Num: 18

Candidate Starts for BrotherBLo\_26:

(5, 20755), (6, 20776), (Start: 15 @20857 has 5 MA's), (Start: 18 @20866 has 75 MA's), (26, 20896), (28, 20905), (37, 20941), (39, 20956), (49, 21004), (63, 21085), (67, 21103), (72, 21124), (100, 21304), (103, 21325), (104, 21337),

Gene: Bubbykins\_31 Start: 25825, Stop: 26265, Start Num: 18

Candidate Starts for Bubbykins\_31:

(Start: 18 @25825 has 75 MA's), (Start: 21 @25831 has 9 MA's), (28, 25864), (32, 25879), (35, 25891), (38, 25903), (39, 25915), (44, 25945), (48, 25960), (55, 25996), (61, 26032), (65, 26047), (77, 26107), (80, 26128), (87, 26185), (89, 26200), (92, 26233),

Gene: Busephilis\_45 Start: 31750, Stop: 32151, Start Num: 8

Candidate Starts for Busephilis\_45:

(3, 31627), (Start: 8 @31750 has 81 MA's), (28, 31849), (32, 31864), (36, 31879), (41, 31915), (46, 31936), (57, 31993), (60, 32011), (71, 32056),

Gene: CMP1\_37 Start: 36378, Stop: 36704, Start Num: 18

Candidate Starts for CMP1\_37:

(Start: 18 @36378 has 75 MA's), (40, 36471), (42, 36492), (46, 36504), (53, 36540), (67, 36609), (70, 36618),

Gene: CallieOMalley\_26 Start: 20900, Stop: 21400, Start Num: 19

Candidate Starts for CallieOMalley\_26:

(Start: 19 @20900 has 30 MA's), (26, 20927), (28, 20936), (39, 20987), (49, 21035), (58, 21089), (63, 21116), (67, 21134), (90, 21275), (104, 21368),

Gene: Canowicakte\_26 Start: 20935, Stop: 21435, Start Num: 19

Candidate Starts for Canowicakte\_26:

(Start: 19 @20935 has 30 MA's), (22, 20938), (26, 20962), (28, 20971), (39, 21022), (49, 21070), (58, 21124), (63, 21151), (67, 21169), (90, 21310), (104, 21403),

Gene: CaptainRex\_26 Start: 18608, Stop: 18931, Start Num: 18

Candidate Starts for CaptainRex\_26:

(Start: 18 @18608 has 75 MA's), (54, 18776), (71, 18857),

Gene: Carpal\_26 Start: 20867, Stop: 21370, Start Num: 18

Candidate Starts for Carpal\_26:

(5, 20756), (6, 20777), (Start: 15 @20858 has 5 MA's), (Start: 18 @20867 has 75 MA's), (26, 20897), (28, 20906), (39, 20957), (49, 21005), (63, 21086), (67, 21104), (72, 21125), (90, 21245), (100, 21305), (104, 21338),

Gene: Chepli\_27 Start: 19263, Stop: 19598, Start Num: 18

Candidate Starts for Chepli\_27:

(16, 19260), (Start: 18 @19263 has 75 MA's), (32, 19320), (36, 19335), (42, 19380), (67, 19497), (71, 19512), (78, 19563),

Gene: ChewChew\_22 Start: 19323, Stop: 19844, Start Num: 19

Candidate Starts for ChewChew\_22:

(Start: 19 @19323 has 30 MA's), (Start: 21 @19326 has 9 MA's), (26, 19353), (33, 19380), (39, 19413), (49, 19461), (63, 19542), (67, 19560), (70, 19569), (72, 19581), (90, 19710), (100, 19770), (105, 19815),

Gene: Chipper1996\_320 Start: 28217, Stop: 28687, Start Num: 18

Candidate Starts for Chipper1996\_320:

(Start: 18 @28217 has 75 MA's), (28, 28259), (33, 28277), (36, 28289), (38, 28298), (39, 28310), (44, 28340), (48, 28355), (53, 28382), (59, 28415), (65, 28442), (74, 28481), (86, 28577), (89, 28595), (94, 28637), (96, 28643), (101, 28661),

Gene: Chivey\_37 Start: 23887, Stop: 24288, Start Num: 8

Candidate Starts for Chivey\_37:

(Start: 8 @23887 has 81 MA's), (10, 23911), (32, 23998), (43, 24061), (62, 24154), (71, 24190), (78, 24241), (80, 24247),

Gene: Chocolat\_32 Start: 28217, Stop: 28687, Start Num: 18

Candidate Starts for Chocolat\_32:

(Start: 18 @28217 has 75 MA's), (28, 28259), (33, 28277), (36, 28289), (38, 28298), (39, 28310), (44, 28340), (48, 28355), (53, 28382), (59, 28415), (65, 28442), (74, 28481), (86, 28577), (89, 28595), (94, 28637), (96, 28643), (101, 28661),

Gene: Cholula\_26 Start: 20913, Stop: 21416, Start Num: 18

Candidate Starts for Cholula\_26:

(10, 20877), (Start: 15 @20904 has 5 MA's), (Start: 18 @20913 has 75 MA's), (26, 20943), (28, 20952), (39, 21003), (49, 21051), (63, 21132), (67, 21150), (72, 21171), (90, 21291), (100, 21351), (103, 21372), (104, 21384),

Gene: Chridison\_22 Start: 19277, Stop: 19780, Start Num: 18

Candidate Starts for Chridison\_22:

(Start: 18 @19277 has 75 MA's), (26, 19307), (39, 19367), (43, 19394), (47, 19406), (49, 19415), (59, 19478), (62, 19493), (63, 19496), (64, 19502), (65, 19505), (67, 19514), (70, 19523), (90, 19655), (93, 19688), (100, 19715), (104, 19748),

Gene: Christian\_22 Start: 19324, Stop: 19845, Start Num: 19

Candidate Starts for Christian\_22:

(Start: 19 @19324 has 30 MA's), (Start: 21 @19327 has 9 MA's), (26, 19354), (33, 19381), (39, 19414), (49, 19462), (63, 19543), (67, 19561), (70, 19570), (72, 19582), (90, 19711), (100, 19771), (105, 19816),

Gene: Chubster\_32 Start: 27988, Stop: 28458, Start Num: 18

Candidate Starts for Chubster\_32:

(Start: 18 @27988 has 75 MA's), (28, 28030), (33, 28048), (36, 28060), (38, 28069), (39, 28081), (44, 28111), (48, 28126), (53, 28153), (59, 28186), (65, 28213), (74, 28252), (86, 28348), (89, 28366), (94, 28408), (96, 28414), (101, 28432),

Gene: ClearAsMud\_48 Start: 31890, Stop: 32291, Start Num: 8

Candidate Starts for ClearAsMud\_48:

(3, 31767), (Start: 8 @31890 has 81 MA's), (28, 31989), (32, 32004), (36, 32019), (41, 32055), (46, 32076), (57, 32133), (60, 32151), (71, 32196),

Gene: Colucci\_31 Start: 27686, Stop: 28141, Start Num: 18

Candidate Starts for Colucci\_31:

(Start: 18 @27686 has 75 MA's), (33, 27746), (36, 27758), (38, 27767), (39, 27779), (44, 27809), (53, 27851), (59, 27884), (65, 27911), (68, 27923), (73, 27947), (80, 27992), (89, 28064), (94, 28103), (101, 28118), (102, 28124),

Gene: Conboy\_32 Start: 28216, Stop: 28686, Start Num: 18

Candidate Starts for Conboy\_32:

(Start: 18 @28216 has 75 MA's), (28, 28258), (33, 28276), (36, 28288), (38, 28297), (39, 28309), (44, 28339), (48, 28354), (53, 28381), (59, 28414), (65, 28441), (74, 28480), (86, 28576), (89, 28594), (94, 28636), (96, 28642), (101, 28660),

Gene: CoolCookie\_38 Start: 24826, Stop: 25227, Start Num: 8

Candidate Starts for CoolCookie\_38:

(Start: 8 @24826 has 81 MA's), (10, 24850), (32, 24937), (43, 25000), (62, 25093), (70, 25123), (71, 25129), (78, 25180), (80, 25186),

Gene: Cranjis\_47 Start: 31969, Stop: 32370, Start Num: 8

Candidate Starts for Cranjis\_47:

(3, 31846), (Start: 8 @31969 has 81 MA's), (28, 32068), (32, 32083), (36, 32098), (41, 32134), (46, 32155), (57, 32212), (60, 32230), (71, 32275),

Gene: CrazyRich\_45 Start: 31778, Stop: 32179, Start Num: 8

Candidate Starts for CrazyRich\_45:

(3, 31655), (Start: 8 @31778 has 81 MA's), (28, 31877), (32, 31892), (36, 31907), (41, 31943), (46, 31964), (57, 32021), (60, 32039), (71, 32084),

Gene: Crestdrop\_37 Start: 23798, Stop: 24199, Start Num: 8

Candidate Starts for Crestdrop\_37:

(Start: 8 @23798 has 81 MA's), (10, 23822), (32, 23909), (43, 23972), (62, 24065), (71, 24101), (78, 24152), (80, 24158),

Gene: Crisis\_47 Start: 31769, Stop: 32170, Start Num: 8

Candidate Starts for Crisis\_47:

(3, 31646), (Start: 8 @31769 has 81 MA's), (28, 31868), (32, 31883), (36, 31898), (41, 31934), (46, 31955), (57, 32012), (60, 32030), (71, 32075),

Gene: CristinaYang\_22 Start: 19328, Stop: 19849, Start Num: 19

Candidate Starts for CristinaYang\_22:

(Start: 19 @19328 has 30 MA's), (Start: 21 @19331 has 9 MA's), (26, 19358), (33, 19385), (39, 19418), (49, 19466), (63, 19547), (67, 19565), (70, 19574), (72, 19586), (90, 19715), (100, 19775), (105, 19820),

Gene: Cybele\_38 Start: 24796, Stop: 25197, Start Num: 8

Candidate Starts for Cybele\_38:

(Start: 8 @24796 has 81 MA's), (10, 24820), (32, 24907), (43, 24970), (62, 25063), (70, 25093), (71, 25099), (78, 25150), (80, 25156),

Gene: Daiboju\_22 Start: 19297, Stop: 19797, Start Num: 21

Candidate Starts for Daiboju\_22:

(Start: 21 @19297 has 9 MA's), (32, 19348), (39, 19384), (48, 19429), (49, 19432), (63, 19513), (67, 19531), (90, 19672), (104, 19765),

Gene: DannyDe\_37 Start: 23893, Stop: 24294, Start Num: 8

Candidate Starts for DannyDe\_37:

(Start: 8 @23893 has 81 MA's), (10, 23917), (32, 24004), (43, 24067), (62, 24160), (71, 24196), (78, 24247), (80, 24253),

Gene: Dino\_26 Start: 20856, Stop: 21368, Start Num: 15

Candidate Starts for Dino\_26:

(5, 20754), (6, 20775), (Start: 15 @20856 has 5 MA's), (Start: 18 @20865 has 75 MA's), (26, 20895), (28, 20904), (35, 20931), (39, 20955), (49, 21003), (63, 21084), (67, 21102), (72, 21123), (90, 21243), (100, 21303), (104, 21336),

Gene: DrRobert\_22 Start: 19327, Stop: 19845, Start Num: 21

Candidate Starts for DrRobert\_22:

(Start: 19 @19324 has 30 MA's), (Start: 21 @19327 has 9 MA's), (26, 19354), (33, 19381), (39, 19414), (49, 19462), (63, 19543), (67, 19561), (70, 19570), (72, 19582), (90, 19711), (100, 19771), (105, 19816),

Gene: DrYang\_32 Start: 29312, Stop: 29767, Start Num: 17

Candidate Starts for DrYang\_32:

(Start: 17 @29312 has 1 MA's), (27, 29348), (28, 29354), (33, 29372), (35, 29381), (36, 29384), (38, 29393), (39, 29405), (44, 29435), (48, 29450), (53, 29477), (59, 29510), (65, 29537), (68, 29549), (86, 29672),

Gene: DreamTeam\_22 Start: 19356, Stop: 19880, Start Num: 19

Candidate Starts for DreamTeam\_22:

(Start: 19 @19356 has 30 MA's), (26, 19383), (28, 19392), (39, 19443), (49, 19491), (58, 19545), (63, 19572), (67, 19590), (72, 19611), (90, 19740), (93, 19773), (95, 19785), (97, 19791),

Gene: EarickHC\_46 Start: 31692, Stop: 32093, Start Num: 8

Candidate Starts for EarickHC\_46:

(3, 31569), (Start: 8 @31692 has 81 MA's), (28, 31791), (32, 31806), (36, 31821), (41, 31857), (46, 31878), (57, 31935), (60, 31953), (71, 31998),

Gene: EdgarPoe\_32 Start: 28216, Stop: 28686, Start Num: 18

Candidate Starts for EdgarPoe\_32:

(Start: 18 @28216 has 75 MA's), (28, 28258), (33, 28276), (36, 28288), (38, 28297), (39, 28309), (44, 28339), (48, 28354), (53, 28381), (59, 28414), (65, 28441), (74, 28480), (86, 28576), (89, 28594), (94, 28636), (96, 28642), (101, 28660),

Gene: EstebanJulior\_22 Start: 19324, Stop: 19827, Start Num: 18

Candidate Starts for EstebanJulior\_22:

(Start: 18 @19324 has 75 MA's), (26, 19354), (37, 19399), (39, 19414), (49, 19462), (63, 19543), (64, 19549), (67, 19561), (72, 19582), (100, 19762),

Gene: Eunoia\_22 Start: 19276, Stop: 19779, Start Num: 18

Candidate Starts for Eunoia\_22:

(Start: 18 @19276 has 75 MA's), (26, 19306), (39, 19366), (43, 19393), (47, 19405), (49, 19414), (59, 19477), (62, 19492), (63, 19495), (64, 19501), (65, 19504), (67, 19513), (70, 19522), (90, 19654), (93, 19687), (100, 19714), (104, 19747),

Gene: Fireman\_47 Start: 33300, Stop: 33701, Start Num: 8

Candidate Starts for Fireman\_47:

(Start: 8 @33300 has 81 MA's), (12, 33333), (Start: 21 @33363 has 9 MA's), (28, 33399), (36, 33429), (41, 33465), (43, 33477), (57, 33543), (60, 33561), (62, 33570), (71, 33606), (83, 33693),

Gene: Fluke\_26 Start: 20899, Stop: 21411, Start Num: 15

Candidate Starts for Fluke\_26:

(5, 20797), (6, 20818), (Start: 15 @20899 has 5 MA's), (Start: 18 @20908 has 75 MA's), (26, 20938), (28, 20947), (39, 20998), (49, 21046), (63, 21127), (67, 21145), (72, 21166), (90, 21286), (100, 21346), (104, 21379),

Gene: FountainFog\_37 Start: 24100, Stop: 24498, Start Num: 8

Candidate Starts for FountainFog\_37:

(Start: 8 @24100 has 81 MA's), (32, 24211), (43, 24274), (68, 24391), (71, 24403),

Gene: FreddieHg\_37 Start: 23903, Stop: 24304, Start Num: 8

Candidate Starts for FreddieHg\_37:

(Start: 8 @23903 has 81 MA's), (10, 23927), (32, 24014), (43, 24077), (62, 24170), (71, 24206), (78, 24257), (80, 24263),

Gene: Fulton\_26 Start: 18590, Stop: 18937, Start Num: 18

Candidate Starts for Fulton\_26:

(Start: 18 @18590 has 75 MA's), (54, 18758), (71, 18839), (78, 18890),

Gene: Ganandorf\_45 Start: 31831, Stop: 32232, Start Num: 8

Candidate Starts for Ganandorf\_45:

(3, 31708), (Start: 8 @31831 has 81 MA's), (28, 31930), (32, 31945), (36, 31960), (41, 31996), (46, 32017), (57, 32074), (60, 32092), (71, 32137),

Gene: Germa\_47 Start: 31660, Stop: 32061, Start Num: 8

Candidate Starts for Germa\_47:

(3, 31537), (Start: 8 @31660 has 81 MA's), (28, 31759), (32, 31774), (36, 31789), (41, 31825), (46, 31846), (57, 31903), (60, 31921), (71, 31966),

Gene: Gilda\_38 Start: 24820, Stop: 25221, Start Num: 8

Candidate Starts for Gilda\_38:

(Start: 8 @24820 has 81 MA's), (10, 24844), (32, 24931), (43, 24994), (62, 25087), (70, 25117), (71, 25123), (78, 25174), (80, 25180),

Gene: Gina\_47 Start: 31433, Stop: 31846, Start Num: 8

Candidate Starts for Gina\_47:

(Start: 8 @31433 has 81 MA's), (27, 31526), (28, 31532), (32, 31547), (42, 31607), (57, 31676), (60, 31694), (62, 31703), (68, 31727), (71, 31739),

Gene: Gisselle\_22 Start: 19356, Stop: 19880, Start Num: 19

Candidate Starts for Gisselle\_22:

(Start: 19 @19356 has 30 MA's), (26, 19383), (28, 19392), (39, 19443), (49, 19491), (58, 19545), (63, 19572), (67, 19590), (72, 19611), (90, 19740), (93, 19773), (95, 19785), (97, 19791),

Gene: Glenn\_26 Start: 20917, Stop: 21420, Start Num: 18

Candidate Starts for Glenn\_26:

(5, 20806), (6, 20827), (Start: 15 @20908 has 5 MA's), (Start: 18 @20917 has 75 MA's), (26, 20947), (28, 20956), (39, 21007), (49, 21055), (63, 21136), (67, 21154), (72, 21175), (90, 21295), (100, 21355), (104, 21388),

Gene: Glorp\_47 Start: 31832, Stop: 32233, Start Num: 8

Candidate Starts for Glorp\_47:

(3, 31709), (Start: 8 @31832 has 81 MA's), (28, 31931), (32, 31946), (36, 31961), (41, 31997), (46, 32018), (57, 32075), (60, 32093), (71, 32138),

Gene: Graynor\_26 Start: 20921, Stop: 21421, Start Num: 19

Candidate Starts for Graynor\_26:

(Start: 19 @20921 has 30 MA's), (26, 20948), (28, 20957), (39, 21008), (49, 21056), (58, 21110), (63, 21137), (67, 21155), (90, 21296), (104, 21389),

Gene: GreenHearts\_26 Start: 20983, Stop: 21486, Start Num: 20

Candidate Starts for GreenHearts\_26:

(Start: 15 @20971 has 5 MA's), (Start: 20 @20983 has 12 MA's), (29, 21025), (35, 21049), (39, 21073), (51, 21133), (63, 21202), (67, 21220), (70, 21229), (72, 21241), (90, 21361), (91, 21370), (100, 21421),

Gene: Greenlvy\_26 Start: 19176, Stop: 19523, Start Num: 18

Candidate Starts for Greenlvy\_26:

(Start: 18 @19176 has 75 MA's), (54, 19344), (71, 19425), (78, 19476),

Gene: Greenhouse\_26 Start: 20907, Stop: 21410, Start Num: 20

Candidate Starts for Greenhouse\_26:

(Start: 15 @20895 has 5 MA's), (Start: 20 @20907 has 12 MA's), (35, 20973), (39, 20997), (44, 21027), (51, 21057), (63, 21126), (70, 21153), (72, 21165), (90, 21285), (91, 21294), (100, 21345),

Gene: Hasitha\_26 Start: 18602, Stop: 18949, Start Num: 18

Candidate Starts for Hasitha\_26:

(Start: 18 @18602 has 75 MA's), (54, 18770), (71, 18851), (78, 18902),

Gene: Haunter\_38 Start: 24212, Stop: 24613, Start Num: 8

Candidate Starts for Haunter\_38:

(Start: 8 @24212 has 81 MA's), (10, 24236), (32, 24323), (62, 24479), (71, 24515), (78, 24566), (80, 24572),

Gene: HeadNerd\_22 Start: 19317, Stop: 19835, Start Num: 19

Candidate Starts for HeadNerd\_22:

(Start: 19 @19317 has 30 MA's), (26, 19344), (33, 19371), (39, 19404), (49, 19452), (63, 19533), (67, 19551), (70, 19560), (72, 19572), (90, 19701), (93, 19734), (100, 19761),

Gene: Herb\_22 Start: 19297, Stop: 19797, Start Num: 21

Candidate Starts for Herb\_22:

(Start: 21 @19297 has 9 MA's), (32, 19348), (39, 19384), (48, 19429), (49, 19432), (63, 19513), (67, 19531), (90, 19672), (104, 19765),

Gene: HerculesXL\_26 Start: 18674, Stop: 19000, Start Num: 18

Candidate Starts for HerculesXL\_26:

(Start: 18 @18674 has 75 MA's), (42, 18791), (54, 18842), (55, 18848), (70, 18917), (71, 18923), (78, 18974),

Gene: Hermeonysus\_45 Start: 31698, Stop: 32099, Start Num: 8

Candidate Starts for Hermeonysus\_45:

(1, 31314), (2, 31374), (3, 31575), (Start: 8 @31698 has 81 MA's), (28, 31797), (32, 31812), (36, 31827), (41, 31863), (46, 31884), (57, 31941), (60, 31959), (71, 32004),

Gene: Hiddenleaf\_37 Start: 23887, Stop: 24288, Start Num: 8

Candidate Starts for Hiddenleaf\_37:

(Start: 8 @23887 has 81 MA's), (10, 23911), (32, 23998), (43, 24061), (62, 24154), (71, 24190), (78, 24241), (80, 24247),

Gene: Honeyfin\_47 Start: 32019, Stop: 32420, Start Num: 8

Candidate Starts for Honeyfin\_47:

(3, 31896), (Start: 8 @32019 has 81 MA's), (28, 32118), (32, 32133), (36, 32148), (41, 32184), (46, 32205), (57, 32262), (60, 32280), (71, 32325),

Gene: Huckleberry\_22 Start: 19317, Stop: 19835, Start Num: 19

Candidate Starts for Huckleberry\_22:

(Start: 19 @19317 has 30 MA's), (26, 19344), (33, 19371), (39, 19404), (49, 19452), (63, 19533), (67, 19551), (70, 19560), (72, 19572), (90, 19701), (93, 19734), (100, 19761),

Gene: HumptyDumpty\_32 Start: 28215, Stop: 28685, Start Num: 18

Candidate Starts for HumptyDumpty\_32:

(Start: 18 @28215 has 75 MA's), (28, 28257), (33, 28275), (36, 28287), (38, 28296), (39, 28308), (44, 28338), (48, 28353), (53, 28380), (59, 28413), (65, 28440), (74, 28479), (86, 28575), (89, 28593), (94, 28635), (96, 28641), (101, 28659),

Gene: HunterDalle\_22 Start: 19276, Stop: 19779, Start Num: 18

Candidate Starts for HunterDalle\_22:

(Start: 18 @19276 has 75 MA's), (26, 19306), (39, 19366), (43, 19393), (47, 19405), (49, 19414), (59, 19477), (62, 19492), (63, 19495), (64, 19501), (65, 19504), (67, 19513), (70, 19522), (90, 19654), (93, 19687), (100, 19714), (104, 19747),

Gene: Huntingdon\_26 Start: 20875, Stop: 21378, Start Num: 20

Candidate Starts for Huntingdon\_26:

(Start: 15 @20863 has 5 MA's), (Start: 20 @20875 has 12 MA's), (29, 20917), (35, 20941), (39, 20965), (67, 21112), (70, 21121), (72, 21133), (90, 21253), (91, 21262), (100, 21313),

Gene: Immaculata\_26 Start: 20912, Stop: 21415, Start Num: 18

Candidate Starts for Immaculata\_26:

(10, 20876), (Start: 15 @20903 has 5 MA's), (Start: 18 @20912 has 75 MA's), (26, 20942), (28, 20951), (39, 21002), (49, 21050), (63, 21131), (67, 21149), (72, 21170), (90, 21290), (100, 21350), (103, 21371), (104, 21383),

Gene: Ixel\_26 Start: 18510, Stop: 18836, Start Num: 18

Candidate Starts for Ixel\_26:

(Start: 18 @18510 has 75 MA's), (42, 18627), (54, 18678), (55, 18684), (71, 18759), (75, 18783),

Gene: JDawG\_37 Start: 24471, Stop: 24872, Start Num: 8

Candidate Starts for JDawG\_37:

(Start: 8 @24471 has 81 MA's), (10, 24495), (32, 24582), (43, 24645), (62, 24738), (71, 24774), (78, 24825), (80, 24831),

Gene: JaNo\_32 Start: 28215, Stop: 28685, Start Num: 18

Candidate Starts for JaNo\_32:

(Start: 18 @28215 has 75 MA's), (28, 28257), (33, 28275), (36, 28287), (38, 28296), (39, 28308), (44, 28338), (48, 28353), (53, 28380), (59, 28413), (65, 28440), (74, 28479), (86, 28575), (89, 28593), (94, 28635), (96, 28641), (101, 28659),

Gene: JayCookie\_32 Start: 28218, Stop: 28688, Start Num: 18

Candidate Starts for JayCookie\_32:

(Start: 18 @28218 has 75 MA's), (28, 28260), (33, 28278), (36, 28290), (38, 28299), (39, 28311), (44, 28341), (48, 28356), (53, 28383), (59, 28416), (65, 28443), (74, 28482), (86, 28578), (89, 28596), (94, 28638), (96, 28644), (101, 28662),

Gene: Jayden\_47 Start: 32140, Stop: 32535, Start Num: 8

Candidate Starts for Jayden\_47:

(Start: 8 @32140 has 81 MA's), (Start: 21 @32203 has 9 MA's), (27, 32233), (28, 32239), (32, 32254), (36, 32269), (49, 32338), (55, 32371), (57, 32383), (60, 32401), (62, 32410), (68, 32434), (71, 32446),

Gene: Jefe\_46 Start: 31756, Stop: 32157, Start Num: 8

Candidate Starts for Jefe\_46:

(3, 31633), (Start: 8 @31756 has 81 MA's), (28, 31855), (32, 31870), (36, 31885), (41, 31921), (46, 31942), (57, 31999), (60, 32017), (71, 32062),

Gene: Jemerald\_27 Start: 20196, Stop: 20519, Start Num: 18

Candidate Starts for Jemerald\_27:

(Start: 18 @20196 has 75 MA's), (26, 20229), (29, 20241), (36, 20268), (42, 20313), (49, 20337), (57, 20382), (62, 20409), (70, 20439), (71, 20445), (76, 20475),

Gene: JingleBells\_37 Start: 24008, Stop: 24409, Start Num: 8

Candidate Starts for JingleBells\_37:

(Start: 8 @24008 has 81 MA's), (10, 24032), (32, 24119), (43, 24182), (62, 24275), (71, 24311), (78, 24362), (80, 24368),

Gene: Joann\_26 Start: 20829, Stop: 21344, Start Num: 15

Candidate Starts for Joann\_26:

(Start: 15 @20829 has 5 MA's), (Start: 20 @20841 has 12 MA's), (35, 20907), (39, 20931), (51, 20991), (63, 21060), (67, 21078), (70, 21087), (72, 21099), (90, 21219), (91, 21228), (100, 21279),

Gene: Jollipop\_46 Start: 32095, Stop: 32496, Start Num: 8

Candidate Starts for Jollipop\_46:

(3, 31972), (Start: 8 @32095 has 81 MA's), (28, 32194), (32, 32209), (36, 32224), (41, 32260), (46, 32281), (57, 32338), (60, 32356), (71, 32401),

Gene: JrWilcox\_81 Start: 46199, Stop: 46537, Start Num: 20

Candidate Starts for JrWilcox\_81:

(12, 46169), (Start: 20 @46199 has 12 MA's), (24, 46214), (26, 46229), (36, 46268), (46, 46325), (63, 46412), (66, 46424), (73, 46457),

Gene: Juicer\_27 Start: 20196, Stop: 20519, Start Num: 18

Candidate Starts for Juicer\_27:

(Start: 18 @20196 has 75 MA's), (26, 20229), (29, 20241), (36, 20268), (42, 20313), (49, 20337), (57, 20382), (62, 20409), (70, 20439), (71, 20445), (76, 20475),

Gene: Jumboset\_26 Start: 20860, Stop: 21363, Start Num: 18

Candidate Starts for Jumboset\_26:

(5, 20749), (6, 20770), (Start: 15 @20851 has 5 MA's), (Start: 18 @20860 has 75 MA's), (26, 20890), (28, 20899), (37, 20935), (39, 20950), (49, 20998), (63, 21079), (67, 21097), (72, 21118), (100, 21298), (103, 21319), (104, 21331),

Gene: KBurrousTX\_32 Start: 29142, Stop: 29597, Start Num: 18

Candidate Starts for KBurrousTX\_32:

(Start: 18 @29142 has 75 MA's), (33, 29202), (35, 29211), (36, 29214), (38, 29223), (39, 29235), (44, 29265), (48, 29280), (53, 29307), (59, 29340), (65, 29367), (68, 29379),

Gene: Kabreeze\_32 Start: 28215, Stop: 28685, Start Num: 18

Candidate Starts for Kabreeze\_32:

(Start: 18 @28215 has 75 MA's), (28, 28257), (33, 28275), (36, 28287), (38, 28296), (39, 28308), (44, 28338), (48, 28353), (53, 28380), (59, 28413), (65, 28440), (74, 28479), (86, 28575), (89, 28593), (94, 28635), (96, 28641), (101, 28659),

Gene: KaiHaiDragon\_46 Start: 31692, Stop: 32093, Start Num: 8

Candidate Starts for KaiHaiDragon\_46:

(3, 31569), (Start: 8 @31692 has 81 MA's), (28, 31791), (32, 31806), (36, 31821), (41, 31857), (46, 31878), (57, 31935), (60, 31953), (71, 31998),

Gene: Kalizoi\_26 Start: 20859, Stop: 21362, Start Num: 18

Candidate Starts for Kalizoi\_26:

(5, 20748), (6, 20769), (Start: 15 @20850 has 5 MA's), (Start: 18 @20859 has 75 MA's), (26, 20889), (28, 20898), (35, 20925), (39, 20949), (49, 20997), (63, 21078), (67, 21096), (72, 21117), (90, 21237), (100, 21297), (104, 21330),

Gene: Karate\_37 Start: 24819, Stop: 25217, Start Num: 8

Candidate Starts for Karate\_37:

(Start: 8 @24819 has 81 MA's), (32, 24930), (43, 24993), (68, 25110), (71, 25122),

Gene: KatChan\_27 Start: 19269, Stop: 19604, Start Num: 18

Candidate Starts for KatChan\_27:

(16, 19266), (Start: 18 @19269 has 75 MA's), (32, 19326), (36, 19341), (42, 19386), (57, 19455), (67, 19503), (71, 19518), (78, 19569),

Gene: Kate\_38 Start: 24828, Stop: 25229, Start Num: 8

Candidate Starts for Kate\_38:

(Start: 8 @24828 has 81 MA's), (10, 24852), (32, 24939), (43, 25002), (62, 25095), (71, 25131), (78, 25182), (80, 25188),

Gene: Kavo\_25 Start: 18510, Stop: 18836, Start Num: 18

Candidate Starts for Kavo\_25:

(Start: 18 @18510 has 75 MA's), (42, 18627), (54, 18678), (55, 18684), (70, 18753), (71, 18759), (78, 18810),

Gene: KellEzio\_2 Start: 788, Stop: 1213, Start Num: 14

Candidate Starts for KellEzio\_2:

(Start: 14 @788 has 3 MA's), (Start: 18 @803 has 75 MA's), (Start: 21 @806 has 9 MA's), (24, 818), (25, 827), (51, 950), (52, 953), (55, 974), (56, 977), (62, 1013), (63, 1016), (64, 1022), (69, 1043), (78, 1100), (79, 1103), (81, 1133), (82, 1136),

Gene: KingBob\_22 Start: 19297, Stop: 19797, Start Num: 21

Candidate Starts for KingBob\_22:

(Start: 21 @19297 has 9 MA's), (32, 19348), (39, 19384), (48, 19429), (49, 19432), (63, 19513), (67, 19531), (90, 19672), (104, 19765),

Gene: Kitkat\_2 Start: 788, Stop: 1213, Start Num: 14

Candidate Starts for Kitkat\_2:

(Start: 14 @788 has 3 MA's), (Start: 18 @803 has 75 MA's), (Start: 21 @806 has 9 MA's), (24, 818), (25, 827), (49, 941), (51, 950), (52, 953), (55, 974), (56, 977), (62, 1013), (64, 1022), (69, 1043), (78, 1100), (79, 1103), (81, 1133), (82, 1136),

Gene: Kittykat\_22 Start: 19340, Stop: 19864, Start Num: 19

Candidate Starts for Kittykat\_22:

(Start: 19 @19340 has 30 MA's), (26, 19367), (39, 19427), (49, 19475), (58, 19529), (63, 19556), (67, 19574), (72, 19595), (90, 19724), (93, 19757), (95, 19769), (97, 19775),

Gene: Korra\_27 Start: 20865, Stop: 21368, Start Num: 18

Candidate Starts for Korra\_27:

(5, 20754), (6, 20775), (Start: 15 @20856 has 5 MA's), (Start: 18 @20865 has 75 MA's), (26, 20895), (28, 20904), (39, 20955), (45, 20988), (49, 21003), (63, 21084), (67, 21102), (72, 21123), (90, 21243), (100, 21303), (103, 21324), (104, 21336),

Gene: Kowalski\_45 Start: 31805, Stop: 32206, Start Num: 8

Candidate Starts for Kowalski\_45:

(3, 31682), (Start: 8 @31805 has 81 MA's), (28, 31904), (32, 31919), (36, 31934), (41, 31970), (46, 31991), (57, 32048), (60, 32066), (71, 32111),

Gene: Krampus\_38 Start: 24828, Stop: 25229, Start Num: 8

Candidate Starts for Krampus\_38:

(Start: 8 @24828 has 81 MA's), (10, 24852), (32, 24939), (43, 25002), (62, 25095), (70, 25125), (71, 25131), (78, 25182), (80, 25188),

Gene: Lakshmi\_26 Start: 20867, Stop: 21370, Start Num: 20

Candidate Starts for Lakshmi\_26:

(Start: 15 @20855 has 5 MA's), (Start: 20 @20867 has 12 MA's), (35, 20933), (39, 20957), (51, 21017), (63, 21086), (67, 21104), (70, 21113), (72, 21125), (90, 21245), (91, 21254), (100, 21305),

Gene: Lasagna\_22 Start: 19324, Stop: 19845, Start Num: 19

Candidate Starts for Lasagna\_22:

(Start: 19 @19324 has 30 MA's), (Start: 21 @19327 has 9 MA's), (26, 19354), (33, 19381), (39, 19414), (49, 19462), (63, 19543), (67, 19561), (70, 19570), (72, 19582), (90, 19711), (105, 19816),

Gene: Lennox\_22 Start: 19312, Stop: 19833, Start Num: 19

Candidate Starts for Lennox\_22:

(Start: 19 @19312 has 30 MA's), (Start: 21 @19315 has 9 MA's), (26, 19342), (33, 19369), (37, 19387), (39, 19402), (49, 19450), (63, 19531), (67, 19549), (70, 19558), (72, 19570), (90, 19699), (105, 19804),

Gene: Librie\_26 Start: 18608, Stop: 18931, Start Num: 18

Candidate Starts for Librie\_26:

(Start: 18 @18608 has 75 MA's), (54, 18776), (71, 18857),

Gene: LilStuart\_22 Start: 19316, Stop: 19837, Start Num: 19

Candidate Starts for LilStuart\_22:

(Start: 19 @19316 has 30 MA's), (Start: 21 @19319 has 9 MA's), (26, 19346), (33, 19373), (39, 19406), (49, 19454), (63, 19535), (67, 19553), (70, 19562), (72, 19574), (90, 19703), (100, 19763), (105, 19808),

Gene: LilTerminator\_26 Start: 18608, Stop: 18955, Start Num: 18

Candidate Starts for LilTerminator\_26:

(Start: 18 @18608 has 75 MA's), (54, 18776), (71, 18857), (78, 18908),

Gene: Linus\_32 Start: 28215, Stop: 28685, Start Num: 18

Candidate Starts for Linus\_32:

(Start: 18 @28215 has 75 MA's), (28, 28257), (33, 28275), (36, 28287), (38, 28296), (39, 28308), (44, 28338), (48, 28353), (53, 28380), (59, 28413), (65, 28440), (74, 28479), (86, 28575), (89, 28593), (94, 28635), (96, 28641), (101, 28659),

Gene: Litotes\_26 Start: 20885, Stop: 21385, Start Num: 19

Candidate Starts for Litotes\_26:

(Start: 19 @20885 has 30 MA's), (22, 20888), (26, 20912), (28, 20921), (39, 20972), (49, 21020), (58, 21074), (63, 21101), (67, 21119), (90, 21260), (104, 21353),

Gene: LittleFortune\_47 Start: 32061, Stop: 32462, Start Num: 8

Candidate Starts for LittleFortune\_47:

(3, 31938), (Start: 8 @32061 has 81 MA's), (28, 32160), (32, 32175), (36, 32190), (41, 32226), (46, 32247), (57, 32304), (60, 32322), (71, 32367),

Gene: Lucretia\_46 Start: 31748, Stop: 32149, Start Num: 8

Candidate Starts for Lucretia\_46:

(3, 31625), (Start: 8 @31748 has 81 MA's), (28, 31847), (32, 31862), (36, 31877), (41, 31913), (46, 31934), (57, 31991), (60, 32009), (71, 32054),

Gene: Lucy\_22 Start: 19304, Stop: 19825, Start Num: 19

Candidate Starts for Lucy\_22:

(Start: 19 @19304 has 30 MA's), (Start: 21 @19307 has 9 MA's), (26, 19334), (33, 19361), (39, 19394), (49, 19442), (63, 19523), (67, 19541), (70, 19550), (72, 19562), (90, 19691), (105, 19796),

Gene: Luna18\_27 Start: 19269, Stop: 19604, Start Num: 18

Candidate Starts for Luna18\_27:

(16, 19266), (Start: 18 @19269 has 75 MA's), (32, 19326), (36, 19341), (42, 19386), (57, 19455), (67, 19503), (71, 19518), (78, 19569),

Gene: Lymara\_32 Start: 28213, Stop: 28683, Start Num: 18

Candidate Starts for Lymara\_32:

(Start: 18 @28213 has 75 MA's), (27, 28249), (33, 28273), (35, 28282), (36, 28285), (38, 28294), (39, 28306), (44, 28336), (48, 28351), (53, 28378), (59, 28411), (65, 28438), (70, 28456), (74, 28477), (86, 28573), (89, 28591), (94, 28633), (96, 28639), (101, 28657),

Gene: Makoto\_22 Start: 19324, Stop: 19845, Start Num: 19

Candidate Starts for Makoto\_22:

(Start: 19 @19324 has 30 MA's), (Start: 21 @19327 has 9 MA's), (26, 19354), (33, 19381), (39, 19414), (49, 19462), (63, 19543), (67, 19561), (70, 19570), (72, 19582), (90, 19711), (103, 19792), (105,

19816),

Gene: MamaPearl\_22 Start: 19324, Stop: 19827, Start Num: 18

Candidate Starts for MamaPearl\_22:

(Start: 18 @19324 has 75 MA's), (26, 19354), (37, 19399), (39, 19414), (49, 19462), (63, 19543), (64, 19549), (67, 19561), (72, 19582), (100, 19762),

Gene: Maria1952\_22 Start: 19297, Stop: 19797, Start Num: 21

Candidate Starts for Maria1952\_22:

(Start: 21 @19297 has 9 MA's), (32, 19348), (39, 19384), (48, 19429), (49, 19432), (63, 19513), (67, 19531), (90, 19672), (104, 19765),

Gene: Maruru\_24 Start: 23469, Stop: 23924, Start Num: 20

Candidate Starts for Maruru\_24:

(Start: 20 @23469 has 12 MA's), (38, 23547), (62, 23679), (99, 23901),

Gene: Megan\_40 Start: 32577, Stop: 33014, Start Num: 8

Candidate Starts for Megan\_40:

(4, 32484), (Start: 8 @32577 has 81 MA's), (13, 32616), (Start: 14 @32622 has 3 MA's), (Start: 21 @32643 has 9 MA's), (23, 32649), (28, 32679), (30, 32685), (32, 32694), (38, 32718), (57, 32823), (60, 32841), (62, 32850), (70, 32880), (71, 32886),

Gene: MeganNoll\_26 Start: 20917, Stop: 21420, Start Num: 18

Candidate Starts for MeganNoll\_26:

(5, 20806), (6, 20827), (Start: 15 @20908 has 5 MA's), (Start: 18 @20917 has 75 MA's), (26, 20947), (28, 20956), (37, 20992), (39, 21007), (49, 21055), (63, 21136), (67, 21154), (72, 21175), (100, 21355), (103, 21376), (104, 21388),

Gene: Merry\_ Start: 33347, Stop: 33721, Start Num: 8

Candidate Starts for Merry\_:

(Start: 8 @33347 has 81 MA's), (12, 33380), (13, 33386), (Start: 14 @33392 has 3 MA's), (Start: 21 @33413 has 9 MA's), (27, 33443), (28, 33449), (31, 33461), (49, 33548), (60, 33611), (62, 33620), (71, 33656),

Gene: Metamorphoo\_47 Start: 32562, Stop: 32963, Start Num: 8

Candidate Starts for Metamorphoo\_47:

(Start: 8 @32562 has 81 MA's), (12, 32595), (Start: 21 @32625 has 9 MA's), (28, 32661), (32, 32676), (36, 32691), (41, 32727), (43, 32739), (57, 32805), (60, 32823), (62, 32832), (71, 32868), (83, 32955),

Gene: Misaeng\_26 Start: 20978, Stop: 21481, Start Num: 20

Candidate Starts for Misaeng\_26:

(Start: 15 @20966 has 5 MA's), (Start: 20 @20978 has 12 MA's), (35, 21044), (39, 21068), (67, 21215), (70, 21224), (72, 21236), (100, 21416),

Gene: Moki\_22 Start: 19317, Stop: 19835, Start Num: 19

Candidate Starts for Moki\_22:

(Start: 19 @19317 has 30 MA's), (26, 19344), (33, 19371), (39, 19404), (49, 19452), (63, 19533), (67, 19551), (70, 19560), (72, 19572), (90, 19701), (93, 19734), (100, 19761),

Gene: Mordred\_32 Start: 28215, Stop: 28685, Start Num: 18

Candidate Starts for Mordred\_32:

(Start: 18 @28215 has 75 MA's), (28, 28257), (33, 28275), (36, 28287), (38, 28296), (39, 28308), (44, 28338), (48, 28353), (53, 28380), (59, 28413), (65, 28440), (74, 28479), (86, 28575), (89, 28593), (94,

28635), (96, 28641), (101, 28659),

Gene: Morrigan\_27 Start: 20156, Stop: 20491, Start Num: 18

Candidate Starts for Morrigan\_27:

(7, 20090), (9, 20111), (Start: 17 @20153 has 1 MA's), (Start: 18 @20156 has 75 MA's), (32, 20213), (36, 20228), (42, 20273), (48, 20294), (57, 20342), (67, 20390), (71, 20405), (78, 20456),

Gene: MortySmith\_36 Start: 23859, Stop: 24260, Start Num: 8

Candidate Starts for MortySmith\_36:

(Start: 8 @23859 has 81 MA's), (10, 23883), (32, 23970), (43, 24033), (62, 24126), (71, 24162), (78, 24213), (80, 24219),

Gene: MoyaNatalis\_32 Start: 28218, Stop: 28688, Start Num: 18

Candidate Starts for MoyaNatalis\_32:

(Start: 18 @28218 has 75 MA's), (28, 28260), (33, 28278), (36, 28290), (38, 28299), (39, 28311), (44, 28341), (48, 28356), (53, 28383), (59, 28416), (65, 28443), (74, 28482), (86, 28578), (89, 28596), (94, 28638), (96, 28644), (101, 28662),

Gene: MrBoss\_26 Start: 20885, Stop: 21385, Start Num: 19

Candidate Starts for MrBoss\_26:

(Start: 19 @20885 has 30 MA's), (22, 20888), (26, 20912), (28, 20921), (39, 20972), (49, 21020), (58, 21074), (63, 21101), (67, 21119), (90, 21260), (104, 21353),

Gene: MrGloopy\_26 Start: 20851, Stop: 21354, Start Num: 18

Candidate Starts for MrGloopy\_26:

(5, 20740), (6, 20761), (Start: 15 @20842 has 5 MA's), (Start: 18 @20851 has 75 MA's), (26, 20881), (28, 20890), (39, 20941), (49, 20989), (63, 21070), (67, 21088), (72, 21109), (90, 21229), (100, 21289), (104, 21322),

Gene: Mufasa8\_25 Start: 23961, Stop: 24362, Start Num: 20

Candidate Starts for Mufasa8\_25:

(Start: 20 @23961 has 12 MA's), (88, 24318),

Gene: Nancia\_22 Start: 19328, Stop: 19849, Start Num: 19

Candidate Starts for Nancia\_22:

(Start: 19 @19328 has 30 MA's), (Start: 21 @19331 has 9 MA's), (26, 19358), (33, 19385), (39, 19418), (49, 19466), (63, 19547), (67, 19565), (70, 19574), (72, 19586), (90, 19715), (100, 19775), (105, 19820),

Gene: NarutoRun\_38 Start: 24796, Stop: 25197, Start Num: 8

Candidate Starts for NarutoRun\_38:

(Start: 8 @24796 has 81 MA's), (10, 24820), (32, 24907), (43, 24970), (62, 25063), (70, 25093), (71, 25099), (78, 25150), (80, 25156),

Gene: Neptune\_38 Start: 24796, Stop: 25197, Start Num: 8

Candidate Starts for Neptune\_38:

(Start: 8 @24796 has 81 MA's), (10, 24820), (32, 24907), (43, 24970), (62, 25063), (70, 25093), (71, 25099), (78, 25150), (80, 25156),

Gene: Nicole72\_41 Start: 33423, Stop: 33860, Start Num: 8

Candidate Starts for Nicole72\_41:

(Start: 8 @33423 has 81 MA's), (12, 33456), (28, 33525), (57, 33669), (60, 33687), (62, 33696), (68, 33720), (71, 33732), (85, 33837),

Gene: NoodlelyBoi\_46 Start: 32103, Stop: 32504, Start Num: 8

Candidate Starts for NoodlelyBoi\_46:

(3, 31980), (Start: 8 @32103 has 81 MA's), (28, 32202), (32, 32217), (36, 32232), (41, 32268), (43, 32280), (57, 32346), (60, 32364), (71, 32409),

Gene: Nubia\_26 Start: 20815, Stop: 21330, Start Num: 15

Candidate Starts for Nubia\_26:

(Start: 15 @20815 has 5 MA's), (Start: 20 @20827 has 12 MA's), (29, 20869), (35, 20893), (39, 20917), (51, 20977), (63, 21046), (67, 21064), (70, 21073), (72, 21085), (90, 21205), (91, 21214), (100, 21265),

Gene: OMalley\_22 Start: 19276, Stop: 19779, Start Num: 18

Candidate Starts for OMalley\_22:

(Start: 18 @19276 has 75 MA's), (26, 19306), (39, 19366), (43, 19393), (47, 19405), (49, 19414), (59, 19477), (62, 19492), (63, 19495), (64, 19501), (65, 19504), (67, 19513), (70, 19522), (90, 19654), (93, 19687), (100, 19714), (104, 19747),

Gene: OhDear\_38 Start: 24794, Stop: 25195, Start Num: 8

Candidate Starts for OhDear\_38:

(Start: 8 @24794 has 81 MA's), (10, 24818), (32, 24905), (43, 24968), (62, 25061), (71, 25097), (78, 25148), (80, 25154),

Gene: Onika\_45 Start: 31780, Stop: 32181, Start Num: 8

Candidate Starts for Onika\_45:

(3, 31657), (Start: 8 @31780 has 81 MA's), (28, 31879), (32, 31894), (36, 31909), (41, 31945), (46, 31966), (57, 32023), (60, 32041), (71, 32086),

Gene: OurGirlNessie\_22 Start: 19304, Stop: 19825, Start Num: 19

Candidate Starts for OurGirlNessie\_22:

(Start: 19 @19304 has 30 MA's), (Start: 21 @19307 has 9 MA's), (26, 19334), (33, 19361), (39, 19394), (49, 19442), (63, 19523), (67, 19541), (70, 19550), (72, 19562), (90, 19691), (105, 19796),

Gene: OverHedge\_38 Start: 24786, Stop: 25187, Start Num: 8

Candidate Starts for OverHedge\_38:

(Start: 8 @24786 has 81 MA's), (10, 24810), (32, 24897), (43, 24960), (62, 25053), (70, 25083), (71, 25089), (78, 25140), (80, 25146),

Gene: Oxynfrius\_26 Start: 20828, Stop: 21343, Start Num: 15

Candidate Starts for Oxynfrius\_26:

(Start: 15 @20828 has 5 MA's), (Start: 20 @20840 has 12 MA's), (35, 20906), (39, 20930), (51, 20990), (63, 21059), (67, 21077), (70, 21086), (72, 21098), (90, 21218), (91, 21227), (100, 21278),

Gene: PartyCup\_26 Start: 20932, Stop: 21432, Start Num: 19

Candidate Starts for PartyCup\_26:

(Start: 19 @20932 has 30 MA's), (22, 20935), (26, 20959), (28, 20968), (39, 21019), (49, 21067), (58, 21121), (63, 21148), (67, 21166), (90, 21307), (104, 21400),

Gene: Paschalis\_45 Start: 31787, Stop: 32188, Start Num: 8

Candidate Starts for Paschalis\_45:

(3, 31664), (Start: 8 @31787 has 81 MA's), (28, 31886), (32, 31901), (36, 31916), (41, 31952), (46, 31973), (57, 32030), (60, 32048), (71, 32093),

Gene: Penta\_25 Start: 18508, Stop: 18834, Start Num: 18

Candidate Starts for Penta\_25:

(Start: 18 @18508 has 75 MA's), (42, 18625), (54, 18676), (55, 18682), (70, 18751), (71, 18757), (78, 18808),

Gene: Pharpay\_38 Start: 24841, Stop: 25242, Start Num: 8

Candidate Starts for Pharpay\_38:

(Start: 8 @24841 has 81 MA's), (10, 24865), (32, 24952), (43, 25015), (62, 25108), (70, 25138), (71, 25144), (78, 25195), (80, 25201),

Gene: PhedwardCullen\_45 Start: 31538, Stop: 31939, Start Num: 8

Candidate Starts for PhedwardCullen\_45:

(3, 31415), (Start: 8 @31538 has 81 MA's), (28, 31637), (32, 31652), (36, 31667), (41, 31703), (46, 31724), (57, 31781), (60, 31799), (71, 31844),

Gene: Phorgeous\_45 Start: 31650, Stop: 32051, Start Num: 8

Candidate Starts for Phorgeous\_45:

(3, 31527), (Start: 8 @31650 has 81 MA's), (28, 31749), (32, 31764), (36, 31779), (41, 31815), (46, 31836), (57, 31893), (60, 31911), (71, 31956),

Gene: Phrancesco\_46 Start: 31940, Stop: 32341, Start Num: 8

Candidate Starts for Phrancesco\_46:

(3, 31817), (Start: 8 @31940 has 81 MA's), (28, 32039), (32, 32054), (36, 32069), (41, 32105), (46, 32126), (57, 32183), (60, 32201), (71, 32246),

Gene: PhunaPhoke\_38 Start: 24814, Stop: 25215, Start Num: 8

Candidate Starts for PhunaPhoke\_38:

(Start: 8 @24814 has 81 MA's), (10, 24838), (32, 24925), (43, 24988), (62, 25081), (70, 25111), (71, 25117), (78, 25168), (80, 25174),

Gene: PierreOrion\_46 Start: 31954, Stop: 32355, Start Num: 8

Candidate Starts for PierreOrion\_46:

(3, 31831), (Start: 8 @31954 has 81 MA's), (28, 32053), (32, 32068), (36, 32083), (41, 32119), (46, 32140), (57, 32197), (60, 32215), (71, 32260),

Gene: PinkFriday\_22 Start: 19339, Stop: 19839, Start Num: 21

Candidate Starts for PinkFriday\_22:

(Start: 21 @19339 has 9 MA's), (32, 19390), (35, 19402), (39, 19426), (43, 19453), (48, 19471), (59, 19537), (63, 19555), (67, 19573), (90, 19714), (100, 19774), (104, 19807),

Gene: PiperSansNom\_46 Start: 32094, Stop: 32495, Start Num: 8

Candidate Starts for PiperSansNom\_46:

(3, 31971), (Start: 8 @32094 has 81 MA's), (28, 32193), (32, 32208), (36, 32223), (41, 32259), (46, 32280), (57, 32337), (60, 32355), (71, 32400),

Gene: Piperis\_46 Start: 31773, Stop: 32174, Start Num: 8

Candidate Starts for Piperis\_46:

(3, 31650), (Start: 8 @31773 has 81 MA's), (28, 31872), (32, 31887), (36, 31902), (41, 31938), (46, 31959), (57, 32016), (60, 32034), (71, 32079),

Gene: PitaDog\_22 Start: 19315, Stop: 19836, Start Num: 19

Candidate Starts for PitaDog\_22:

(11, 19282), (Start: 19 @19315 has 30 MA's), (26, 19345), (33, 19372), (39, 19405), (49, 19453), (63, 19534), (67, 19552), (70, 19561), (72, 19573), (90, 19702), (100, 19762), (105, 19807),

Gene: Potatoes\_26 Start: 20913, Stop: 21416, Start Num: 18

Candidate Starts for Potatoes\_26:

(10, 20877), (Start: 15 @20904 has 5 MA's), (Start: 18 @20913 has 75 MA's), (26, 20943), (28, 20952), (39, 21003), (49, 21051), (63, 21132), (67, 21150), (72, 21171), (90, 21291), (100, 21351), (103, 21372), (104, 21384),

Gene: Potty\_38 Start: 24819, Stop: 25220, Start Num: 8

Candidate Starts for Potty\_38:

(Start: 8 @24819 has 81 MA's), (10, 24843), (32, 24930), (43, 24993), (62, 25086), (70, 25116), (71, 25122), (78, 25173), (80, 25179),

Gene: Poultress\_37 Start: 25165, Stop: 25566, Start Num: 8

Candidate Starts for Poultress\_37:

(Start: 8 @25165 has 81 MA's), (10, 25189), (32, 25276), (43, 25339), (62, 25432), (71, 25468), (78, 25519), (80, 25525),

Gene: Preamble\_22 Start: 19317, Stop: 19841, Start Num: 19

Candidate Starts for Preamble\_22:

(Start: 19 @19317 has 30 MA's), (26, 19344), (39, 19404), (49, 19452), (58, 19506), (63, 19533), (67, 19551), (72, 19572), (90, 19701), (93, 19734), (95, 19746), (97, 19752),

Gene: PrincessTrina\_32 Start: 28218, Stop: 28688, Start Num: 18

Candidate Starts for PrincessTrina\_32:

(Start: 18 @28218 has 75 MA's), (28, 28260), (33, 28278), (36, 28290), (38, 28299), (39, 28311), (44, 28341), (48, 28356), (53, 28383), (59, 28416), (65, 28443), (74, 28482), (86, 28578), (89, 28596), (94, 28638), (96, 28644), (101, 28662),

Gene: Pterodactyl\_22 Start: 19306, Stop: 19827, Start Num: 20

Candidate Starts for Pterodactyl\_22:

(Start: 20 @19306 has 12 MA's), (Start: 21 @19309 has 9 MA's), (26, 19336), (33, 19363), (39, 19396), (49, 19444), (63, 19525), (67, 19543), (70, 19552), (72, 19564), (90, 19693), (100, 19753), (105, 19798),

Gene: Pulchra\_47 Start: 32170, Stop: 32571, Start Num: 8

Candidate Starts for Pulchra\_47:

(1, 31786), (2, 31846), (3, 32047), (Start: 8 @32170 has 81 MA's), (28, 32269), (32, 32284), (36, 32299), (41, 32335), (46, 32356), (57, 32413), (60, 32431), (71, 32476),

Gene: Pumancara\_22 Start: 19321, Stop: 19821, Start Num: 21

Candidate Starts for Pumancara\_22:

(Start: 21 @19321 has 9 MA's), (32, 19372), (35, 19384), (39, 19408), (43, 19435), (48, 19453), (59, 19519), (63, 19537), (67, 19555), (90, 19696), (100, 19756), (104, 19789),

Gene: QuadZero\_26 Start: 18612, Stop: 18959, Start Num: 18

Candidate Starts for QuadZero\_26:

(Start: 18 @18612 has 75 MA's), (54, 18780), (71, 18861), (78, 18912),

Gene: Quhwah\_49 Start: 32402, Stop: 32803, Start Num: 8

Candidate Starts for Quhwah\_49:

(3, 32279), (Start: 8 @32402 has 81 MA's), (28, 32501), (32, 32516), (36, 32531), (41, 32567), (46, 32588), (57, 32645), (60, 32663), (71, 32708),

Gene: RAP15\_26 Start: 20917, Stop: 21420, Start Num: 18

Candidate Starts for RAP15\_26:

(5, 20806), (6, 20827), (Start: 15 @20908 has 5 MA's), (Start: 18 @20917 has 75 MA's), (26, 20947), (28, 20956), (37, 20992), (39, 21007), (49, 21055), (63, 21136), (67, 21154), (72, 21175), (100, 21355), (103, 21376), (104, 21388),

Gene: Rachella\_38 Start: 24822, Stop: 25223, Start Num: 8

Candidate Starts for Rachella\_38:

(Start: 8 @24822 has 81 MA's), (10, 24846), (32, 24933), (43, 24996), (62, 25089), (70, 25119), (71, 25125), (78, 25176), (80, 25182),

Gene: Ramiel05\_45 Start: 31805, Stop: 32206, Start Num: 8

Candidate Starts for Ramiel05\_45:

(3, 31682), (Start: 8 @31805 has 81 MA's), (28, 31904), (32, 31919), (36, 31934), (41, 31970), (46, 31991), (57, 32048), (60, 32066), (71, 32111),

Gene: RcigaStruga\_26 Start: 20875, Stop: 21378, Start Num: 20

Candidate Starts for RcigaStruga\_26:

(Start: 15 @20863 has 5 MA's), (Start: 20 @20875 has 12 MA's), (29, 20917), (35, 20941), (39, 20965), (67, 21112), (70, 21121), (72, 21133), (90, 21253), (91, 21262), (100, 21313),

Gene: Rie18\_38 Start: 24311, Stop: 24709, Start Num: 8

Candidate Starts for Rie18\_38:

(Start: 8 @24311 has 81 MA's), (10, 24335), (32, 24422), (43, 24485), (62, 24578), (68, 24602), (71, 24614),

Gene: Riovina\_22 Start: 19276, Stop: 19779, Start Num: 18

Candidate Starts for Riovina\_22:

(Start: 18 @19276 has 75 MA's), (26, 19306), (39, 19366), (43, 19393), (47, 19405), (49, 19414), (59, 19477), (62, 19492), (63, 19495), (64, 19501), (65, 19504), (67, 19513), (70, 19522), (90, 19654), (93, 19687), (100, 19714), (104, 19747),

Gene: Riverdale\_26 Start: 20847, Stop: 21350, Start Num: 18

Candidate Starts for Riverdale\_26:

(5, 20736), (6, 20757), (Start: 15 @20838 has 5 MA's), (Start: 18 @20847 has 75 MA's), (26, 20877), (28, 20886), (39, 20937), (49, 20985), (63, 21066), (67, 21084), (72, 21105), (90, 21225), (100, 21285), (104, 21318),

Gene: RobsFeet\_48 Start: 32843, Stop: 33244, Start Num: 8

Candidate Starts for RobsFeet\_48:

(Start: 8 @32843 has 81 MA's), (12, 32876), (Start: 21 @32906 has 9 MA's), (28, 32942), (36, 32972), (41, 33008), (43, 33020), (57, 33086), (60, 33104), (62, 33113), (71, 33149), (83, 33236),

Gene: Rockwell\_45 Start: 31805, Stop: 32206, Start Num: 8

Candidate Starts for Rockwell\_45:

(3, 31682), (Start: 8 @31805 has 81 MA's), (28, 31904), (32, 31919), (36, 31934), (41, 31970), (46, 31991), (57, 32048), (60, 32066), (71, 32111),

Gene: RosiePosie\_32 Start: 28218, Stop: 28688, Start Num: 18

Candidate Starts for RosiePosie\_32:

(Start: 18 @28218 has 75 MA's), (28, 28260), (33, 28278), (36, 28290), (38, 28299), (39, 28311), (44, 28341), (48, 28356), (53, 28383), (59, 28416), (65, 28443), (74, 28482), (86, 28578), (89, 28596), (94, 28638), (96, 28644), (101, 28662),

Gene: Rozby\_26 Start: 20848, Stop: 21351, Start Num: 18

Candidate Starts for Rozby\_26:

(5, 20737), (6, 20758), (Start: 15 @20839 has 5 MA's), (Start: 18 @20848 has 75 MA's), (26, 20878), (28, 20887), (39, 20938), (49, 20986), (63, 21067), (67, 21085), (72, 21106), (90, 21226), (100, 21286), (104, 21319),

Gene: Savage2526\_26 Start: 20911, Stop: 21414, Start Num: 18

Candidate Starts for Savage2526\_26:

(5, 20800), (6, 20821), (Start: 15 @20902 has 5 MA's), (Start: 18 @20911 has 75 MA's), (26, 20941), (28, 20950), (37, 20986), (39, 21001), (49, 21049), (63, 21130), (67, 21148), (72, 21169), (100, 21349), (103, 21370), (104, 21382),

Gene: Savannah\_45 Start: 31832, Stop: 32233, Start Num: 8

Candidate Starts for Savannah\_45:

(3, 31709), (Start: 8 @31832 has 81 MA's), (28, 31931), (32, 31946), (36, 31961), (41, 31997), (46, 32018), (57, 32075), (60, 32093), (71, 32138),

Gene: Scavito\_32 Start: 28215, Stop: 28685, Start Num: 18

Candidate Starts for Scavito\_32:

(Start: 18 @28215 has 75 MA's), (28, 28257), (33, 28275), (36, 28287), (38, 28296), (39, 28308), (44, 28338), (48, 28353), (53, 28380), (59, 28413), (65, 28440), (74, 28479), (86, 28575), (89, 28593), (94, 28635), (96, 28641), (101, 28659),

Gene: Schimmels22\_26 Start: 19037, Stop: 19360, Start Num: 18

Candidate Starts for Schimmels22\_26:

(Start: 18 @19037 has 75 MA's), (42, 19154), (54, 19205), (55, 19211), (70, 19280), (71, 19286),

Gene: Scissor2024\_26 Start: 18673, Stop: 18996, Start Num: 18

Candidate Starts for Scissor2024\_26:

(Start: 18 @18673 has 75 MA's), (42, 18790), (54, 18841), (55, 18847), (70, 18916), (71, 18922),

Gene: Scumberland\_47 Start: 32027, Stop: 32428, Start Num: 8

Candidate Starts for Scumberland\_47:

(3, 31904), (Start: 8 @32027 has 81 MA's), (28, 32126), (32, 32141), (36, 32156), (41, 32192), (46, 32213), (57, 32270), (60, 32288), (71, 32333),

Gene: Scuttle\_26 Start: 20916, Stop: 21419, Start Num: 18

Candidate Starts for Scuttle\_26:

(5, 20805), (6, 20826), (Start: 15 @20907 has 5 MA's), (Start: 18 @20916 has 75 MA's), (26, 20946), (28, 20955), (37, 20991), (39, 21006), (49, 21054), (61, 21129), (63, 21135), (67, 21153), (72, 21174), (90, 21294), (100, 21354), (103, 21375), (104, 21387),

Gene: Selwyn23\_47 Start: 32004, Stop: 32405, Start Num: 8

Candidate Starts for Selwyn23\_47:

(3, 31881), (Start: 8 @32004 has 81 MA's), (28, 32103), (32, 32118), (36, 32133), (41, 32169), (46, 32190), (57, 32247), (60, 32265), (71, 32310),

Gene: Sergei\_22 Start: 19297, Stop: 19797, Start Num: 21

Candidate Starts for Sergei\_22:

(Start: 21 @19297 has 9 MA's), (32, 19348), (39, 19384), (48, 19429), (49, 19432), (63, 19513), (67, 19531), (90, 19672), (104, 19765),

Gene: Shotgun\_45 Start: 31631, Stop: 32032, Start Num: 8

Candidate Starts for Shotgun\_45:

(3, 31508), (Start: 8 @31631 has 81 MA's), (28, 31730), (32, 31745), (36, 31760), (41, 31796), (46, 31817), (57, 31874), (60, 31892), (71, 31937),

Gene: Shrew\_41 Start: 15755, Stop: 16075, Start Num: 20

Candidate Starts for Shrew\_41:

(Start: 20 @15755 has 12 MA's), (31, 15806), (32, 15809), (36, 15824), (48, 15890), (60, 15956),

Gene: Shrubaron\_47 Start: 32477, Stop: 32878, Start Num: 8

Candidate Starts for Shrubaron\_47:

(Start: 8 @32477 has 81 MA's), (12, 32510), (Start: 21 @32540 has 9 MA's), (28, 32576), (32, 32591), (36, 32606), (41, 32642), (43, 32654), (57, 32720), (60, 32738), (62, 32747), (71, 32783), (83, 32870),

Gene: SilentWarrior\_37 Start: 23900, Stop: 24301, Start Num: 8

Candidate Starts for SilentWarrior\_37:

(Start: 8 @23900 has 81 MA's), (10, 23924), (32, 24011), (43, 24074), (62, 24167), (71, 24203), (78, 24254), (80, 24260),

Gene: SirFrank\_45 Start: 31673, Stop: 32074, Start Num: 8

Candidate Starts for SirFrank\_45:

(3, 31550), (Start: 8 @31673 has 81 MA's), (28, 31772), (32, 31787), (36, 31802), (41, 31838), (46, 31859), (57, 31916), (60, 31934), (71, 31979),

Gene: Skugga\_44 Start: 31449, Stop: 31862, Start Num: 8

Candidate Starts for Skugga\_44:

(Start: 8 @31449 has 81 MA's), (27, 31542), (28, 31548), (32, 31563), (38, 31587), (57, 31692), (60, 31710), (62, 31719), (68, 31743), (71, 31755),

Gene: Smarties\_54 Start: 33634, Stop: 34035, Start Num: 8

Candidate Starts for Smarties\_54:

(3, 33511), (Start: 8 @33634 has 81 MA's), (27, 33727), (28, 33733), (32, 33748), (36, 33763), (41, 33799), (55, 33865), (60, 33895), (62, 33904), (68, 33928), (71, 33940),

Gene: Snakehole\_38 Start: 23999, Stop: 24400, Start Num: 8

Candidate Starts for Snakehole\_38:

(Start: 8 @23999 has 81 MA's), (10, 24023), (32, 24110), (43, 24173), (62, 24266), (70, 24296), (71, 24302), (78, 24353), (80, 24359),

Gene: Sonali\_24 Start: 24016, Stop: 24471, Start Num: 19

Candidate Starts for Sonali\_24:

(Start: 19 @24016 has 30 MA's), (38, 24094), (62, 24226), (99, 24448),

Gene: Sunny\_ Start: 33349, Stop: 33723, Start Num: 8

Candidate Starts for Sunny\_:

(Start: 8 @33349 has 81 MA's), (12, 33382), (13, 33388), (Start: 14 @33394 has 3 MA's), (Start: 21 @33415 has 9 MA's), (27, 33445), (28, 33451), (31, 33463), (49, 33550), (60, 33613), (62, 33622), (71, 33658),

Gene: Sunshine23\_26 Start: 24033, Stop: 24488, Start Num: 19

Candidate Starts for Sunshine23\_26:

(Start: 19 @24033 has 30 MA's), (38, 24111), (62, 24243), (99, 24465),

Gene: Supakev\_22 Start: 19278, Stop: 19781, Start Num: 18

Candidate Starts for Supakev\_22:

(Start: 18 @19278 has 75 MA's), (26, 19308), (39, 19368), (43, 19395), (47, 19407), (49, 19416), (59, 19479), (62, 19494), (63, 19497), (64, 19503), (65, 19506), (67, 19515), (70, 19524), (90, 19656), (93, 19689), (100, 19716), (104, 19749),

Gene: Suppi\_26 Start: 20935, Stop: 21435, Start Num: 19

Candidate Starts for Suppi\_26:

(Start: 19 @20935 has 30 MA's), (22, 20938), (26, 20962), (28, 20971), (39, 21022), (49, 21070), (58, 21124), (63, 21151), (67, 21169), (90, 21310), (104, 21403),

Gene: TattModd\_26 Start: 20910, Stop: 21413, Start Num: 18

Candidate Starts for TattModd\_26:

(5, 20799), (6, 20820), (Start: 15 @20901 has 5 MA's), (Start: 18 @20910 has 75 MA's), (26, 20940), (28, 20949), (39, 21000), (49, 21048), (63, 21129), (67, 21147), (72, 21168), (90, 21288), (100, 21348), (104, 21381),

Gene: Teamocil\_47 Start: 31532, Stop: 31945, Start Num: 8

Candidate Starts for Teamocil\_47:

(Start: 8 @31532 has 81 MA's), (27, 31625), (28, 31631), (32, 31646), (42, 31706), (57, 31775), (60, 31793), (62, 31802), (68, 31826), (71, 31838),

Gene: Tedro\_38 Start: 24292, Stop: 24693, Start Num: 8

Candidate Starts for Tedro\_38:

(Start: 8 @24292 has 81 MA's), (10, 24316), (32, 24403), (43, 24466), (62, 24559), (70, 24589), (71, 24595), (78, 24646), (80, 24652),

Gene: Temper16\_22 Start: 19297, Stop: 19797, Start Num: 21

Candidate Starts for Temper16\_22:

(Start: 21 @19297 has 9 MA's), (32, 19348), (39, 19384), (48, 19429), (49, 19432), (63, 19513), (67, 19531), (90, 19672), (104, 19765),

Gene: Tiggy93\_38 Start: 24825, Stop: 25226, Start Num: 8

Candidate Starts for Tiggy93\_38:

(Start: 8 @24825 has 81 MA's), (10, 24849), (32, 24936), (43, 24999), (62, 25092), (70, 25122), (71, 25128), (78, 25179), (80, 25185),

Gene: Tinyman4\_26 Start: 18674, Stop: 19000, Start Num: 18

Candidate Starts for Tinyman4\_26:

(Start: 18 @18674 has 75 MA's), (42, 18791), (54, 18842), (55, 18848), (70, 18917), (71, 18923), (78, 18974),

Gene: Tongui\_37 Start: 24250, Stop: 24648, Start Num: 8

Candidate Starts for Tongui\_37:

(Start: 8 @24250 has 81 MA's), (10, 24274), (32, 24361), (43, 24424), (68, 24541), (71, 24553),

Gene: Tophat\_32 Start: 28217, Stop: 28687, Start Num: 18

Candidate Starts for Tophat\_32:

(Start: 18 @28217 has 75 MA's), (28, 28259), (33, 28277), (36, 28289), (38, 28298), (39, 28310), (44, 28340), (48, 28355), (53, 28382), (59, 28415), (65, 28442), (74, 28481), (86, 28577), (89, 28595), (94, 28637), (96, 28643), (101, 28661),

Gene: TwoBits\_26 Start: 18989, Stop: 19336, Start Num: 18

Candidate Starts for TwoBits\_26:

(Start: 18 @18989 has 75 MA's), (34, 19055), (54, 19157), (55, 19163), (71, 19238), (78, 19289),

Gene: Tyrumbra\_45 Start: 32643, Stop: 33044, Start Num: 8

Candidate Starts for Tyrumbra\_45:

(Start: 8 @32643 has 81 MA's), (12, 32676), (Start: 21 @32706 has 9 MA's), (28, 32742), (36, 32772), (41, 32808), (43, 32820), (57, 32886), (60, 32904), (62, 32913), (71, 32949), (83, 33036),

Gene: Urla\_22 Start: 19326, Stop: 19829, Start Num: 18

Candidate Starts for Urla\_22:

(Start: 18 @19326 has 75 MA's), (30, 19371), (39, 19416), (63, 19545), (65, 19554), (67, 19563), (72, 19584), (98, 19758), (100, 19764), (104, 19797),

Gene: ValentiniPuff\_79 Start: 47112, Stop: 47483, Start Num: 20

Candidate Starts for ValentiniPuff\_79:

(Start: 20 @47112 has 12 MA's), (24, 47127), (26, 47142), (32, 47166), (46, 47238), (50, 47259), (56, 47286), (62, 47322), (66, 47337), (81, 47442), (84, 47445),

Gene: Vallejo\_26 Start: 20849, Stop: 21352, Start Num: 18

Candidate Starts for Vallejo\_26:

(5, 20738), (6, 20759), (Start: 15 @20840 has 5 MA's), (Start: 18 @20849 has 75 MA's), (26, 20879), (28, 20888), (39, 20939), (49, 20987), (63, 21068), (67, 21086), (72, 21107), (90, 21227), (100, 21287), (104, 21320),

Gene: Vulture\_22 Start: 19276, Stop: 19779, Start Num: 18

Candidate Starts for Vulture\_22:

(Start: 18 @19276 has 75 MA's), (26, 19306), (39, 19366), (43, 19393), (47, 19405), (49, 19414), (59, 19477), (62, 19492), (63, 19495), (64, 19501), (65, 19504), (67, 19513), (70, 19522), (90, 19654), (93, 19687), (100, 19714), (104, 19747),

Gene: Wardwill\_28 Start: 18770, Stop: 19117, Start Num: 18

Candidate Starts for Wardwill\_28:

(Start: 18 @18770 has 75 MA's), (54, 18938), (71, 19019), (78, 19070),

Gene: Wawa\_26 Start: 20886, Stop: 21389, Start Num: 18

Candidate Starts for Wawa\_26:

(5, 20775), (6, 20796), (Start: 15 @20877 has 5 MA's), (Start: 18 @20886 has 75 MA's), (26, 20916), (28, 20925), (39, 20976), (49, 21024), (63, 21105), (67, 21123), (72, 21144), (90, 21264), (100, 21324), (104, 21357),

Gene: Wayne\_26 Start: 20981, Stop: 21481, Start Num: 19

Candidate Starts for Wayne\_26:

(Start: 19 @20981 has 30 MA's), (26, 21008), (28, 21017), (39, 21068), (49, 21116), (58, 21170), (63, 21197), (67, 21215), (90, 21356), (104, 21449),

Gene: WestPM\_25 Start: 18517, Stop: 18843, Start Num: 18

Candidate Starts for WestPM\_25:

(Start: 18 @18517 has 75 MA's), (42, 18634), (54, 18685), (55, 18691), (70, 18760), (71, 18766), (78, 18817),

Gene: WilliamStrong\_25 Start: 20264, Stop: 20584, Start Num: 18

Candidate Starts for WilliamStrong\_25:

(Start: 18 @20264 has 75 MA's), (32, 20321), (36, 20336), (42, 20381), (54, 20432), (57, 20450), (71, 20513), (75, 20537),

Gene: WonderBoy\_22 Start: 19305, Stop: 19826, Start Num: 19

Candidate Starts for WonderBoy\_22:

(Start: 19 @19305 has 30 MA's), (Start: 21 @19308 has 9 MA's), (33, 19362), (39, 19395), (49, 19443), (63, 19524), (67, 19542), (70, 19551), (72, 19563), (90, 19692), (100, 19752), (105, 19797),

Gene: Yeti\_46 Start: 31806, Stop: 32207, Start Num: 8

Candidate Starts for Yeti\_46:

(3, 31683), (Start: 8 @31806 has 81 MA's), (28, 31905), (32, 31920), (36, 31935), (41, 31971), (46, 31992), (57, 32049), (60, 32067), (71, 32112),

Gene: Zapato\_45 Start: 31952, Stop: 32347, Start Num: 8

Candidate Starts for Zapato\_45:

(Start: 8 @31952 has 81 MA's), (12, 31985), (27, 32045), (28, 32051), (32, 32066), (42, 32126), (55, 32183), (57, 32195), (60, 32213), (62, 32222), (68, 32246), (71, 32258),

Gene: Zayuliv\_26 Start: 19198, Stop: 19545, Start Num: 18

Candidate Starts for Zayuliv\_26:

(Start: 18 @19198 has 75 MA's), (54, 19366), (71, 19447), (78, 19498),

Gene: Zepp\_27 Start: 18596, Stop: 18943, Start Num: 18

Candidate Starts for Zepp\_27:

(Start: 18 @18596 has 75 MA's), (54, 18764), (71, 18845), (78, 18896),

Gene: Zorro\_26 Start: 20865, Stop: 21368, Start Num: 18

Candidate Starts for Zorro\_26:

(5, 20754), (6, 20775), (Start: 15 @20856 has 5 MA's), (Start: 18 @20865 has 75 MA's), (26, 20895), (28, 20904), (35, 20931), (39, 20955), (49, 21003), (63, 21084), (67, 21102), (72, 21123), (90, 21243), (100, 21303), (104, 21336),