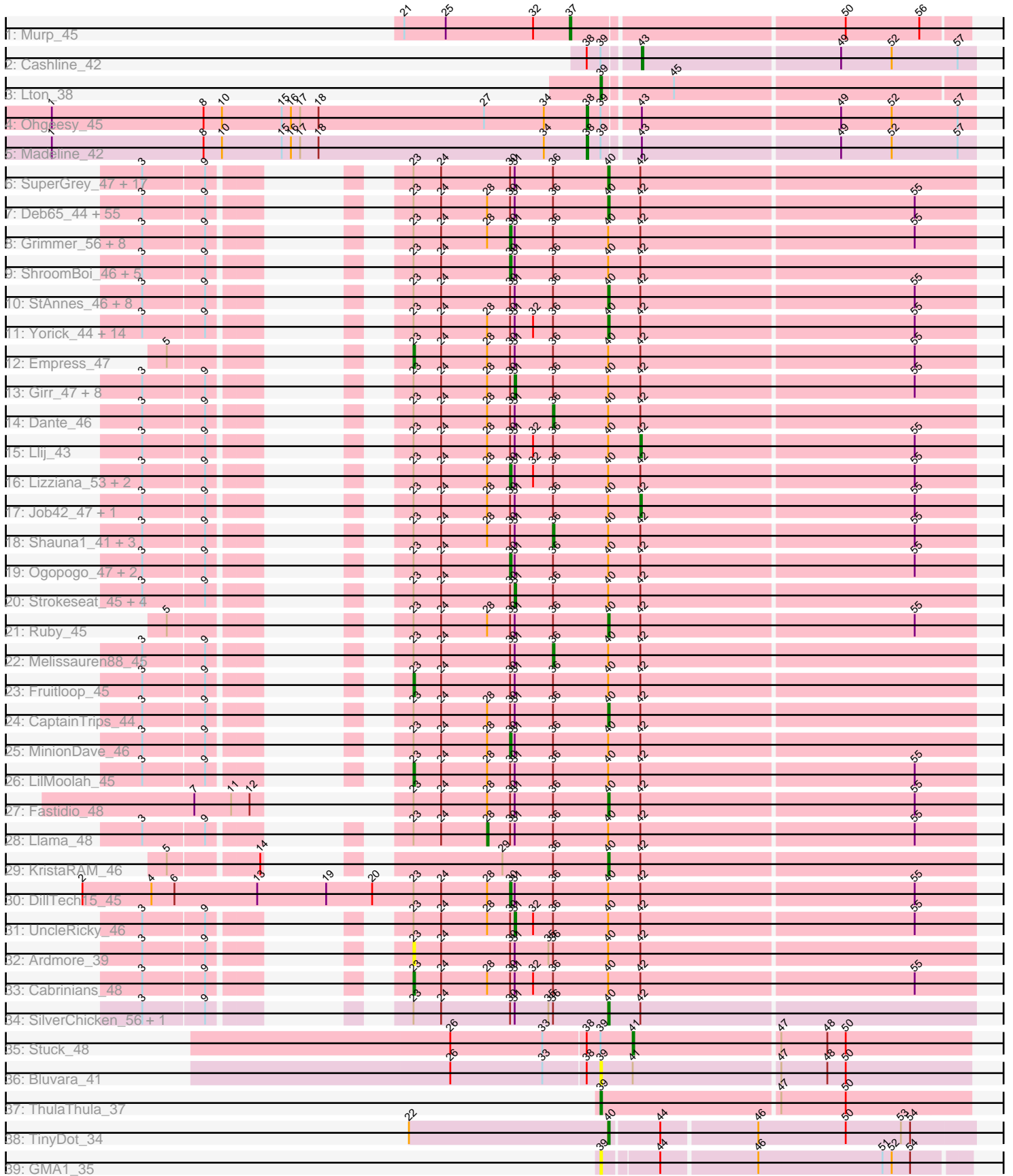


Pham 308163



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 308163 Report

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

Pham number 308163 has 167 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Murp\_45
- Track 2 : Cashline\_42
- Track 3 : Lton\_38
- Track 4 : Ohgeesy\_45
- Track 5 : Madeline\_42
- Track 6 : SuperGrey\_47, Bobi\_49, MilanaBonita\_40, Corium\_44, Doomslug\_54, XFactor\_45, Cornucopia\_50, KingJulian\_45, Akhila\_40, Beakin\_48, Emma\_47, Phalconet\_45, Galactic\_46, PatoPoderoso\_44, Ms6\_40, Enby\_48, Okabe\_42, Lorde\_48
- Track 7 : Deb65\_44, Dorothy\_43, Doomphist\_46, Leozinho\_46, Boomer\_49, SassyB\_42, Mwanjiwa\_52, Plumbus\_46, Spoonbill\_46, Topiatin\_51, Ochi17\_46, Nimbo\_43, Estave1\_47, Leperchaun\_41, PopTart\_42, Pollywog\_45, Kenuha5\_42, Nitzel\_42, Modragons\_47, JoeyJr\_44, Daenerys\_43, Whouxphf\_45, SimranZ1\_46, Rockne\_44, Kersh\_47, Phasih\_44, Ibhubesi\_47, Chuckly\_46, Latretium\_49, Blarby\_57, PHappiness\_44, MadMen\_41, Hegedechwinu\_45, ArcusAngelus\_50, Eradicator\_38, Eish\_47, Madiba\_42, Peridot\_50, Stap\_45, Tootsieroll\_48, Zerg\_45, Inventum\_43, Tchotchke\_48, Geralt\_44, RitaG\_44, LittleShirley\_46, Juice456\_48, BodEinwohner17\_45, Beanstalk\_49, AlpineSix\_48, Polka14\_45, Sparkdehlily\_49, Taj\_48, Pacc40\_43, Minnie\_49, RockyHorror\_47
- Track 8 : Grimmer\_56, KingMidas\_48, TDanisky\_49, Poenanya\_46, Rita\_47, BlueCrab\_44, Krakatau\_44, Seagreen\_47, OlympiaSaint\_46
- Track 9 : ShroomBoi\_46, EleanorGeorge\_44, LunaBlu\_49, Flathead\_47, Mandlovu\_44, Ovechkin\_44
- Track 10 : StAnnes\_46, Medindi\_44, Filuzino\_44, DaWorst\_48, Batiatus\_46, IMpilo\_45, DLane\_44, Cheesepuff\_52, Jant\_51
- Track 11 : Yorick\_44, DirtMcgirt\_45, Martik\_47, Jarcob\_47, Drago\_45, Blexus\_44, ShowerHandel\_49, NormanBulbieJr\_48, Koella\_41, Priscilla\_47, ShiLan\_47, Lucia\_45, Crumble\_42, Burwell21\_46, Phatniss\_44
- Track 12 : Empress\_47
- Track 13 : Girr\_47, RedBird\_43, Jinglebell\_48, Scottish\_47, Sassafras\_46, Chevrolet\_53, MisterCuddles\_46, Sebastian\_48, OfUltron\_48
- Track 14 : Dante\_46
- Track 15 : Llij\_43
- Track 16 : Lizziana\_53, FreddyB\_47, DoRead\_48
- Track 17 : Job42\_47, PMC\_41
- Track 18 : Shauna1\_41, Renaud18\_49, Marker\_47, Mozy\_55
- Track 19 : Ogotogo\_47, Mova\_47, Guppsters\_47

- Track 20 : Strokeseat\_45, VRedHorse\_47, PhesterPhotato\_48, Hlubikazi\_44, SG4\_45
- Track 21 : Ruby\_45
- Track 22 : Melissauren88\_45
- Track 23 : Fruitloop\_45
- Track 24 : CaptainTrips\_44
- Track 25 : MinionDave\_46
- Track 26 : LilMoolah\_45
- Track 27 : Fastidio\_48
- Track 28 : Llama\_48
- Track 29 : KristaRAM\_46
- Track 30 : DillTech15\_45
- Track 31 : UncleRicky\_46
- Track 32 : Ardmore\_39
- Track 33 : Cabrinians\_48
- Track 34 : SilverChicken\_56, Brushbloom\_49
- Track 35 : Stuck\_48
- Track 36 : Bluvara\_41
- Track 37 : ThulaThula\_37
- Track 38 : TinyDot\_34
- Track 39 : GMA1\_35

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

The start number called the most often in the published annotations is 40, it was called in 90 of the 148 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Akhila\_40, AlpineSix\_48, ArcusAngelus\_50, Batiatus\_46, Beakin\_48, Beanstalk\_49, Blarby\_57, Blexus\_44, Bobi\_49, BodEinwohner17\_45, Boomer\_49, Brushbloom\_49, Burwell21\_46, CaptainTrips\_44, CheesePuff\_52, Chuckly\_46, Corium\_44, Cornucopia\_50, Crumble\_42, DLane\_44, DaWorst\_48, Daenerys\_43, Deb65\_44, DirtMcGirt\_45, Doomphist\_46, Doomslug\_54, Dorothy\_43, Drago\_45, Eish\_47, Emma\_47, Enby\_48, Eradicator\_38, Estave1\_47, Fastidio\_48, Filuzino\_44, Galactic\_46, Geralt\_44, Hegedechwinu\_45, IMpilo\_45, Ibhubesi\_47, Inventum\_43, Jant\_51, Jarcob\_47, JoeyJr\_44, Juice456\_48, Kenuha5\_42, Kersh\_47, KingJulian\_45, Koella\_41, KristaRAM\_46, Latretium\_49, Leozinho\_46, Leperchaun\_41, LittleShirley\_46, Lorde\_48, Lucia\_45, MadMen\_41, Madiba\_42, Martik\_47, Medindi\_44, MilanaBonita\_40, Minnie\_49, Modragons\_47, Ms6\_40, Mwanjiwa\_52, Nimbo\_43, Nitzel\_42, NormanBulbieJr\_48, Ochi17\_46, Okabe\_42, PHappiness\_44, Pacc40\_43, PatoPoderoso\_44, Peridot\_50, Phalconet\_45, Phasih\_44, Phatniss\_44, Plumbus\_46, Polka14\_45, Pollywog\_45, PopTart\_42, Priscilla\_47, RitaG\_44, Rockne\_44, RockyHorror\_47, Ruby\_45, SassyB\_42, ShiLan\_47, ShowerHandel\_49, SilverChicken\_56, SimranZ1\_46, Sparkdehlily\_49, Spoonbill\_46, StAnnes\_46, Stap\_45, SuperGrey\_47, Taj\_48, Tchotchke\_48, TinyDot\_34, Tootsieroll\_48, Topiatin\_51, Whouxphf\_45, XFactor\_45, Yorick\_44, Zerg\_45,

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

- Ardmore\_39, BlueCrab\_44, Cabrinians\_48, Chevrolet\_53, Dante\_46, DillTech15\_45, DoRead\_48, EleanorGeorge\_44, Empress\_47, Flathead\_47, FreddyB\_47, Fruitloop\_45, Girr\_47, Grimmer\_56, Guppsters\_47, Hlubikazi\_44, Jinglebell\_48, Job42\_47, KingMidas\_48, Krakatau\_44, LilMoolah\_45, Lizziana\_53, Llama\_48, Llij\_43, LunaBlu\_49, Mandlovu\_44, Marker\_47, Melissauren88\_45, MinionDave\_46, MisterCuddles\_46, Mova\_47, Mozy\_55, OfUltron\_48, Ogopogo\_47, OlympiaSaint\_46, Ovechkin\_44, PMC\_41, PhesterPhotato\_48, Poenanya\_46, RedBird\_43, Renaud18\_49, Rita\_47, SG4\_45, Sassafras\_46, Scottish\_47, Seabastian\_48, Seagreen\_47, Shauna1\_41, ShroomBoi\_46, Strokeseat\_45, TDanisky\_49, UncleRicky\_46, VRedHorse\_47,

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

- Bluvara\_41, Cashline\_42, GMA1\_35, Lton\_38, Madeline\_42, Murp\_45, Ohgeesy\_45, Stuck\_48, ThulaThula\_37,

### Summary by start number:

Start 23:

- Found in 156 of 167 ( 93.4% ) of genes in pham
- Manual Annotations of this start: 4 of 148
- Called 3.2% of time when present
- Phage (with cluster) where this start called: Ardmore\_39 (F1), Cabrinians\_48 (F1), Empress\_47 (F1), Fruitloop\_45 (F1), LilMoolah\_45 (F1),

Start 28:

- Found in 110 of 167 ( 65.9% ) of genes in pham
- Manual Annotations of this start: 1 of 148
- Called 0.9% of time when present
- Phage (with cluster) where this start called: Llama\_48 (F1),

Start 30:

- Found in 156 of 167 ( 93.4% ) of genes in pham
- Manual Annotations of this start: 22 of 148
- Called 14.7% of time when present
- Phage (with cluster) where this start called: BlueCrab\_44 (F1), DillTech15\_45 (F1), DoRead\_48 (F1), EleanorGeorge\_44 (F1), Flathead\_47 (F1), FreddyB\_47 (F1), Grimmer\_56 (F1), Guppsters\_47 (F1), KingMidas\_48 (F1), Krakatau\_44 (F1), Lizziana\_53 (F1), LunaBlu\_49 (F1), Mandlovu\_44 (F1), MinionDave\_46 (F1), Mova\_47 (F1), Ogopogo\_47 (F1), OlympiaSaint\_46 (F1), Ovechkin\_44 (F1), Poenanya\_46 (F1), Rita\_47 (F1), Seagreen\_47 (F1), ShroomBoi\_46 (F1), TDanisky\_49 (F1),

Start 31:

- Found in 156 of 167 ( 93.4% ) of genes in pham
- Manual Annotations of this start: 15 of 148
- Called 9.6% of time when present
- Phage (with cluster) where this start called: Chevrolet\_53 (F1), Girr\_47 (F1), Hlubikazi\_44 (F1), Jinglebell\_48 (F1), MisterCuddles\_46 (F1), OfUltron\_48 (F1), PhesterPhotato\_48 (F1), RedBird\_43 (F1), SG4\_45 (F1), Sassafras\_46 (F1), Scottish\_47 (F1), Seabastian\_48 (F1), Strokeseat\_45 (F1), UncleRicky\_46 (F1), VRedHorse\_47 (F1),

Start 36:

- Found in 157 of 167 ( 94.0% ) of genes in pham
- Manual Annotations of this start: 6 of 148
- Called 3.8% of time when present
- Phage (with cluster) where this start called: Dante\_46 (F1), Marker\_47 (F1), Melissauraen88\_45 (F1), Mozy\_55 (F1), Renaud18\_49 (F4), Shauna1\_41 (F1),

#### Start 37:

- Found in 1 of 167 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 148
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Murp\_45 (CV),

#### Start 38:

- Found in 5 of 167 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 2 of 148
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Madeline\_42 (CZ1), Ohgeesy\_45 (CZ),

#### Start 39:

- Found in 8 of 167 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 2 of 148
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Bluvara\_41 (I3), GMA1\_35 (singleton), Lton\_38 (CZ), ThulaThula\_37 (P5),

#### Start 40:

- Found in 158 of 167 ( 94.6% ) of genes in pham
- Manual Annotations of this start: 90 of 148
- Called 66.5% of time when present
- Phage (with cluster) where this start called: Akhila\_40 (F1), AlpineSix\_48 (F1), ArcusAngelus\_50 (F1), Batiatus\_46 (F1), Beakin\_48 (F1), Beanstalk\_49 (F1), Blarby\_57 (F), Blexus\_44 (F1), Bobi\_49 (F1), BodEinwohner17\_45 (F1), Boomer\_49 (F1), Brushbloom\_49 (F1), Burwell21\_46 (F1), CaptainTrips\_44 (F1), CheesePuff\_52 (F1), Chuckly\_46 (F1), Corium\_44 (F1), Cornucopia\_50 (F1), Crumble\_42 (F1), DLane\_44 (F1), DaWorst\_48 (F1), Daenerys\_43 (F1), Deb65\_44 (F1), DirtMcGirt\_45 (F1), Doomphist\_46 (F1), Doomslug\_54 (F), Dorothy\_43 (F1), Drago\_45 (F1), Eish\_47 (F1), Emma\_47 (F1), Enby\_48 (F1), Eradicator\_38 (F1), Estave1\_47 (F1), Fastidio\_48 (F1), Filuzino\_44 (F1), Galactic\_46 (F1), Geralt\_44 (F1), Hegedechwinu\_45 (F1), IMpilo\_45 (F1), Ibhubesi\_47 (F1), Inventum\_43 (F1), Jant\_51 (F1), Jarcob\_47 (F1), JoeyJr\_44 (F1), Juice456\_48 (F1), Kenuha5\_42 (F1), Kersh\_47 (F1), KingJulian\_45 (F1), Koella\_41 (F1), KristaRAM\_46 (F1), Latretium\_49 (F1), Leozinho\_46 (F1), Leperchaun\_41 (F1), LittleShirley\_46 (F1), Lorde\_48 (F1), Lucia\_45 (F1), MadMen\_41 (F1), Madiba\_42 (F1), Martik\_47 (F1), Medindi\_44 (F1), MilanaBonita\_40 (F1), Minnie\_49 (F1), Modragons\_47 (F1), Ms6\_40 (F1), Mwanjiwa\_52 (F1), Nimbo\_43 (F1), Nitzel\_42 (F1), NormanBulbieJr\_48 (F1), Ochi17\_46 (F1), Okabe\_42 (F8), PHappiness\_44 (F1), Pacc40\_43 (F1), PatoPoderoso\_44 (F1), Peridot\_50 (F1), Phalconet\_45 (F1), Phasih\_44 (F1), Phatniss\_44 (F1), Plumbus\_46 (F1), Polka14\_45 (F1), Pollywog\_45 (F1), PopTart\_42 (F1), Priscilla\_47 (F1), RitaG\_44 (F1), Rockne\_44 (F1), RockyHorror\_47 (F1), Ruby\_45 (F1), SassyB\_42 (F1), ShiLan\_47 (F1), ShowerHandel\_49 (F1), SilverChicken\_56 (F2), SimranZ1\_46 (F1), Sparkdehlily\_49 (F1), Spoonbill\_46 (F1), StAnnes\_46 (F1), Stap\_45 (F1), SuperGrey\_47 (F1), Taj\_48 (F1), Tchotchke\_48 (F1), TinyDot\_34 (singleton), Tootsieroll\_48 (F1), Topiatin\_51 (F1), Whouxphf\_45 (F1),

XFactor\_45 (F1), Yorick\_44 (F1), Zerg\_45 (F1),

Start 41:

- Found in 2 of 167 ( 1.2% ) of genes in pham
- Manual Annotations of this start: 1 of 148
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Stuck\_48 (I2),

Start 42:

- Found in 157 of 167 ( 94.0% ) of genes in pham
- Manual Annotations of this start: 3 of 148
- Called 1.9% of time when present
- Phage (with cluster) where this start called: Job42\_47 (F1), Llij\_43 (F1), PMC\_41 (F1),

Start 43:

- Found in 3 of 167 ( 1.8% ) of genes in pham
- Manual Annotations of this start: 1 of 148
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Cashline\_42 (CY6),

### **Summary by clusters:**

There are 13 clusters represented in this pham: F1, singleton, I2, F4, CY6, F, F8, I3, CZ1, F2, CZ, CV, P5,

Info for manual annotations of cluster CV:

- Start number 37 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CY6:

- Start number 43 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CZ:

- Start number 38 was manually annotated 1 time for cluster CZ.
- Start number 39 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 38 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster F1:

- Start number 23 was manually annotated 4 times for cluster F1.
- Start number 28 was manually annotated 1 time for cluster F1.
- Start number 30 was manually annotated 22 times for cluster F1.
- Start number 31 was manually annotated 15 times for cluster F1.
- Start number 36 was manually annotated 5 times for cluster F1.
- Start number 40 was manually annotated 89 times for cluster F1.
- Start number 42 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster F4:

- Start number 36 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster I2:

- Start number 41 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster P5:

- Start number 39 was manually annotated 1 time for cluster P5.

### **Gene Information:**

Gene: Akhila\_40 Start: 31759, Stop: 31992, Start Num: 40

Candidate Starts for Akhila\_40:

(3, 31540), (9, 31579), (Start: 23 @31633 has 4 MA's), (24, 31651), (Start: 30 @31696 has 22 MA's), (Start: 31 @31699 has 15 MA's), (Start: 36 @31723 has 6 MA's), (Start: 40 @31759 has 90 MA's), (Start: 42 @31780 has 3 MA's),

Gene: AlpineSix\_48 Start: 35971, Stop: 36204, Start Num: 40

Candidate Starts for AlpineSix\_48:

(3, 35752), (9, 35791), (Start: 23 @35845 has 4 MA's), (24, 35863), (Start: 28 @35893 has 1 MA's), (Start: 30 @35908 has 22 MA's), (Start: 31 @35911 has 15 MA's), (Start: 36 @35935 has 6 MA's), (Start: 40 @35971 has 90 MA's), (Start: 42 @35992 has 3 MA's), (55, 36166),

Gene: ArcusAngelus\_50 Start: 37109, Stop: 37342, Start Num: 40

Candidate Starts for ArcusAngelus\_50:

(3, 36890), (9, 36929), (Start: 23 @36983 has 4 MA's), (24, 37001), (Start: 28 @37031 has 1 MA's), (Start: 30 @37046 has 22 MA's), (Start: 31 @37049 has 15 MA's), (Start: 36 @37073 has 6 MA's), (Start: 40 @37109 has 90 MA's), (Start: 42 @37130 has 3 MA's), (55, 37304),

Gene: Ardmore\_39 Start: 33409, Stop: 33768, Start Num: 23

Candidate Starts for Ardmore\_39:

(3, 33316), (9, 33355), (Start: 23 @33409 has 4 MA's), (24, 33427), (Start: 30 @33472 has 22 MA's), (Start: 31 @33475 has 15 MA's), (35, 33496), (Start: 36 @33499 has 6 MA's), (Start: 40 @33535 has 90 MA's), (Start: 42 @33556 has 3 MA's),

Gene: Batiatus\_46 Start: 35791, Stop: 36024, Start Num: 40

Candidate Starts for Batiatus\_46:

(3, 35572), (9, 35611), (Start: 23 @35665 has 4 MA's), (24, 35683), (Start: 30 @35728 has 22 MA's), (Start: 31 @35731 has 15 MA's), (Start: 36 @35755 has 6 MA's), (Start: 40 @35791 has 90 MA's), (Start: 42 @35812 has 3 MA's), (55, 35986),

Gene: Beakin\_48 Start: 34844, Stop: 35077, Start Num: 40

Candidate Starts for Beakin\_48:

(3, 34625), (9, 34664), (Start: 23 @34718 has 4 MA's), (24, 34736), (Start: 30 @34781 has 22 MA's), (Start: 31 @34784 has 15 MA's), (Start: 36 @34808 has 6 MA's), (Start: 40 @34844 has 90 MA's), (Start: 42 @34865 has 3 MA's),

Gene: Beanstalk\_49 Start: 34471, Stop: 34704, Start Num: 40

Candidate Starts for Beanstalk\_49:

(3, 34252), (9, 34291), (Start: 23 @34345 has 4 MA's), (24, 34363), (Start: 28 @34393 has 1 MA's), (Start: 30 @34408 has 22 MA's), (Start: 31 @34411 has 15 MA's), (Start: 36 @34435 has 6 MA's), (Start: 40 @34471 has 90 MA's), (Start: 42 @34492 has 3 MA's), (55, 34666),

Gene: Blarby\_57 Start: 35522, Stop: 35755, Start Num: 40

Candidate Starts for Blarby\_57:

(3, 35303), (9, 35342), (Start: 23 @35396 has 4 MA's), (24, 35414), (Start: 28 @35444 has 1 MA's), (Start: 30 @35459 has 22 MA's), (Start: 31 @35462 has 15 MA's), (Start: 36 @35486 has 6 MA's), (Start: 40 @35522 has 90 MA's), (Start: 42 @35543 has 3 MA's), (55, 35717),

Gene: Blexus\_44 Start: 34840, Stop: 35073, Start Num: 40

Candidate Starts for Blexus\_44:

(3, 34621), (9, 34660), (Start: 23 @34714 has 4 MA's), (24, 34732), (Start: 28 @34762 has 1 MA's), (Start: 30 @34777 has 22 MA's), (Start: 31 @34780 has 15 MA's), (32, 34792), (Start: 36 @34804 has 6 MA's), (Start: 40 @34840 has 90 MA's), (Start: 42 @34861 has 3 MA's), (55, 35035),

Gene: BlueCrab\_44 Start: 34503, Stop: 34799, Start Num: 30

Candidate Starts for BlueCrab\_44:

(3, 34347), (9, 34386), (Start: 23 @34440 has 4 MA's), (24, 34458), (Start: 28 @34488 has 1 MA's), (Start: 30 @34503 has 22 MA's), (Start: 31 @34506 has 15 MA's), (Start: 36 @34530 has 6 MA's), (Start: 40 @34566 has 90 MA's), (Start: 42 @34587 has 3 MA's), (55, 34761),

Gene: Bluvara\_41 Start: 33376, Stop: 33612, Start Num: 39

Candidate Starts for Bluvara\_41:

(26, 33280), (33, 33340), (Start: 38 @33367 has 2 MA's), (Start: 39 @33376 has 2 MA's), (Start: 41 @33397 has 1 MA's), (47, 33490), (48, 33520), (50, 33532),

Gene: Bobi\_49 Start: 36534, Stop: 36767, Start Num: 40

Candidate Starts for Bobi\_49:

(3, 36315), (9, 36354), (Start: 23 @36408 has 4 MA's), (24, 36426), (Start: 30 @36471 has 22 MA's), (Start: 31 @36474 has 15 MA's), (Start: 36 @36498 has 6 MA's), (Start: 40 @36534 has 90 MA's), (Start: 42 @36555 has 3 MA's),

Gene: BodEinwohner17\_45 Start: 34782, Stop: 35015, Start Num: 40

Candidate Starts for BodEinwohner17\_45:

(3, 34563), (9, 34602), (Start: 23 @34656 has 4 MA's), (24, 34674), (Start: 28 @34704 has 1 MA's), (Start: 30 @34719 has 22 MA's), (Start: 31 @34722 has 15 MA's), (Start: 36 @34746 has 6 MA's), (Start: 40 @34782 has 90 MA's), (Start: 42 @34803 has 3 MA's), (55, 34977),

Gene: Boomer\_49 Start: 36015, Stop: 36248, Start Num: 40

Candidate Starts for Boomer\_49:

(3, 35796), (9, 35835), (Start: 23 @35889 has 4 MA's), (24, 35907), (Start: 28 @35937 has 1 MA's), (Start: 30 @35952 has 22 MA's), (Start: 31 @35955 has 15 MA's), (Start: 36 @35979 has 6 MA's), (Start: 40 @36015 has 90 MA's), (Start: 42 @36036 has 3 MA's), (55, 36210),

Gene: Brushbloom\_49 Start: 35484, Stop: 35717, Start Num: 40

Candidate Starts for Brushbloom\_49:

(3, 35265), (9, 35304), (Start: 23 @35358 has 4 MA's), (24, 35376), (Start: 30 @35421 has 22 MA's), (Start: 31 @35424 has 15 MA's), (35, 35445), (Start: 36 @35448 has 6 MA's), (Start: 40 @35484 has 90 MA's), (Start: 42 @35505 has 3 MA's),

Gene: Burwell21\_46 Start: 36047, Stop: 36280, Start Num: 40

Candidate Starts for Burwell21\_46:

(3, 35828), (9, 35867), (Start: 23 @35921 has 4 MA's), (24, 35939), (Start: 28 @35969 has 1 MA's), (Start: 30 @35984 has 22 MA's), (Start: 31 @35987 has 15 MA's), (32, 35999), (Start: 36 @36011 has 6 MA's), (Start: 40 @36047 has 90 MA's), (Start: 42 @36068 has 3 MA's), (55, 36242),

Gene: Cabrinians\_48 Start: 35999, Stop: 36358, Start Num: 23

Candidate Starts for Cabrinians\_48:

(3, 35906), (9, 35945), (Start: 23 @35999 has 4 MA's), (24, 36017), (Start: 28 @36047 has 1 MA's), (Start: 30 @36062 has 22 MA's), (Start: 31 @36065 has 15 MA's), (32, 36077), (Start: 36 @36089 has 6 MA's), (Start: 40 @36125 has 90 MA's), (Start: 42 @36146 has 3 MA's), (55, 36320),

Gene: CaptainTrips\_44 Start: 34967, Stop: 35200, Start Num: 40

Candidate Starts for CaptainTrips\_44:

(3, 34748), (9, 34787), (Start: 23 @34841 has 4 MA's), (24, 34859), (Start: 28 @34889 has 1 MA's), (Start: 30 @34904 has 22 MA's), (Start: 31 @34907 has 15 MA's), (Start: 36 @34931 has 6 MA's), (Start: 40 @34967 has 90 MA's), (Start: 42 @34988 has 3 MA's),

Gene: Cashline\_42 Start: 35028, Stop: 35240, Start Num: 43

Candidate Starts for Cashline\_42:

(Start: 38 @34998 has 2 MA's), (Start: 39 @35007 has 2 MA's), (Start: 43 @35028 has 1 MA's), (49, 35154), (52, 35187), (57, 35229),

Gene: Cheese puff\_52 Start: 37007, Stop: 37240, Start Num: 40

Candidate Starts for Cheese puff\_52:

(3, 36788), (9, 36827), (Start: 23 @36881 has 4 MA's), (24, 36899), (Start: 30 @36944 has 22 MA's), (Start: 31 @36947 has 15 MA's), (Start: 36 @36971 has 6 MA's), (Start: 40 @37007 has 90 MA's), (Start: 42 @37028 has 3 MA's), (55, 37202),

Gene: Chevrolet\_53 Start: 37050, Stop: 37343, Start Num: 31

Candidate Starts for Chevrolet\_53:

(3, 36891), (9, 36930), (Start: 23 @36984 has 4 MA's), (24, 37002), (Start: 28 @37032 has 1 MA's), (Start: 30 @37047 has 22 MA's), (Start: 31 @37050 has 15 MA's), (Start: 36 @37074 has 6 MA's), (Start: 40 @37110 has 90 MA's), (Start: 42 @37131 has 3 MA's), (55, 37305),

Gene: Chuckly\_46 Start: 34810, Stop: 35043, Start Num: 40

Candidate Starts for Chuckly\_46:

(3, 34591), (9, 34630), (Start: 23 @34684 has 4 MA's), (24, 34702), (Start: 28 @34732 has 1 MA's), (Start: 30 @34747 has 22 MA's), (Start: 31 @34750 has 15 MA's), (Start: 36 @34774 has 6 MA's), (Start: 40 @34810 has 90 MA's), (Start: 42 @34831 has 3 MA's), (55, 35005),

Gene: Corium\_44 Start: 35056, Stop: 35289, Start Num: 40

Candidate Starts for Corium\_44:

(3, 34837), (9, 34876), (Start: 23 @34930 has 4 MA's), (24, 34948), (Start: 30 @34993 has 22 MA's), (Start: 31 @34996 has 15 MA's), (Start: 36 @35020 has 6 MA's), (Start: 40 @35056 has 90 MA's), (Start: 42 @35077 has 3 MA's),

Gene: Cornucopia\_50 Start: 36113, Stop: 36346, Start Num: 40

Candidate Starts for Cornucopia\_50:

(3, 35894), (9, 35933), (Start: 23 @35987 has 4 MA's), (24, 36005), (Start: 30 @36050 has 22 MA's), (Start: 31 @36053 has 15 MA's), (Start: 36 @36077 has 6 MA's), (Start: 40 @36113 has 90 MA's), (Start: 42 @36134 has 3 MA's),

Gene: Crumble\_42 Start: 32061, Stop: 32294, Start Num: 40

Candidate Starts for Crumble\_42:

(3, 31842), (9, 31881), (Start: 23 @31935 has 4 MA's), (24, 31953), (Start: 28 @31983 has 1 MA's), (Start: 30 @31998 has 22 MA's), (Start: 31 @32001 has 15 MA's), (32, 32013), (Start: 36 @32025 has 6 MA's), (Start: 40 @32061 has 90 MA's), (Start: 42 @32082 has 3 MA's), (55, 32256),

Gene: DLane\_44 Start: 34896, Stop: 35129, Start Num: 40

Candidate Starts for DLane\_44:

(3, 34677), (9, 34716), (Start: 23 @34770 has 4 MA's), (24, 34788), (Start: 30 @34833 has 22 MA's), (Start: 31 @34836 has 15 MA's), (Start: 36 @34860 has 6 MA's), (Start: 40 @34896 has 90 MA's), (Start: 42 @34917 has 3 MA's), (55, 35091),

Gene: DaWorst\_48 Start: 35641, Stop: 35874, Start Num: 40

Candidate Starts for DaWorst\_48:

(3, 35422), (9, 35461), (Start: 23 @35515 has 4 MA's), (24, 35533), (Start: 30 @35578 has 22 MA's), (Start: 31 @35581 has 15 MA's), (Start: 36 @35605 has 6 MA's), (Start: 40 @35641 has 90 MA's), (Start: 42 @35662 has 3 MA's), (55, 35836),

Gene: Daenerys\_43 Start: 34432, Stop: 34665, Start Num: 40

Candidate Starts for Daenerys\_43:

(3, 34213), (9, 34252), (Start: 23 @34306 has 4 MA's), (24, 34324), (Start: 28 @34354 has 1 MA's), (Start: 30 @34369 has 22 MA's), (Start: 31 @34372 has 15 MA's), (Start: 36 @34396 has 6 MA's), (Start: 40 @34432 has 90 MA's), (Start: 42 @34453 has 3 MA's), (55, 34627),

Gene: Dante\_46 Start: 34510, Stop: 34779, Start Num: 36

Candidate Starts for Dante\_46:

(3, 34327), (9, 34366), (Start: 23 @34420 has 4 MA's), (24, 34438), (Start: 28 @34468 has 1 MA's), (Start: 30 @34483 has 22 MA's), (Start: 31 @34486 has 15 MA's), (Start: 36 @34510 has 6 MA's), (Start: 40 @34546 has 90 MA's), (Start: 42 @34567 has 3 MA's),

Gene: Deb65\_44 Start: 34401, Stop: 34634, Start Num: 40

Candidate Starts for Deb65\_44:

(3, 34182), (9, 34221), (Start: 23 @34275 has 4 MA's), (24, 34293), (Start: 28 @34323 has 1 MA's), (Start: 30 @34338 has 22 MA's), (Start: 31 @34341 has 15 MA's), (Start: 36 @34365 has 6 MA's), (Start: 40 @34401 has 90 MA's), (Start: 42 @34422 has 3 MA's), (55, 34596),

Gene: DillTech15\_45 Start: 33993, Stop: 34289, Start Num: 30

Candidate Starts for DillTech15\_45:

(2, 33714), (4, 33759), (6, 33774), (13, 33828), (19, 33873), (20, 33903), (Start: 23 @33930 has 4 MA's), (24, 33948), (Start: 28 @33978 has 1 MA's), (Start: 30 @33993 has 22 MA's), (Start: 31 @33996 has 15 MA's), (Start: 36 @34020 has 6 MA's), (Start: 40 @34056 has 90 MA's), (Start: 42 @34077 has 3 MA's), (55, 34251),

Gene: DirtMcgirt\_45 Start: 34083, Stop: 34316, Start Num: 40

Candidate Starts for DirtMcgirt\_45:

(3, 33864), (9, 33903), (Start: 23 @33957 has 4 MA's), (24, 33975), (Start: 28 @34005 has 1 MA's), (Start: 30 @34020 has 22 MA's), (Start: 31 @34023 has 15 MA's), (32, 34035), (Start: 36 @34047 has 6 MA's), (Start: 40 @34083 has 90 MA's), (Start: 42 @34104 has 3 MA's), (55, 34278),

Gene: DoRead\_48 Start: 34735, Stop: 35031, Start Num: 30

Candidate Starts for DoRead\_48:

(3, 34579), (9, 34618), (Start: 23 @34672 has 4 MA's), (24, 34690), (Start: 28 @34720 has 1 MA's), (Start: 30 @34735 has 22 MA's), (Start: 31 @34738 has 15 MA's), (32, 34750), (Start: 36 @34762 has 6 MA's), (Start: 40 @34798 has 90 MA's), (Start: 42 @34819 has 3 MA's), (55, 34993),

Gene: Doomphist\_46 Start: 35780, Stop: 36013, Start Num: 40

Candidate Starts for Doomphist\_46:

(3, 35561), (9, 35600), (Start: 23 @35654 has 4 MA's), (24, 35672), (Start: 28 @35702 has 1 MA's), (Start: 30 @35717 has 22 MA's), (Start: 31 @35720 has 15 MA's), (Start: 36 @35744 has 6 MA's), (Start: 40 @35780 has 90 MA's), (Start: 42 @35801 has 3 MA's), (55, 35975),

Gene: Doomslug\_54 Start: 34759, Stop: 34992, Start Num: 40

Candidate Starts for Doomslug\_54:

(3, 34540), (9, 34579), (Start: 23 @34633 has 4 MA's), (24, 34651), (Start: 30 @34696 has 22 MA's), (Start: 31 @34699 has 15 MA's), (Start: 36 @34723 has 6 MA's), (Start: 40 @34759 has 90 MA's), (Start: 42 @34780 has 3 MA's),

Gene: Dorothy\_43 Start: 34579, Stop: 34812, Start Num: 40

Candidate Starts for Dorothy\_43:

(3, 34360), (9, 34399), (Start: 23 @34453 has 4 MA's), (24, 34471), (Start: 28 @34501 has 1 MA's), (Start: 30 @34516 has 22 MA's), (Start: 31 @34519 has 15 MA's), (Start: 36 @34543 has 6 MA's), (Start: 40 @34579 has 90 MA's), (Start: 42 @34600 has 3 MA's), (55, 34774),

Gene: Drago\_45 Start: 34086, Stop: 34319, Start Num: 40

Candidate Starts for Drago\_45:

(3, 33867), (9, 33906), (Start: 23 @33960 has 4 MA's), (24, 33978), (Start: 28 @34008 has 1 MA's), (Start: 30 @34023 has 22 MA's), (Start: 31 @34026 has 15 MA's), (32, 34038), (Start: 36 @34050 has 6 MA's), (Start: 40 @34086 has 90 MA's), (Start: 42 @34107 has 3 MA's), (55, 34281),

Gene: Eish\_47 Start: 35127, Stop: 35360, Start Num: 40

Candidate Starts for Eish\_47:

(3, 34908), (9, 34947), (Start: 23 @35001 has 4 MA's), (24, 35019), (Start: 28 @35049 has 1 MA's), (Start: 30 @35064 has 22 MA's), (Start: 31 @35067 has 15 MA's), (Start: 36 @35091 has 6 MA's), (Start: 40 @35127 has 90 MA's), (Start: 42 @35148 has 3 MA's), (55, 35322),

Gene: EleanorGeorge\_44 Start: 34211, Stop: 34507, Start Num: 30

Candidate Starts for EleanorGeorge\_44:

(3, 34055), (9, 34094), (Start: 23 @34148 has 4 MA's), (24, 34166), (Start: 30 @34211 has 22 MA's), (Start: 31 @34214 has 15 MA's), (Start: 36 @34238 has 6 MA's), (Start: 40 @34274 has 90 MA's), (Start: 42 @34295 has 3 MA's),

Gene: Emma\_47 Start: 35303, Stop: 35536, Start Num: 40

Candidate Starts for Emma\_47:

(3, 35084), (9, 35123), (Start: 23 @35177 has 4 MA's), (24, 35195), (Start: 30 @35240 has 22 MA's), (Start: 31 @35243 has 15 MA's), (Start: 36 @35267 has 6 MA's), (Start: 40 @35303 has 90 MA's), (Start: 42 @35324 has 3 MA's),

Gene: Empress\_47 Start: 35720, Stop: 36079, Start Num: 23

Candidate Starts for Empress\_47:

(5, 35642), (Start: 23 @35720 has 4 MA's), (24, 35738), (Start: 28 @35768 has 1 MA's), (Start: 30 @35783 has 22 MA's), (Start: 31 @35786 has 15 MA's), (Start: 36 @35810 has 6 MA's), (Start: 40 @35846 has 90 MA's), (Start: 42 @35867 has 3 MA's), (55, 36041),

Gene: Enby\_48 Start: 34479, Stop: 34712, Start Num: 40

Candidate Starts for Enby\_48:

(3, 34260), (9, 34299), (Start: 23 @34353 has 4 MA's), (24, 34371), (Start: 30 @34416 has 22 MA's), (Start: 31 @34419 has 15 MA's), (Start: 36 @34443 has 6 MA's), (Start: 40 @34479 has 90 MA's), (Start: 42 @34500 has 3 MA's),

Gene: Eradicator\_38 Start: 32722, Stop: 32955, Start Num: 40

Candidate Starts for Eradicator\_38:

(3, 32503), (9, 32542), (Start: 23 @32596 has 4 MA's), (24, 32614), (Start: 28 @32644 has 1 MA's), (Start: 30 @32659 has 22 MA's), (Start: 31 @32662 has 15 MA's), (Start: 36 @32686 has 6 MA's), (Start: 40 @32722 has 90 MA's), (Start: 42 @32743 has 3 MA's), (55, 32917),

Gene: Estave1\_47 Start: 34529, Stop: 34762, Start Num: 40

Candidate Starts for Estave1\_47:

(3, 34310), (9, 34349), (Start: 23 @34403 has 4 MA's), (24, 34421), (Start: 28 @34451 has 1 MA's), (Start: 30 @34466 has 22 MA's), (Start: 31 @34469 has 15 MA's), (Start: 36 @34493 has 6 MA's), (Start: 40 @34529 has 90 MA's), (Start: 42 @34550 has 3 MA's), (55, 34724),

Gene: Fastidio\_48 Start: 34202, Stop: 34435, Start Num: 40

Candidate Starts for Fastidio\_48:

(7, 34019), (11, 34043), (12, 34055), (Start: 23 @34076 has 4 MA's), (24, 34094), (Start: 28 @34124 has 1 MA's), (Start: 30 @34139 has 22 MA's), (Start: 31 @34142 has 15 MA's), (Start: 36 @34166 has 6 MA's), (Start: 40 @34202 has 90 MA's), (Start: 42 @34223 has 3 MA's), (55, 34397),

Gene: Filuzino\_44 Start: 33961, Stop: 34194, Start Num: 40

Candidate Starts for Filuzino\_44:

(3, 33742), (9, 33781), (Start: 23 @33835 has 4 MA's), (24, 33853), (Start: 30 @33898 has 22 MA's), (Start: 31 @33901 has 15 MA's), (Start: 36 @33925 has 6 MA's), (Start: 40 @33961 has 90 MA's), (Start: 42 @33982 has 3 MA's), (55, 34156),

Gene: Flathead\_47 Start: 36172, Stop: 36468, Start Num: 30

Candidate Starts for Flathead\_47:

(3, 36016), (9, 36055), (Start: 23 @36109 has 4 MA's), (24, 36127), (Start: 30 @36172 has 22 MA's), (Start: 31 @36175 has 15 MA's), (Start: 36 @36199 has 6 MA's), (Start: 40 @36235 has 90 MA's), (Start: 42 @36256 has 3 MA's),

Gene: FreddyB\_47 Start: 34910, Stop: 35206, Start Num: 30

Candidate Starts for FreddyB\_47:

(3, 34754), (9, 34793), (Start: 23 @34847 has 4 MA's), (24, 34865), (Start: 28 @34895 has 1 MA's), (Start: 30 @34910 has 22 MA's), (Start: 31 @34913 has 15 MA's), (32, 34925), (Start: 36 @34937 has 6 MA's), (Start: 40 @34973 has 90 MA's), (Start: 42 @34994 has 3 MA's), (55, 35168),

Gene: Fruitloop\_45 Start: 35701, Stop: 36060, Start Num: 23

Candidate Starts for Fruitloop\_45:

(3, 35608), (9, 35647), (Start: 23 @35701 has 4 MA's), (24, 35719), (Start: 30 @35764 has 22 MA's), (Start: 31 @35767 has 15 MA's), (Start: 36 @35791 has 6 MA's), (Start: 40 @35827 has 90 MA's), (Start: 42 @35848 has 3 MA's),

Gene: GMA1\_35 Start: 26567, Stop: 26794, Start Num: 39

Candidate Starts for GMA1\_35:

(Start: 39 @26567 has 2 MA's), (44, 26600), (46, 26660), (51, 26741), (52, 26747), (54, 26759),

Gene: Galactic\_46 Start: 35414, Stop: 35647, Start Num: 40

Candidate Starts for Galactic\_46:

(3, 35195), (9, 35234), (Start: 23 @35288 has 4 MA's), (24, 35306), (Start: 30 @35351 has 22 MA's), (Start: 31 @35354 has 15 MA's), (Start: 36 @35378 has 6 MA's), (Start: 40 @35414 has 90 MA's), (Start: 42 @35435 has 3 MA's),

Gene: Geralt\_44 Start: 34400, Stop: 34633, Start Num: 40

Candidate Starts for Geralt\_44:

(3, 34181), (9, 34220), (Start: 23 @34274 has 4 MA's), (24, 34292), (Start: 28 @34322 has 1 MA's), (Start: 30 @34337 has 22 MA's), (Start: 31 @34340 has 15 MA's), (Start: 36 @34364 has 6 MA's), (Start: 40 @34400 has 90 MA's), (Start: 42 @34421 has 3 MA's), (55, 34595),

Gene: Girr\_47 Start: 35381, Stop: 35674, Start Num: 31

Candidate Starts for Girr\_47:

(3, 35222), (9, 35261), (Start: 23 @35315 has 4 MA's), (24, 35333), (Start: 28 @35363 has 1 MA's), (Start: 30 @35378 has 22 MA's), (Start: 31 @35381 has 15 MA's), (Start: 36 @35405 has 6 MA's), (Start: 40 @35441 has 90 MA's), (Start: 42 @35462 has 3 MA's), (55, 35636),

Gene: Grimmer\_56 Start: 36895, Stop: 37191, Start Num: 30

Candidate Starts for Grimmer\_56:

(3, 36739), (9, 36778), (Start: 23 @36832 has 4 MA's), (24, 36850), (Start: 28 @36880 has 1 MA's), (Start: 30 @36895 has 22 MA's), (Start: 31 @36898 has 15 MA's), (Start: 36 @36922 has 6 MA's), (Start: 40 @36958 has 90 MA's), (Start: 42 @36979 has 3 MA's), (55, 37153),

Gene: Guppsters\_47 Start: 35119, Stop: 35415, Start Num: 30

Candidate Starts for Guppsters\_47:

(3, 34963), (9, 35002), (Start: 23 @35056 has 4 MA's), (24, 35074), (Start: 30 @35119 has 22 MA's), (Start: 31 @35122 has 15 MA's), (Start: 36 @35146 has 6 MA's), (Start: 40 @35182 has 90 MA's), (Start: 42 @35203 has 3 MA's), (55, 35377),

Gene: Hegedechwinu\_45 Start: 33573, Stop: 33806, Start Num: 40

Candidate Starts for Hegedechwinu\_45:

(3, 33354), (9, 33393), (Start: 23 @33447 has 4 MA's), (24, 33465), (Start: 28 @33495 has 1 MA's), (Start: 30 @33510 has 22 MA's), (Start: 31 @33513 has 15 MA's), (Start: 36 @33537 has 6 MA's), (Start: 40 @33573 has 90 MA's), (Start: 42 @33594 has 3 MA's), (55, 33768),

Gene: Hlubikazi\_44 Start: 34359, Stop: 34652, Start Num: 31

Candidate Starts for Hlubikazi\_44:

(3, 34200), (9, 34239), (Start: 23 @34293 has 4 MA's), (24, 34311), (Start: 30 @34356 has 22 MA's), (Start: 31 @34359 has 15 MA's), (Start: 36 @34383 has 6 MA's), (Start: 40 @34419 has 90 MA's), (Start: 42 @34440 has 3 MA's),

Gene: IMpilo\_45 Start: 34358, Stop: 34591, Start Num: 40

Candidate Starts for IMpilo\_45:

(3, 34139), (9, 34178), (Start: 23 @34232 has 4 MA's), (24, 34250), (Start: 30 @34295 has 22 MA's), (Start: 31 @34298 has 15 MA's), (Start: 36 @34322 has 6 MA's), (Start: 40 @34358 has 90 MA's), (Start: 42 @34379 has 3 MA's), (55, 34553),

Gene: Ibhubesi\_47 Start: 35172, Stop: 35405, Start Num: 40

Candidate Starts for Ibhubesi\_47:

(3, 34953), (9, 34992), (Start: 23 @35046 has 4 MA's), (24, 35064), (Start: 28 @35094 has 1 MA's), (Start: 30 @35109 has 22 MA's), (Start: 31 @35112 has 15 MA's), (Start: 36 @35136 has 6 MA's), (Start: 40 @35172 has 90 MA's), (Start: 42 @35193 has 3 MA's), (55, 35367),

Gene: Inventum\_43 Start: 35113, Stop: 35346, Start Num: 40

Candidate Starts for Inventum\_43:

(3, 34894), (9, 34933), (Start: 23 @34987 has 4 MA's), (24, 35005), (Start: 28 @35035 has 1 MA's), (Start: 30 @35050 has 22 MA's), (Start: 31 @35053 has 15 MA's), (Start: 36 @35077 has 6 MA's), (Start: 40 @35113 has 90 MA's), (Start: 42 @35134 has 3 MA's), (55, 35308),

Gene: Jant\_51 Start: 36837, Stop: 37070, Start Num: 40

Candidate Starts for Jant\_51:

(3, 36618), (9, 36657), (Start: 23 @36711 has 4 MA's), (24, 36729), (Start: 30 @36774 has 22 MA's), (Start: 31 @36777 has 15 MA's), (Start: 36 @36801 has 6 MA's), (Start: 40 @36837 has 90 MA's), (Start: 42 @36858 has 3 MA's), (55, 37032),

Gene: Jarcob\_47 Start: 36093, Stop: 36326, Start Num: 40

Candidate Starts for Jarcob\_47:

(3, 35874), (9, 35913), (Start: 23 @35967 has 4 MA's), (24, 35985), (Start: 28 @36015 has 1 MA's), (Start: 30 @36030 has 22 MA's), (Start: 31 @36033 has 15 MA's), (32, 36045), (Start: 36 @36057 has 6 MA's), (Start: 40 @36093 has 90 MA's), (Start: 42 @36114 has 3 MA's), (55, 36288),

Gene: Jinglebell\_48 Start: 35910, Stop: 36203, Start Num: 31

Candidate Starts for Jinglebell\_48:

(3, 35751), (9, 35790), (Start: 23 @35844 has 4 MA's), (24, 35862), (Start: 28 @35892 has 1 MA's), (Start: 30 @35907 has 22 MA's), (Start: 31 @35910 has 15 MA's), (Start: 36 @35934 has 6 MA's), (Start: 40 @35970 has 90 MA's), (Start: 42 @35991 has 3 MA's), (55, 36165),

Gene: Job42\_47 Start: 36451, Stop: 36663, Start Num: 42

Candidate Starts for Job42\_47:

(3, 36211), (9, 36250), (Start: 23 @36304 has 4 MA's), (24, 36322), (Start: 28 @36352 has 1 MA's), (Start: 30 @36367 has 22 MA's), (Start: 31 @36370 has 15 MA's), (Start: 36 @36394 has 6 MA's), (Start: 40 @36430 has 90 MA's), (Start: 42 @36451 has 3 MA's), (55, 36625),

Gene: JoeyJr\_44 Start: 34600, Stop: 34833, Start Num: 40

Candidate Starts for JoeyJr\_44:

(3, 34381), (9, 34420), (Start: 23 @34474 has 4 MA's), (24, 34492), (Start: 28 @34522 has 1 MA's), (Start: 30 @34537 has 22 MA's), (Start: 31 @34540 has 15 MA's), (Start: 36 @34564 has 6 MA's), (Start: 40 @34600 has 90 MA's), (Start: 42 @34621 has 3 MA's), (55, 34795),

Gene: Juice456\_48 Start: 36175, Stop: 36408, Start Num: 40

Candidate Starts for Juice456\_48:

(3, 35956), (9, 35995), (Start: 23 @36049 has 4 MA's), (24, 36067), (Start: 28 @36097 has 1 MA's), (Start: 30 @36112 has 22 MA's), (Start: 31 @36115 has 15 MA's), (Start: 36 @36139 has 6 MA's), (Start: 40 @36175 has 90 MA's), (Start: 42 @36196 has 3 MA's), (55, 36370),

Gene: Kenuha5\_42 Start: 33808, Stop: 34041, Start Num: 40

Candidate Starts for Kenuha5\_42:

(3, 33589), (9, 33628), (Start: 23 @33682 has 4 MA's), (24, 33700), (Start: 28 @33730 has 1 MA's), (Start: 30 @33745 has 22 MA's), (Start: 31 @33748 has 15 MA's), (Start: 36 @33772 has 6 MA's), (Start: 40 @33808 has 90 MA's), (Start: 42 @33829 has 3 MA's), (55, 34003),

Gene: Kersh\_47 Start: 36476, Stop: 36709, Start Num: 40

Candidate Starts for Kersh\_47:

(3, 36257), (9, 36296), (Start: 23 @36350 has 4 MA's), (24, 36368), (Start: 28 @36398 has 1 MA's), (Start: 30 @36413 has 22 MA's), (Start: 31 @36416 has 15 MA's), (Start: 36 @36440 has 6 MA's), (Start: 40 @36476 has 90 MA's), (Start: 42 @36497 has 3 MA's), (55, 36671),

Gene: KingJulian\_45 Start: 35056, Stop: 35289, Start Num: 40

Candidate Starts for KingJulian\_45:

(3, 34837), (9, 34876), (Start: 23 @34930 has 4 MA's), (24, 34948), (Start: 30 @34993 has 22 MA's), (Start: 31 @34996 has 15 MA's), (Start: 36 @35020 has 6 MA's), (Start: 40 @35056 has 90 MA's), (Start: 42 @35077 has 3 MA's),

Gene: KingMidas\_48 Start: 36199, Stop: 36495, Start Num: 30

Candidate Starts for KingMidas\_48:

(3, 36043), (9, 36082), (Start: 23 @36136 has 4 MA's), (24, 36154), (Start: 28 @36184 has 1 MA's), (Start: 30 @36199 has 22 MA's), (Start: 31 @36202 has 15 MA's), (Start: 36 @36226 has 6 MA's), (Start: 40 @36262 has 90 MA's), (Start: 42 @36283 has 3 MA's), (55, 36457),

Gene: Koella\_41 Start: 32023, Stop: 32256, Start Num: 40

Candidate Starts for Koella\_41:

(3, 31804), (9, 31843), (Start: 23 @31897 has 4 MA's), (24, 31915), (Start: 28 @31945 has 1 MA's), (Start: 30 @31960 has 22 MA's), (Start: 31 @31963 has 15 MA's), (32, 31975), (Start: 36 @31987 has 6 MA's), (Start: 40 @32023 has 90 MA's), (Start: 42 @32044 has 3 MA's), (55, 32218),

Gene: Krakatau\_44 Start: 34871, Stop: 35167, Start Num: 30

Candidate Starts for Krakatau\_44:

(3, 34715), (9, 34754), (Start: 23 @34808 has 4 MA's), (24, 34826), (Start: 28 @34856 has 1 MA's), (Start: 30 @34871 has 22 MA's), (Start: 31 @34874 has 15 MA's), (Start: 36 @34898 has 6 MA's), (Start: 40 @34934 has 90 MA's), (Start: 42 @34955 has 3 MA's), (55, 35129),

Gene: KristaRAM\_46 Start: 36148, Stop: 36381, Start Num: 40

Candidate Starts for KristaRAM\_46:

(5, 35944), (14, 35995), (29, 36079), (Start: 36 @36112 has 6 MA's), (Start: 40 @36148 has 90 MA's), (Start: 42 @36169 has 3 MA's),

Gene: Latretium\_49 Start: 36052, Stop: 36285, Start Num: 40

Candidate Starts for Latretium\_49:

(3, 35833), (9, 35872), (Start: 23 @35926 has 4 MA's), (24, 35944), (Start: 28 @35974 has 1 MA's), (Start: 30 @35989 has 22 MA's), (Start: 31 @35992 has 15 MA's), (Start: 36 @36016 has 6 MA's), (Start: 40 @36052 has 90 MA's), (Start: 42 @36073 has 3 MA's), (55, 36247),

Gene: Leozinho\_46 Start: 34854, Stop: 35087, Start Num: 40

Candidate Starts for Leozinho\_46:

(3, 34635), (9, 34674), (Start: 23 @34728 has 4 MA's), (24, 34746), (Start: 28 @34776 has 1 MA's), (Start: 30 @34791 has 22 MA's), (Start: 31 @34794 has 15 MA's), (Start: 36 @34818 has 6 MA's), (Start: 40 @34854 has 90 MA's), (Start: 42 @34875 has 3 MA's), (55, 35049),

Gene: Leperchaun\_41 Start: 33830, Stop: 34063, Start Num: 40

Candidate Starts for Leperchaun\_41:

(3, 33611), (9, 33650), (Start: 23 @33704 has 4 MA's), (24, 33722), (Start: 28 @33752 has 1 MA's), (Start: 30 @33767 has 22 MA's), (Start: 31 @33770 has 15 MA's), (Start: 36 @33794 has 6 MA's), (Start: 40 @33830 has 90 MA's), (Start: 42 @33851 has 3 MA's), (55, 34025),

Gene: LilMoolah\_45 Start: 34706, Stop: 35065, Start Num: 23

Candidate Starts for LilMoolah\_45:

(3, 34613), (9, 34652), (Start: 23 @34706 has 4 MA's), (24, 34724), (Start: 28 @34754 has 1 MA's), (Start: 30 @34769 has 22 MA's), (Start: 31 @34772 has 15 MA's), (Start: 36 @34796 has 6 MA's), (Start: 40 @34832 has 90 MA's), (Start: 42 @34853 has 3 MA's), (55, 35027),

Gene: LittleShirley\_46 Start: 35863, Stop: 36096, Start Num: 40

Candidate Starts for LittleShirley\_46:

(3, 35644), (9, 35683), (Start: 23 @35737 has 4 MA's), (24, 35755), (Start: 28 @35785 has 1 MA's), (Start: 30 @35800 has 22 MA's), (Start: 31 @35803 has 15 MA's), (Start: 36 @35827 has 6 MA's), (Start: 40 @35863 has 90 MA's), (Start: 42 @35884 has 3 MA's), (55, 36058),

Gene: Lizziana\_53 Start: 37033, Stop: 37329, Start Num: 30

Candidate Starts for Lizziana\_53:

(3, 36877), (9, 36916), (Start: 23 @36970 has 4 MA's), (24, 36988), (Start: 28 @37018 has 1 MA's), (Start: 30 @37033 has 22 MA's), (Start: 31 @37036 has 15 MA's), (32, 37048), (Start: 36 @37060 has 6 MA's), (Start: 40 @37096 has 90 MA's), (Start: 42 @37117 has 3 MA's), (55, 37291),

Gene: Llama\_48 Start: 35890, Stop: 36201, Start Num: 28

Candidate Starts for Llama\_48:

(3, 35749), (9, 35788), (Start: 23 @35842 has 4 MA's), (24, 35860), (Start: 28 @35890 has 1 MA's), (Start: 30 @35905 has 22 MA's), (Start: 31 @35908 has 15 MA's), (Start: 36 @35932 has 6 MA's), (Start: 40 @35968 has 90 MA's), (Start: 42 @35989 has 3 MA's), (55, 36163),

Gene: Llij\_43 Start: 34261, Stop: 34473, Start Num: 42

Candidate Starts for Llij\_43:

(3, 34021), (9, 34060), (Start: 23 @34114 has 4 MA's), (24, 34132), (Start: 28 @34162 has 1 MA's), (Start: 30 @34177 has 22 MA's), (Start: 31 @34180 has 15 MA's), (32, 34192), (Start: 36 @34204 has 6 MA's), (Start: 40 @34240 has 90 MA's), (Start: 42 @34261 has 3 MA's), (55, 34435),

Gene: Lorde\_48 Start: 34454, Stop: 34687, Start Num: 40

Candidate Starts for Lorde\_48:

(3, 34235), (9, 34274), (Start: 23 @34328 has 4 MA's), (24, 34346), (Start: 30 @34391 has 22 MA's), (Start: 31 @34394 has 15 MA's), (Start: 36 @34418 has 6 MA's), (Start: 40 @34454 has 90 MA's), (Start: 42 @34475 has 3 MA's),

Gene: Lton\_38 Start: 28029, Stop: 28259, Start Num: 39

Candidate Starts for Lton\_38:

(Start: 39 @28029 has 2 MA's), (45, 28071),

Gene: Lucia\_45 Start: 34384, Stop: 34617, Start Num: 40

Candidate Starts for Lucia\_45:

(3, 34165), (9, 34204), (Start: 23 @34258 has 4 MA's), (24, 34276), (Start: 28 @34306 has 1 MA's), (Start: 30 @34321 has 22 MA's), (Start: 31 @34324 has 15 MA's), (32, 34336), (Start: 36 @34348 has 6 MA's), (Start: 40 @34384 has 90 MA's), (Start: 42 @34405 has 3 MA's), (55, 34579),

Gene: LunaBlu\_49 Start: 36010, Stop: 36306, Start Num: 30

Candidate Starts for LunaBlu\_49:

(3, 35854), (9, 35893), (Start: 23 @35947 has 4 MA's), (24, 35965), (Start: 30 @36010 has 22 MA's), (Start: 31 @36013 has 15 MA's), (Start: 36 @36037 has 6 MA's), (Start: 40 @36073 has 90 MA's), (Start: 42 @36094 has 3 MA's),

Gene: MadMen\_41 Start: 33880, Stop: 34113, Start Num: 40

Candidate Starts for MadMen\_41:

(3, 33661), (9, 33700), (Start: 23 @33754 has 4 MA's), (24, 33772), (Start: 28 @33802 has 1 MA's), (Start: 30 @33817 has 22 MA's), (Start: 31 @33820 has 15 MA's), (Start: 36 @33844 has 6 MA's), (Start: 40 @33880 has 90 MA's), (Start: 42 @33901 has 3 MA's), (55, 34075),

Gene: Madeline\_42 Start: 34926, Stop: 35168, Start Num: 38

Candidate Starts for Madeline\_42:

(1, 34578), (8, 34677), (10, 34689), (15, 34728), (16, 34734), (17, 34740), (18, 34752), (34, 34899), (Start: 38 @34926 has 2 MA's), (Start: 39 @34935 has 2 MA's), (Start: 43 @34956 has 1 MA's), (49, 35082), (52, 35115), (57, 35157),

Gene: Madiba\_42 Start: 33173, Stop: 33406, Start Num: 40

Candidate Starts for Madiba\_42:

(3, 32954), (9, 32993), (Start: 23 @33047 has 4 MA's), (24, 33065), (Start: 28 @33095 has 1 MA's), (Start: 30 @33110 has 22 MA's), (Start: 31 @33113 has 15 MA's), (Start: 36 @33137 has 6 MA's), (Start: 40 @33173 has 90 MA's), (Start: 42 @33194 has 3 MA's), (55, 33368),

Gene: Mandlovu\_44 Start: 34298, Stop: 34594, Start Num: 30

Candidate Starts for Mandlovu\_44:

(3, 34142), (9, 34181), (Start: 23 @34235 has 4 MA's), (24, 34253), (Start: 30 @34298 has 22 MA's), (Start: 31 @34301 has 15 MA's), (Start: 36 @34325 has 6 MA's), (Start: 40 @34361 has 90 MA's), (Start: 42 @34382 has 3 MA's),

Gene: Marker\_47 Start: 34699, Stop: 34968, Start Num: 36

Candidate Starts for Marker\_47:

(3, 34516), (9, 34555), (Start: 23 @34609 has 4 MA's), (24, 34627), (Start: 28 @34657 has 1 MA's), (Start: 30 @34672 has 22 MA's), (Start: 31 @34675 has 15 MA's), (Start: 36 @34699 has 6 MA's), (Start: 40 @34735 has 90 MA's), (Start: 42 @34756 has 3 MA's), (55, 34930),

Gene: Martik\_47 Start: 36049, Stop: 36282, Start Num: 40

Candidate Starts for Martik\_47:

(3, 35830), (9, 35869), (Start: 23 @35923 has 4 MA's), (24, 35941), (Start: 28 @35971 has 1 MA's), (Start: 30 @35986 has 22 MA's), (Start: 31 @35989 has 15 MA's), (32, 36001), (Start: 36 @36013 has 6 MA's), (Start: 40 @36049 has 90 MA's), (Start: 42 @36070 has 3 MA's), (55, 36244),

Gene: Medindi\_44 Start: 34117, Stop: 34350, Start Num: 40

Candidate Starts for Medindi\_44:

(3, 33898), (9, 33937), (Start: 23 @33991 has 4 MA's), (24, 34009), (Start: 30 @34054 has 22 MA's), (Start: 31 @34057 has 15 MA's), (Start: 36 @34081 has 6 MA's), (Start: 40 @34117 has 90 MA's), (Start: 42 @34138 has 3 MA's), (55, 34312),

Gene: Melissauren88\_45 Start: 35169, Stop: 35438, Start Num: 36

Candidate Starts for Melissauren88\_45:

(3, 34986), (9, 35025), (Start: 23 @35079 has 4 MA's), (24, 35097), (Start: 30 @35142 has 22 MA's), (Start: 31 @35145 has 15 MA's), (Start: 36 @35169 has 6 MA's), (Start: 40 @35205 has 90 MA's), (Start: 42 @35226 has 3 MA's),

Gene: MilanaBonita\_40 Start: 31759, Stop: 31992, Start Num: 40

Candidate Starts for MilanaBonita\_40:

(3, 31540), (9, 31579), (Start: 23 @31633 has 4 MA's), (24, 31651), (Start: 30 @31696 has 22 MA's), (Start: 31 @31699 has 15 MA's), (Start: 36 @31723 has 6 MA's), (Start: 40 @31759 has 90 MA's), (Start: 42 @31780 has 3 MA's),

Gene: MinionDave\_46 Start: 35679, Stop: 35975, Start Num: 30

Candidate Starts for MinionDave\_46:

(3, 35523), (9, 35562), (Start: 23 @35616 has 4 MA's), (24, 35634), (Start: 28 @35664 has 1 MA's), (Start: 30 @35679 has 22 MA's), (Start: 31 @35682 has 15 MA's), (Start: 36 @35706 has 6 MA's), (Start: 40 @35742 has 90 MA's), (Start: 42 @35763 has 3 MA's),

Gene: Minnie\_49 Start: 35911, Stop: 36144, Start Num: 40

Candidate Starts for Minnie\_49:

(3, 35692), (9, 35731), (Start: 23 @35785 has 4 MA's), (24, 35803), (Start: 28 @35833 has 1 MA's), (Start: 30 @35848 has 22 MA's), (Start: 31 @35851 has 15 MA's), (Start: 36 @35875 has 6 MA's), (Start: 40 @35911 has 90 MA's), (Start: 42 @35932 has 3 MA's), (55, 36106),

Gene: MisterCuddles\_46 Start: 35381, Stop: 35674, Start Num: 31

Candidate Starts for MisterCuddles\_46:

(3, 35222), (9, 35261), (Start: 23 @35315 has 4 MA's), (24, 35333), (Start: 28 @35363 has 1 MA's), (Start: 30 @35378 has 22 MA's), (Start: 31 @35381 has 15 MA's), (Start: 36 @35405 has 6 MA's), (Start: 40 @35441 has 90 MA's), (Start: 42 @35462 has 3 MA's), (55, 35636),

Gene: Modragons\_47 Start: 35814, Stop: 36047, Start Num: 40

Candidate Starts for Modragons\_47:

(3, 35595), (9, 35634), (Start: 23 @35688 has 4 MA's), (24, 35706), (Start: 28 @35736 has 1 MA's), (Start: 30 @35751 has 22 MA's), (Start: 31 @35754 has 15 MA's), (Start: 36 @35778 has 6 MA's), (Start: 40 @35814 has 90 MA's), (Start: 42 @35835 has 3 MA's), (55, 36009),

Gene: Mova\_47 Start: 34961, Stop: 35257, Start Num: 30

Candidate Starts for Mova\_47:

(3, 34805), (9, 34844), (Start: 23 @34898 has 4 MA's), (24, 34916), (Start: 30 @34961 has 22 MA's), (Start: 31 @34964 has 15 MA's), (Start: 36 @34988 has 6 MA's), (Start: 40 @35024 has 90 MA's), (Start: 42 @35045 has 3 MA's), (55, 35219),

Gene: Mozy\_55 Start: 37262, Stop: 37531, Start Num: 36

Candidate Starts for Mozy\_55:

(3, 37079), (9, 37118), (Start: 23 @37172 has 4 MA's), (24, 37190), (Start: 28 @37220 has 1 MA's), (Start: 30 @37235 has 22 MA's), (Start: 31 @37238 has 15 MA's), (Start: 36 @37262 has 6 MA's), (Start: 40 @37298 has 90 MA's), (Start: 42 @37319 has 3 MA's), (55, 37493),

Gene: Ms6\_40 Start: 30271, Stop: 30504, Start Num: 40

Candidate Starts for Ms6\_40:

(3, 30052), (9, 30091), (Start: 23 @30145 has 4 MA's), (24, 30163), (Start: 30 @30208 has 22 MA's), (Start: 31 @30211 has 15 MA's), (Start: 36 @30235 has 6 MA's), (Start: 40 @30271 has 90 MA's), (Start: 42 @30292 has 3 MA's),

Gene: Murp\_45 Start: 36357, Stop: 36602, Start Num: 37

Candidate Starts for Murp\_45:

(21, 36249), (25, 36276), (32, 36333), (Start: 37 @36357 has 1 MA's), (50, 36525), (56, 36573),

Gene: Mwanjiwa\_52 Start: 35818, Stop: 36051, Start Num: 40

Candidate Starts for Mwanjiwa\_52:

(3, 35599), (9, 35638), (Start: 23 @35692 has 4 MA's), (24, 35710), (Start: 28 @35740 has 1 MA's), (Start: 30 @35755 has 22 MA's), (Start: 31 @35758 has 15 MA's), (Start: 36 @35782 has 6 MA's), (Start: 40 @35818 has 90 MA's), (Start: 42 @35839 has 3 MA's), (55, 36013),

Gene: Nimbo\_43 Start: 34403, Stop: 34636, Start Num: 40

Candidate Starts for Nimbo\_43:

(3, 34184), (9, 34223), (Start: 23 @34277 has 4 MA's), (24, 34295), (Start: 28 @34325 has 1 MA's), (Start: 30 @34340 has 22 MA's), (Start: 31 @34343 has 15 MA's), (Start: 36 @34367 has 6 MA's), (Start: 40 @34403 has 90 MA's), (Start: 42 @34424 has 3 MA's), (55, 34598),

Gene: Nitzel\_42 Start: 34508, Stop: 34741, Start Num: 40

Candidate Starts for Nitzel\_42:

(3, 34289), (9, 34328), (Start: 23 @34382 has 4 MA's), (24, 34400), (Start: 28 @34430 has 1 MA's), (Start: 30 @34445 has 22 MA's), (Start: 31 @34448 has 15 MA's), (Start: 36 @34472 has 6 MA's), (Start: 40 @34508 has 90 MA's), (Start: 42 @34529 has 3 MA's), (55, 34703),

Gene: NormanBulbieJr\_48 Start: 36036, Stop: 36269, Start Num: 40

Candidate Starts for NormanBulbieJr\_48:

(3, 35817), (9, 35856), (Start: 23 @35910 has 4 MA's), (24, 35928), (Start: 28 @35958 has 1 MA's), (Start: 30 @35973 has 22 MA's), (Start: 31 @35976 has 15 MA's), (32, 35988), (Start: 36 @36000 has 6 MA's), (Start: 40 @36036 has 90 MA's), (Start: 42 @36057 has 3 MA's), (55, 36231),

Gene: Ochi17\_46 Start: 35421, Stop: 35654, Start Num: 40

Candidate Starts for Ochi17\_46:

(3, 35202), (9, 35241), (Start: 23 @35295 has 4 MA's), (24, 35313), (Start: 28 @35343 has 1 MA's), (Start: 30 @35358 has 22 MA's), (Start: 31 @35361 has 15 MA's), (Start: 36 @35385 has 6 MA's), (Start: 40 @35421 has 90 MA's), (Start: 42 @35442 has 3 MA's), (55, 35616),

Gene: OfUltron\_48 Start: 35910, Stop: 36203, Start Num: 31

Candidate Starts for OfUltron\_48:

(3, 35751), (9, 35790), (Start: 23 @35844 has 4 MA's), (24, 35862), (Start: 28 @35892 has 1 MA's), (Start: 30 @35907 has 22 MA's), (Start: 31 @35910 has 15 MA's), (Start: 36 @35934 has 6 MA's), (Start: 40 @35970 has 90 MA's), (Start: 42 @35991 has 3 MA's), (55, 36165),

Gene: Ogopogo\_47 Start: 34293, Stop: 34589, Start Num: 30

Candidate Starts for Ogopogo\_47:

(3, 34137), (9, 34176), (Start: 23 @34230 has 4 MA's), (24, 34248), (Start: 30 @34293 has 22 MA's), (Start: 31 @34296 has 15 MA's), (Start: 36 @34320 has 6 MA's), (Start: 40 @34356 has 90 MA's), (Start: 42 @34377 has 3 MA's), (55, 34551),

Gene: Ohgeesy\_45 Start: 35721, Stop: 35963, Start Num: 38

Candidate Starts for Ohgeesy\_45:

(1, 35373), (8, 35472), (10, 35484), (15, 35523), (16, 35529), (17, 35535), (18, 35547), (27, 35655), (34, 35694), (Start: 38 @35721 has 2 MA's), (Start: 39 @35730 has 2 MA's), (Start: 43 @35751 has 1 MA's), (49, 35877), (52, 35910), (57, 35952),

Gene: Okabe\_42 Start: 30698, Stop: 30931, Start Num: 40

Candidate Starts for Okabe\_42:

(3, 30479), (9, 30518), (Start: 23 @30572 has 4 MA's), (24, 30590), (Start: 30 @30635 has 22 MA's), (Start: 31 @30638 has 15 MA's), (Start: 36 @30662 has 6 MA's), (Start: 40 @30698 has 90 MA's), (Start: 42 @30719 has 3 MA's),

Gene: OlympiaSaint\_46 Start: 34816, Stop: 35112, Start Num: 30

Candidate Starts for OlympiaSaint\_46:

(3, 34660), (9, 34699), (Start: 23 @34753 has 4 MA's), (24, 34771), (Start: 28 @34801 has 1 MA's), (Start: 30 @34816 has 22 MA's), (Start: 31 @34819 has 15 MA's), (Start: 36 @34843 has 6 MA's), (Start: 40 @34879 has 90 MA's), (Start: 42 @34900 has 3 MA's), (55, 35074),

Gene: Ovechkin\_44 Start: 35523, Stop: 35819, Start Num: 30

Candidate Starts for Ovechkin\_44:

(3, 35367), (9, 35406), (Start: 23 @35460 has 4 MA's), (24, 35478), (Start: 30 @35523 has 22 MA's), (Start: 31 @35526 has 15 MA's), (Start: 36 @35550 has 6 MA's), (Start: 40 @35586 has 90 MA's), (Start: 42 @35607 has 3 MA's),

Gene: PHappiness\_44 Start: 34376, Stop: 34609, Start Num: 40

Candidate Starts for PHappiness\_44:

(3, 34157), (9, 34196), (Start: 23 @34250 has 4 MA's), (24, 34268), (Start: 28 @34298 has 1 MA's), (Start: 30 @34313 has 22 MA's), (Start: 31 @34316 has 15 MA's), (Start: 36 @34340 has 6 MA's), (Start: 40 @34376 has 90 MA's), (Start: 42 @34397 has 3 MA's), (55, 34571),

Gene: PMC\_41 Start: 34272, Stop: 34484, Start Num: 42

Candidate Starts for PMC\_41:

(3, 34032), (9, 34071), (Start: 23 @34125 has 4 MA's), (24, 34143), (Start: 28 @34173 has 1 MA's), (Start: 30 @34188 has 22 MA's), (Start: 31 @34191 has 15 MA's), (Start: 36 @34215 has 6 MA's), (Start: 40 @34251 has 90 MA's), (Start: 42 @34272 has 3 MA's), (55, 34446),

Gene: Pacc40\_43 Start: 34450, Stop: 34683, Start Num: 40

Candidate Starts for Pacc40\_43:

(3, 34231), (9, 34270), (Start: 23 @34324 has 4 MA's), (24, 34342), (Start: 28 @34372 has 1 MA's), (Start: 30 @34387 has 22 MA's), (Start: 31 @34390 has 15 MA's), (Start: 36 @34414 has 6 MA's), (Start: 40 @34450 has 90 MA's), (Start: 42 @34471 has 3 MA's), (55, 34645),

Gene: PatoPoderoso\_44 Start: 35056, Stop: 35289, Start Num: 40

Candidate Starts for PatoPoderoso\_44:

(3, 34837), (9, 34876), (Start: 23 @34930 has 4 MA's), (24, 34948), (Start: 30 @34993 has 22 MA's), (Start: 31 @34996 has 15 MA's), (Start: 36 @35020 has 6 MA's), (Start: 40 @35056 has 90 MA's), (Start: 42 @35077 has 3 MA's),

Gene: Peridot\_50 Start: 36068, Stop: 36301, Start Num: 40

Candidate Starts for Peridot\_50:

(3, 35849), (9, 35888), (Start: 23 @35942 has 4 MA's), (24, 35960), (Start: 28 @35990 has 1 MA's), (Start: 30 @36005 has 22 MA's), (Start: 31 @36008 has 15 MA's), (Start: 36 @36032 has 6 MA's), (Start: 40 @36068 has 90 MA's), (Start: 42 @36089 has 3 MA's), (55, 36263),

Gene: Phalconet\_45 Start: 34583, Stop: 34816, Start Num: 40

Candidate Starts for Phalconet\_45:

(3, 34364), (9, 34403), (Start: 23 @34457 has 4 MA's), (24, 34475), (Start: 30 @34520 has 22 MA's), (Start: 31 @34523 has 15 MA's), (Start: 36 @34547 has 6 MA's), (Start: 40 @34583 has 90 MA's), (Start: 42 @34604 has 3 MA's),

Gene: Phasih\_44 Start: 34795, Stop: 35028, Start Num: 40

Candidate Starts for Phasih\_44:

(3, 34576), (9, 34615), (Start: 23 @34669 has 4 MA's), (24, 34687), (Start: 28 @34717 has 1 MA's), (Start: 30 @34732 has 22 MA's), (Start: 31 @34735 has 15 MA's), (Start: 36 @34759 has 6 MA's), (Start: 40 @34795 has 90 MA's), (Start: 42 @34816 has 3 MA's), (55, 34990),

Gene: Phatniss\_44 Start: 34757, Stop: 34990, Start Num: 40

Candidate Starts for Phatniss\_44:

(3, 34538), (9, 34577), (Start: 23 @34631 has 4 MA's), (24, 34649), (Start: 28 @34679 has 1 MA's), (Start: 30 @34694 has 22 MA's), (Start: 31 @34697 has 15 MA's), (32, 34709), (Start: 36 @34721 has 6 MA's), (Start: 40 @34757 has 90 MA's), (Start: 42 @34778 has 3 MA's), (55, 34952),

Gene: PhesterPhotato\_48 Start: 35478, Stop: 35771, Start Num: 31

Candidate Starts for PhesterPhotato\_48:

(3, 35319), (9, 35358), (Start: 23 @35412 has 4 MA's), (24, 35430), (Start: 30 @35475 has 22 MA's), (Start: 31 @35478 has 15 MA's), (Start: 36 @35502 has 6 MA's), (Start: 40 @35538 has 90 MA's), (Start: 42 @35559 has 3 MA's),

Gene: Plumbus\_46 Start: 34503, Stop: 34736, Start Num: 40

Candidate Starts for Plumbus\_46:

(3, 34284), (9, 34323), (Start: 23 @34377 has 4 MA's), (24, 34395), (Start: 28 @34425 has 1 MA's), (Start: 30 @34440 has 22 MA's), (Start: 31 @34443 has 15 MA's), (Start: 36 @34467 has 6 MA's), (Start: 40 @34503 has 90 MA's), (Start: 42 @34524 has 3 MA's), (55, 34698),

Gene: Poenanya\_46 Start: 35717, Stop: 36013, Start Num: 30

Candidate Starts for Poenanya\_46:

(3, 35561), (9, 35600), (Start: 23 @35654 has 4 MA's), (24, 35672), (Start: 28 @35702 has 1 MA's), (Start: 30 @35717 has 22 MA's), (Start: 31 @35720 has 15 MA's), (Start: 36 @35744 has 6 MA's), (Start: 40 @35780 has 90 MA's), (Start: 42 @35801 has 3 MA's), (55, 35975),

Gene: Polka14\_45 Start: 35053, Stop: 35286, Start Num: 40

Candidate Starts for Polka14\_45:

(3, 34834), (9, 34873), (Start: 23 @34927 has 4 MA's), (24, 34945), (Start: 28 @34975 has 1 MA's), (Start: 30 @34990 has 22 MA's), (Start: 31 @34993 has 15 MA's), (Start: 36 @35017 has 6 MA's), (Start: 40 @35053 has 90 MA's), (Start: 42 @35074 has 3 MA's), (55, 35248),

Gene: Pollywog\_45 Start: 34958, Stop: 35191, Start Num: 40

Candidate Starts for Pollywog\_45:

(3, 34739), (9, 34778), (Start: 23 @34832 has 4 MA's), (24, 34850), (Start: 28 @34880 has 1 MA's), (Start: 30 @34895 has 22 MA's), (Start: 31 @34898 has 15 MA's), (Start: 36 @34922 has 6 MA's), (Start: 40 @34958 has 90 MA's), (Start: 42 @34979 has 3 MA's), (55, 35153),

Gene: PopTart\_42 Start: 34263, Stop: 34496, Start Num: 40

Candidate Starts for PopTart\_42:

(3, 34044), (9, 34083), (Start: 23 @34137 has 4 MA's), (24, 34155), (Start: 28 @34185 has 1 MA's), (Start: 30 @34200 has 22 MA's), (Start: 31 @34203 has 15 MA's), (Start: 36 @34227 has 6 MA's), (Start: 40 @34263 has 90 MA's), (Start: 42 @34284 has 3 MA's), (55, 34458),

Gene: Priscilla\_47 Start: 36135, Stop: 36368, Start Num: 40

Candidate Starts for Priscilla\_47:

(3, 35916), (9, 35955), (Start: 23 @36009 has 4 MA's), (24, 36027), (Start: 28 @36057 has 1 MA's), (Start: 30 @36072 has 22 MA's), (Start: 31 @36075 has 15 MA's), (32, 36087), (Start: 36 @36099 has 6 MA's), (Start: 40 @36135 has 90 MA's), (Start: 42 @36156 has 3 MA's), (55, 36330),

Gene: RedBird\_43 Start: 34531, Stop: 34824, Start Num: 31

Candidate Starts for RedBird\_43:

(3, 34372), (9, 34411), (Start: 23 @34465 has 4 MA's), (24, 34483), (Start: 28 @34513 has 1 MA's), (Start: 30 @34528 has 22 MA's), (Start: 31 @34531 has 15 MA's), (Start: 36 @34555 has 6 MA's), (Start: 40 @34591 has 90 MA's), (Start: 42 @34612 has 3 MA's), (55, 34786),

Gene: Renaud18\_49 Start: 35266, Stop: 35568, Start Num: 36

Candidate Starts for Renaud18\_49:

(3, 35083), (9, 35122), (Start: 23 @35176 has 4 MA's), (24, 35194), (Start: 28 @35224 has 1 MA's), (Start: 30 @35239 has 22 MA's), (Start: 31 @35242 has 15 MA's), (Start: 36 @35266 has 6 MA's), (Start: 40 @35302 has 90 MA's), (Start: 42 @35323 has 3 MA's), (55, 35497),

Gene: Rita\_47 Start: 34544, Stop: 34840, Start Num: 30

Candidate Starts for Rita\_47:

(3, 34388), (9, 34427), (Start: 23 @34481 has 4 MA's), (24, 34499), (Start: 28 @34529 has 1 MA's), (Start: 30 @34544 has 22 MA's), (Start: 31 @34547 has 15 MA's), (Start: 36 @34571 has 6 MA's), (Start: 40 @34607 has 90 MA's), (Start: 42 @34628 has 3 MA's), (55, 34802),

Gene: RitaG\_44 Start: 34721, Stop: 34954, Start Num: 40

Candidate Starts for RitaG\_44:

(3, 34502), (9, 34541), (Start: 23 @34595 has 4 MA's), (24, 34613), (Start: 28 @34643 has 1 MA's), (Start: 30 @34658 has 22 MA's), (Start: 31 @34661 has 15 MA's), (Start: 36 @34685 has 6 MA's),

(Start: 40 @34721 has 90 MA's), (Start: 42 @34742 has 3 MA's), (55, 34916),

Gene: Rockne\_44 Start: 34251, Stop: 34484, Start Num: 40

Candidate Starts for Rockne\_44:

(3, 34032), (9, 34071), (Start: 23 @34125 has 4 MA's), (24, 34143), (Start: 28 @34173 has 1 MA's), (Start: 30 @34188 has 22 MA's), (Start: 31 @34191 has 15 MA's), (Start: 36 @34215 has 6 MA's), (Start: 40 @34251 has 90 MA's), (Start: 42 @34272 has 3 MA's), (55, 34446),

Gene: RockyHorror\_47 Start: 34653, Stop: 34886, Start Num: 40

Candidate Starts for RockyHorror\_47:

(3, 34434), (9, 34473), (Start: 23 @34527 has 4 MA's), (24, 34545), (Start: 28 @34575 has 1 MA's), (Start: 30 @34590 has 22 MA's), (Start: 31 @34593 has 15 MA's), (Start: 36 @34617 has 6 MA's), (Start: 40 @34653 has 90 MA's), (Start: 42 @34674 has 3 MA's), (55, 34848),

Gene: Ruby\_45 Start: 35442, Stop: 35675, Start Num: 40

Candidate Starts for Ruby\_45:

(5, 35238), (Start: 23 @35316 has 4 MA's), (24, 35334), (Start: 28 @35364 has 1 MA's), (Start: 30 @35379 has 22 MA's), (Start: 31 @35382 has 15 MA's), (Start: 36 @35406 has 6 MA's), (Start: 40 @35442 has 90 MA's), (Start: 42 @35463 has 3 MA's), (55, 35637),

Gene: SG4\_45 Start: 34904, Stop: 35197, Start Num: 31

Candidate Starts for SG4\_45:

(3, 34745), (9, 34784), (Start: 23 @34838 has 4 MA's), (24, 34856), (Start: 30 @34901 has 22 MA's), (Start: 31 @34904 has 15 MA's), (Start: 36 @34928 has 6 MA's), (Start: 40 @34964 has 90 MA's), (Start: 42 @34985 has 3 MA's),

Gene: Sassafras\_46 Start: 35052, Stop: 35345, Start Num: 31

Candidate Starts for Sassafras\_46:

(3, 34893), (9, 34932), (Start: 23 @34986 has 4 MA's), (24, 35004), (Start: 28 @35034 has 1 MA's), (Start: 30 @35049 has 22 MA's), (Start: 31 @35052 has 15 MA's), (Start: 36 @35076 has 6 MA's), (Start: 40 @35112 has 90 MA's), (Start: 42 @35133 has 3 MA's), (55, 35307),

Gene: SassyB\_42 Start: 34263, Stop: 34496, Start Num: 40

Candidate Starts for SassyB\_42:

(3, 34044), (9, 34083), (Start: 23 @34137 has 4 MA's), (24, 34155), (Start: 28 @34185 has 1 MA's), (Start: 30 @34200 has 22 MA's), (Start: 31 @34203 has 15 MA's), (Start: 36 @34227 has 6 MA's), (Start: 40 @34263 has 90 MA's), (Start: 42 @34284 has 3 MA's), (55, 34458),

Gene: Scottish\_47 Start: 35673, Stop: 35966, Start Num: 31

Candidate Starts for Scottish\_47:

(3, 35514), (9, 35553), (Start: 23 @35607 has 4 MA's), (24, 35625), (Start: 28 @35655 has 1 MA's), (Start: 30 @35670 has 22 MA's), (Start: 31 @35673 has 15 MA's), (Start: 36 @35697 has 6 MA's), (Start: 40 @35733 has 90 MA's), (Start: 42 @35754 has 3 MA's), (55, 35928),

Gene: Seabastian\_48 Start: 35910, Stop: 36203, Start Num: 31

Candidate Starts for Seabastian\_48:

(3, 35751), (9, 35790), (Start: 23 @35844 has 4 MA's), (24, 35862), (Start: 28 @35892 has 1 MA's), (Start: 30 @35907 has 22 MA's), (Start: 31 @35910 has 15 MA's), (Start: 36 @35934 has 6 MA's), (Start: 40 @35970 has 90 MA's), (Start: 42 @35991 has 3 MA's), (55, 36165),

Gene: Seagreen\_47 Start: 34933, Stop: 35229, Start Num: 30

Candidate Starts for Seagreen\_47:

(3, 34777), (9, 34816), (Start: 23 @34870 has 4 MA's), (24, 34888), (Start: 28 @34918 has 1 MA's), (Start: 30 @34933 has 22 MA's), (Start: 31 @34936 has 15 MA's), (Start: 36 @34960 has 6 MA's), (Start: 40 @34996 has 90 MA's), (Start: 42 @35017 has 3 MA's), (55, 35191),

Gene: Shauna1\_41 Start: 33682, Stop: 33951, Start Num: 36

Candidate Starts for Shauna1\_41:

(3, 33499), (9, 33538), (Start: 23 @33592 has 4 MA's), (24, 33610), (Start: 28 @33640 has 1 MA's), (Start: 30 @33655 has 22 MA's), (Start: 31 @33658 has 15 MA's), (Start: 36 @33682 has 6 MA's), (Start: 40 @33718 has 90 MA's), (Start: 42 @33739 has 3 MA's), (55, 33913),

Gene: ShiLan\_47 Start: 36082, Stop: 36315, Start Num: 40

Candidate Starts for ShiLan\_47:

(3, 35863), (9, 35902), (Start: 23 @35956 has 4 MA's), (24, 35974), (Start: 28 @36004 has 1 MA's), (Start: 30 @36019 has 22 MA's), (Start: 31 @36022 has 15 MA's), (32, 36034), (Start: 36 @36046 has 6 MA's), (Start: 40 @36082 has 90 MA's), (Start: 42 @36103 has 3 MA's), (55, 36277),

Gene: ShowerHandel\_49 Start: 36049, Stop: 36282, Start Num: 40

Candidate Starts for ShowerHandel\_49:

(3, 35830), (9, 35869), (Start: 23 @35923 has 4 MA's), (24, 35941), (Start: 28 @35971 has 1 MA's), (Start: 30 @35986 has 22 MA's), (Start: 31 @35989 has 15 MA's), (32, 36001), (Start: 36 @36013 has 6 MA's), (Start: 40 @36049 has 90 MA's), (Start: 42 @36070 has 3 MA's), (55, 36244),

Gene: ShroomBoi\_46 Start: 34856, Stop: 35152, Start Num: 30

Candidate Starts for ShroomBoi\_46:

(3, 34700), (9, 34739), (Start: 23 @34793 has 4 MA's), (24, 34811), (Start: 30 @34856 has 22 MA's), (Start: 31 @34859 has 15 MA's), (Start: 36 @34883 has 6 MA's), (Start: 40 @34919 has 90 MA's), (Start: 42 @34940 has 3 MA's),

Gene: SilverChicken\_56 Start: 35494, Stop: 35727, Start Num: 40

Candidate Starts for SilverChicken\_56:

(3, 35275), (9, 35314), (Start: 23 @35368 has 4 MA's), (24, 35386), (Start: 30 @35431 has 22 MA's), (Start: 31 @35434 has 15 MA's), (35, 35455), (Start: 36 @35458 has 6 MA's), (Start: 40 @35494 has 90 MA's), (Start: 42 @35515 has 3 MA's),

Gene: SimranZ1\_46 Start: 34262, Stop: 34495, Start Num: 40

Candidate Starts for SimranZ1\_46:

(3, 34043), (9, 34082), (Start: 23 @34136 has 4 MA's), (24, 34154), (Start: 28 @34184 has 1 MA's), (Start: 30 @34199 has 22 MA's), (Start: 31 @34202 has 15 MA's), (Start: 36 @34226 has 6 MA's), (Start: 40 @34262 has 90 MA's), (Start: 42 @34283 has 3 MA's), (55, 34457),

Gene: Sparkdehlily\_49 Start: 35653, Stop: 35886, Start Num: 40

Candidate Starts for Sparkdehlily\_49:

(3, 35434), (9, 35473), (Start: 23 @35527 has 4 MA's), (24, 35545), (Start: 28 @35575 has 1 MA's), (Start: 30 @35590 has 22 MA's), (Start: 31 @35593 has 15 MA's), (Start: 36 @35617 has 6 MA's), (Start: 40 @35653 has 90 MA's), (Start: 42 @35674 has 3 MA's), (55, 35848),

Gene: Spoonbill\_46 Start: 34675, Stop: 34908, Start Num: 40

Candidate Starts for Spoonbill\_46:

(3, 34456), (9, 34495), (Start: 23 @34549 has 4 MA's), (24, 34567), (Start: 28 @34597 has 1 MA's), (Start: 30 @34612 has 22 MA's), (Start: 31 @34615 has 15 MA's), (Start: 36 @34639 has 6 MA's), (Start: 40 @34675 has 90 MA's), (Start: 42 @34696 has 3 MA's), (55, 34870),

Gene: StAnnes\_46 Start: 36183, Stop: 36416, Start Num: 40

Candidate Starts for StAnnes\_46:

(3, 35964), (9, 36003), (Start: 23 @36057 has 4 MA's), (24, 36075), (Start: 30 @36120 has 22 MA's), (Start: 31 @36123 has 15 MA's), (Start: 36 @36147 has 6 MA's), (Start: 40 @36183 has 90 MA's), (Start: 42 @36204 has 3 MA's), (55, 36378),

Gene: Stap\_45 Start: 34553, Stop: 34786, Start Num: 40

Candidate Starts for Stap\_45:

(3, 34334), (9, 34373), (Start: 23 @34427 has 4 MA's), (24, 34445), (Start: 28 @34475 has 1 MA's), (Start: 30 @34490 has 22 MA's), (Start: 31 @34493 has 15 MA's), (Start: 36 @34517 has 6 MA's), (Start: 40 @34553 has 90 MA's), (Start: 42 @34574 has 3 MA's), (55, 34748),

Gene: Strokeseat\_45 Start: 34358, Stop: 34651, Start Num: 31

Candidate Starts for Strokeseat\_45:

(3, 34199), (9, 34238), (Start: 23 @34292 has 4 MA's), (24, 34310), (Start: 30 @34355 has 22 MA's), (Start: 31 @34358 has 15 MA's), (Start: 36 @34382 has 6 MA's), (Start: 40 @34418 has 90 MA's), (Start: 42 @34439 has 3 MA's),

Gene: Stuck\_48 Start: 38250, Stop: 38465, Start Num: 41

Candidate Starts for Stuck\_48:

(26, 38133), (33, 38193), (Start: 38 @38220 has 2 MA's), (Start: 39 @38229 has 2 MA's), (Start: 41 @38250 has 1 MA's), (47, 38343), (48, 38373), (50, 38385),

Gene: SuperGrey\_47 Start: 35887, Stop: 36120, Start Num: 40

Candidate Starts for SuperGrey\_47:

(3, 35668), (9, 35707), (Start: 23 @35761 has 4 MA's), (24, 35779), (Start: 30 @35824 has 22 MA's), (Start: 31 @35827 has 15 MA's), (Start: 36 @35851 has 6 MA's), (Start: 40 @35887 has 90 MA's), (Start: 42 @35908 has 3 MA's),

Gene: TDanisky\_49 Start: 35590, Stop: 35886, Start Num: 30

Candidate Starts for TDanisky\_49:

(3, 35434), (9, 35473), (Start: 23 @35527 has 4 MA's), (24, 35545), (Start: 28 @35575 has 1 MA's), (Start: 30 @35590 has 22 MA's), (Start: 31 @35593 has 15 MA's), (Start: 36 @35617 has 6 MA's), (Start: 40 @35653 has 90 MA's), (Start: 42 @35674 has 3 MA's), (55, 35848),

Gene: Taj\_48 Start: 35222, Stop: 35455, Start Num: 40

Candidate Starts for Taj\_48:

(3, 35003), (9, 35042), (Start: 23 @35096 has 4 MA's), (24, 35114), (Start: 28 @35144 has 1 MA's), (Start: 30 @35159 has 22 MA's), (Start: 31 @35162 has 15 MA's), (Start: 36 @35186 has 6 MA's), (Start: 40 @35222 has 90 MA's), (Start: 42 @35243 has 3 MA's), (55, 35417),

Gene: Tchotchke\_48 Start: 34552, Stop: 34785, Start Num: 40

Candidate Starts for Tchotchke\_48:

(3, 34333), (9, 34372), (Start: 23 @34426 has 4 MA's), (24, 34444), (Start: 28 @34474 has 1 MA's), (Start: 30 @34489 has 22 MA's), (Start: 31 @34492 has 15 MA's), (Start: 36 @34516 has 6 MA's), (Start: 40 @34552 has 90 MA's), (Start: 42 @34573 has 3 MA's), (55, 34747),

Gene: ThulaThula\_37 Start: 31168, Stop: 31404, Start Num: 39

Candidate Starts for ThulaThula\_37:

(Start: 39 @31168 has 2 MA's), (47, 31282), (50, 31324),

Gene: TinyDot\_34 Start: 27443, Stop: 27673, Start Num: 40

Candidate Starts for TinyDot\_34:

(22, 27314), (Start: 40 @27443 has 90 MA's), (44, 27473), (46, 27533), (50, 27590), (53, 27626), (54, 27632),

Gene: Tootsieroll\_48 Start: 34843, Stop: 35076, Start Num: 40

Candidate Starts for Tootsieroll\_48:

(3, 34624), (9, 34663), (Start: 23 @34717 has 4 MA's), (24, 34735), (Start: 28 @34765 has 1 MA's), (Start: 30 @34780 has 22 MA's), (Start: 31 @34783 has 15 MA's), (Start: 36 @34807 has 6 MA's), (Start: 40 @34843 has 90 MA's), (Start: 42 @34864 has 3 MA's), (55, 35038),

Gene: Topiatin\_51 Start: 36321, Stop: 36554, Start Num: 40

Candidate Starts for Topiatin\_51:

(3, 36102), (9, 36141), (Start: 23 @36195 has 4 MA's), (24, 36213), (Start: 28 @36243 has 1 MA's), (Start: 30 @36258 has 22 MA's), (Start: 31 @36261 has 15 MA's), (Start: 36 @36285 has 6 MA's), (Start: 40 @36321 has 90 MA's), (Start: 42 @36342 has 3 MA's), (55, 36516),

Gene: UncleRicky\_46 Start: 35523, Stop: 35816, Start Num: 31

Candidate Starts for UncleRicky\_46:

(3, 35364), (9, 35403), (Start: 23 @35457 has 4 MA's), (24, 35475), (Start: 28 @35505 has 1 MA's), (Start: 30 @35520 has 22 MA's), (Start: 31 @35523 has 15 MA's), (32, 35535), (Start: 36 @35547 has 6 MA's), (Start: 40 @35583 has 90 MA's), (Start: 42 @35604 has 3 MA's), (55, 35778),

Gene: VRedHorse\_47 Start: 35369, Stop: 35662, Start Num: 31

Candidate Starts for VRedHorse\_47:

(3, 35210), (9, 35249), (Start: 23 @35303 has 4 MA's), (24, 35321), (Start: 30 @35366 has 22 MA's), (Start: 31 @35369 has 15 MA's), (Start: 36 @35393 has 6 MA's), (Start: 40 @35429 has 90 MA's), (Start: 42 @35450 has 3 MA's),

Gene: Whouxphf\_45 Start: 34756, Stop: 34989, Start Num: 40

Candidate Starts for Whouxphf\_45:

(3, 34537), (9, 34576), (Start: 23 @34630 has 4 MA's), (24, 34648), (Start: 28 @34678 has 1 MA's), (Start: 30 @34693 has 22 MA's), (Start: 31 @34696 has 15 MA's), (Start: 36 @34720 has 6 MA's), (Start: 40 @34756 has 90 MA's), (Start: 42 @34777 has 3 MA's), (55, 34951),

Gene: XFactor\_45 Start: 34913, Stop: 35146, Start Num: 40

Candidate Starts for XFactor\_45:

(3, 34694), (9, 34733), (Start: 23 @34787 has 4 MA's), (24, 34805), (Start: 30 @34850 has 22 MA's), (Start: 31 @34853 has 15 MA's), (Start: 36 @34877 has 6 MA's), (Start: 40 @34913 has 90 MA's), (Start: 42 @34934 has 3 MA's),

Gene: Yorick\_44 Start: 34762, Stop: 34995, Start Num: 40

Candidate Starts for Yorick\_44:

(3, 34543), (9, 34582), (Start: 23 @34636 has 4 MA's), (24, 34654), (Start: 28 @34684 has 1 MA's), (Start: 30 @34699 has 22 MA's), (Start: 31 @34702 has 15 MA's), (32, 34714), (Start: 36 @34726 has 6 MA's), (Start: 40 @34762 has 90 MA's), (Start: 42 @34783 has 3 MA's), (55, 34957),

Gene: Zerg\_45 Start: 34762, Stop: 34995, Start Num: 40

Candidate Starts for Zerg\_45:

(3, 34543), (9, 34582), (Start: 23 @34636 has 4 MA's), (24, 34654), (Start: 28 @34684 has 1 MA's), (Start: 30 @34699 has 22 MA's), (Start: 31 @34702 has 15 MA's), (Start: 36 @34726 has 6 MA's), (Start: 40 @34762 has 90 MA's), (Start: 42 @34783 has 3 MA's), (55, 34957),