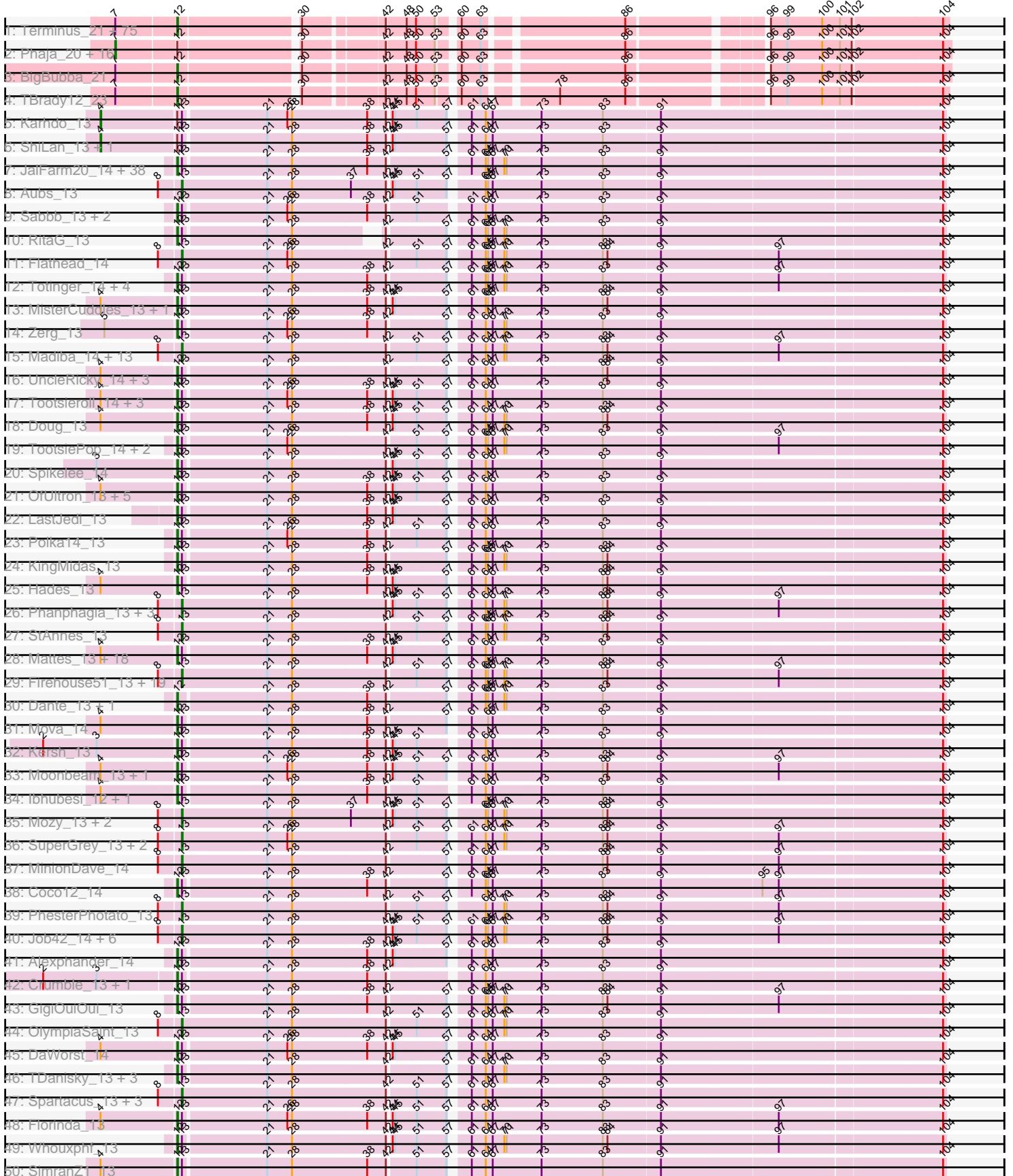
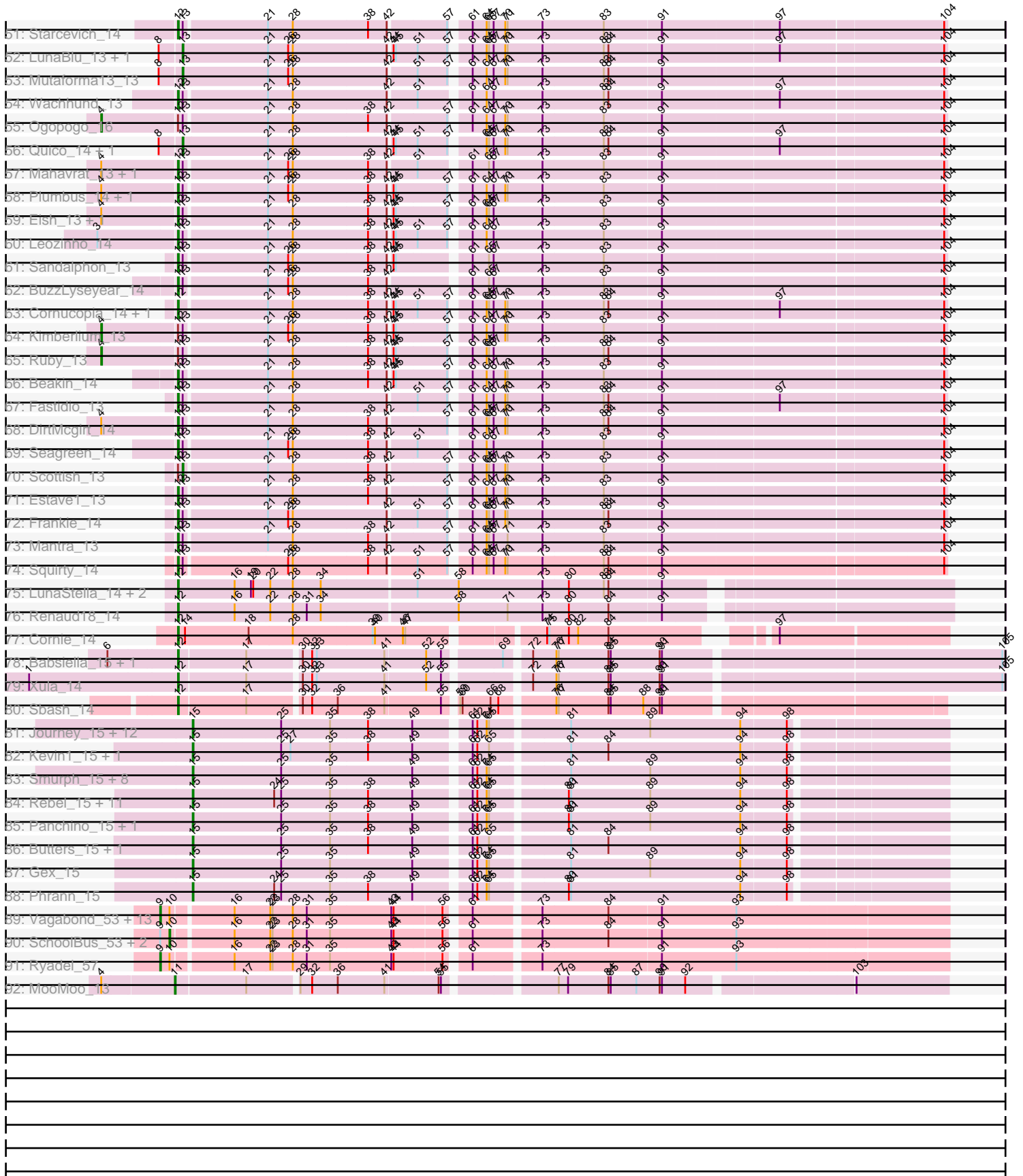


Pham 224185



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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 224185 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224185 has 373 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Terminus\_21, Goldilocks\_22, Command613\_22, Xandras\_23, Willez\_20, YassJohnny\_21, Traaww1\_18, Holt\_22, Youngblood\_21, Adnama\_23, Marshmallow\_21, Flypotenuse\_19, Buck\_20, Miniwave\_21, Asriel\_20, Lilizi\_23, MPhalcon\_20, Cookies\_21, Icee\_20, BadStone\_20, Inca\_20, Stark\_22, Gemini\_23, Filch\_22, Moldemort\_22, Emmina\_21, Palpatine\_20, FireRed\_20, Barbarian\_20, Sotrice96\_21, NelitzaMV\_21, Tomaszewski\_20, Murica\_19, GooberAzure\_23, AmericanBeauty\_23, Elite2014\_20, Bench\_23, Hoonter\_23, Thresher\_22, Misfit\_21, ChosenOne\_20, DoctorDiddles\_21, Henry\_20, ChotaBhai\_21, Paperbeatsrock\_23, Simpliphy\_22, Policronamos\_20, Harella\_19, Lilpickle\_20, Argent26\_23, ShamWow\_21, MadamMonkfish\_21, Highbury\_22, NoSleep\_22, xkcd\_21, HanKaySha\_22, OrionPax\_22, Wiggin\_23, MISSy\_20, Cactus\_22, Balomoji\_20, Gage\_23, JeTaime\_23, Saints25\_22, Kimchi\_23, Stank\_23, ShereKhan\_23, Easy2Say\_22, StolenFromERC\_23, Tuco\_21, Quallification\_22, Rimmer\_20, TeardropMSU\_20, GoldenSpark\_23, Sassay\_20, Tarkin\_23
- Track 2 : Phaja\_20, Myrale\_21, ABCat\_20, IHOP\_20, Teaspoon\_21, Pharsalus\_22, Gator\_19, StellaBean\_21, Czyszczo1\_22, CrystalP\_21, Nimrod\_21, SophKB\_21, Glexan\_19, Hokey\_22, Maxxinista\_22, Dusk\_20, Kanye\_23
- Track 3 : BigBubba\_21
- Track 4 : TBrady12\_23
- Track 5 : Karhdo\_13
- Track 6 : ShiLan\_13, ByChance\_13
- Track 7 : JalFarm20\_14, Clifton\_13, Rockne\_13, BlueCrab\_13, Cerasum\_14, VRedHorse\_13, Pacc40\_13, Gandalph\_13, Phatniss\_13, Strokeseat\_13, OwlsT2W\_14, BigPhil\_14, Daenerys\_13, OldBen\_13, Radiance\_13, Nitzel\_14, Pippy\_12, Nimbo\_13, Blexus\_13, Deb65\_13, Gorge\_13, Hlubikazi\_13, Inventum\_13, Pollywog\_14, Dorothy\_13, Leperchaun\_13, Velveteen\_14, Eradicator\_13, JoeyJr\_13, Brocalys\_13, Saal\_13, Geralt\_13, BodEinwohner17\_13, Mandlovu\_13, Sarma624\_14, Sassafras\_13, Latretium\_13, Kingsley\_14, Koella\_13
- Track 8 : Aubs\_13
- Track 9 : Sabbb\_13, Poenanya\_13, Doomphist\_13
- Track 10 : RitaG\_13
- Track 11 : Flathead\_14
- Track 12 : Totinger\_14, DosHalletts\_14, Awesomesauce\_14, LittleShirley\_14, Piper2020\_14
- Track 13 : MisterCuddles\_13, Girr\_13
- Track 14 : Zerg\_13

- Track 15 : Madiba\_14, MilanaBonita\_14, DotProduct\_13, EleanorGeorge\_13, XFactor\_13, ShroomBoi\_13, Phalconet\_13, Hamulus\_13, Phasih\_13, Bipolar\_13, DillTech15\_13, Ardmore\_12, Akhila\_14, Filuzino\_13
- Track 16 : UncleRicky\_14, Lorde\_14, Drago\_14, Enby\_14
- Track 17 : Tootsieroll\_14, Ramsey\_14, Stap\_14, RockyHorror\_14
- Track 18 : Doug\_13
- Track 19 : TootsiePop\_14, DocMcStuffins\_14, Misha28\_14
- Track 20 : Spikelee\_14
- Track 21 : OfUltron\_13, Llama\_13, Modragons\_13, Fancypants\_13, Sebastian\_13, Ochi17\_13
- Track 22 : LastJedi\_13
- Track 23 : Polka14\_13
- Track 24 : KingMidas\_13
- Track 25 : Hades\_13
- Track 26 : Phanphagia\_13, Shauna1\_12, Bobi\_14, Krakatau\_14
- Track 27 : StAnnes\_13
- Track 28 : Mattes\_13, Maravista\_13, Nivrat\_13, BobaPhett\_13, Burwell21\_13, SwagPiggett\_13, Philus\_13, Donkeykong\_12, ShowerHandel\_13, Priscilla\_13, Bubbles123\_13, Yorick\_13, Jarcob\_13, Martik\_13, Zizzle\_13, James\_13, FreddyB\_13, Cabrinians\_13, Lizziana\_13
- Track 29 : Firehouse51\_13, SG4\_13, GUmbie\_12, Taj\_13, Chuckly\_13, Byougenkin\_13, Royals2015\_13, KristaRAM\_14, Ovechkin\_13, DeadP\_13, SassyB\_13, Whatsapiecost\_13, Veteran\_13, Melissauren88\_13, QuickMath\_13, PopTart\_13, Tweety\_12, Fruitloop\_13, Wee\_12, CaptainTrips\_14
- Track 30 : Dante\_13, Che8\_13
- Track 31 : Mova\_14
- Track 32 : Kersh\_13
- Track 33 : Moonbeam\_13, Rialto\_14
- Track 34 : lbhubesi\_12, Harley\_13
- Track 35 : Mozy\_13, ArcusAngelus\_13, Chevrolet\_13
- Track 36 : SuperGrey\_13, Rita\_13, Kenuha5\_13
- Track 37 : MinionDave\_14
- Track 38 : Coco12\_14
- Track 39 : PhesterPhotato\_13
- Track 40 : Job42\_14, MilleniumForce\_14, SiSi\_13, Batiatus\_13, Emma\_13, DLane\_12, Galactic\_13
- Track 41 : Alexphander\_14
- Track 42 : Crumble\_13, NormanBulbieJr\_13
- Track 43 : GigiOuiOui\_13
- Track 44 : OlympiaSaint\_13
- Track 45 : DaWorst\_14
- Track 46 : TDanisky\_13, MadMen\_13, Sparkdehlily\_13, DRBy19\_13
- Track 47 : Spartacus\_13, Guppsters\_13, WillSterrel\_13, IrishSherpFalk\_13
- Track 48 : Florinda\_13
- Track 49 : Whouxphf\_13
- Track 50 : SimranZ1\_13
- Track 51 : Starcevich\_14
- Track 52 : LunaBlu\_13, Hegedechwinu\_14
- Track 53 : Mutaforma13\_13
- Track 54 : Wachhund\_13
- Track 55 : Ogopogo\_16
- Track 56 : Quico\_14, Girafales\_14
- Track 57 : Mahavrat\_13, Juniper1\_13

- Track 58 : Plumbus\_14, Juice456\_14
- Track 59 : Eish\_13, Spoonbill\_13
- Track 60 : Leozinho\_14
- Track 61 : Sandalphon\_13
- Track 62 : BuzzLyseyear\_14
- Track 63 : Cornucopia\_14, Marker\_14
- Track 64 : Kimberlium\_13
- Track 65 : Ruby\_13
- Track 66 : Beakin\_14
- Track 67 : Fastidio\_13
- Track 68 : DirtMcgirt\_14
- Track 69 : Seagreen\_14
- Track 70 : Scottish\_13
- Track 71 : Estave1\_13
- Track 72 : Frankie\_14
- Track 73 : Mantra\_13
- Track 74 : Squirty\_14
- Track 75 : LunaStella\_14, ThetaBob\_14, TChen\_14
- Track 76 : Renaud18\_14
- Track 77 : Cornie\_14
- Track 78 : Babsiella\_15, QueenHazel\_15
- Track 79 : Xula\_14
- Track 80 : Sbash\_14
- Track 81 : Journey\_15, Andies\_15, Bosection6\_15, Fulbright\_15, Silvy\_15, Melville\_15, Charlie\_15, Magsby\_15, Philonius\_15, Xeno\_15, Aggie\_15, Chewbacca\_15, Tapioca\_15
- Track 82 : Kevin1\_15, MichelleMyBell\_15
- Track 83 : Smurph\_15, Schnauzer\_15, Carcharodon\_15, Silvafighter\_15, Duplicity\_15, Xerxes\_15, Pipsqueaks\_15, Phloss\_15, Parmesanjohn\_15
- Track 84 : Rebel\_15, Redi\_15, PhancyPhin\_15, Shweta\_15, ShrimpFriedEgg\_15, Snekmaggedon\_15, Nenae\_15, Raymond7\_15, Jamie19\_15, Hanako\_15, BabeRuth\_15, SpongeBob\_15
- Track 85 : Panchino\_15, SkinnyPete\_15
- Track 86 : Butters\_15, Rubeelu\_15
- Track 87 : Gex\_15
- Track 88 : Phrann\_15
- Track 89 : Vagabond\_53, Krili\_52, NiebruSaylor\_52, Mori\_52, Shida\_53, Murai\_53, Familton\_54, Winget\_54, TelAviv\_50, Catdawg\_53, Blessica\_54, YungJamal\_56, Zakhe101\_53, Vorrps\_51
- Track 90 : SchoolBus\_53, Smooch\_55, JangDynasty\_53
- Track 91 : Ryadel\_57
- Track 92 : MooMoo\_13

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

The start number called the most often in the published annotations is 12, it was called in 222 of the 372 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adnama\_23, Alexphander\_14, AmericanBeauty\_23, Argent26\_23, Asriel\_20, Awesomesauce\_14, Babsiella\_15, BadStone\_20, Balomoji\_20, Barbarian\_20, Beakin\_14, Bench\_23, BigBubba\_21, BigPhil\_14, Blexus\_13, BlueCrab\_13, BobaPhett\_13, BodEinwohner17\_13, Brocalys\_13, Bubbles123\_13, Buck\_20, Burwell21\_13, BuzzLyseyear\_14, Cabrinians\_13, Cactus\_22, Cerasum\_14, Che8\_13, ChosenOne\_20, ChotaBhai\_21, Clifton\_13, Coco12\_14, Command613\_22, Cookies\_21, Cornie\_14, Cornucopia\_14, Crumble\_13, DRBy19\_13, DaWorst\_14, Daenerys\_13, Dante\_13, Deb65\_13, DirtMcgirt\_14, DocMcStuffins\_14, DoctorDiddles\_21, Donkeykong\_12, Doomphist\_13, Dorothy\_13, DosHalletts\_14, Doug\_13, Drago\_14, Easy2Say\_22, Eish\_13, Elite2014\_20, Emmina\_21, Enby\_14, Eradicator\_13, Estave1\_13, Fancypants\_13, Fastidio\_13, Filch\_22, FireRed\_20, Florinda\_13, Flypotenuse\_19, Frankie\_14, FreddyB\_13, Gage\_23, Gandalph\_13, Gemini\_23, Geralt\_13, GigiOuiOui\_13, Girr\_13, GoldenSpark\_23, Goldilocks\_22, GooberAzure\_23, Gorge\_13, Hades\_13, HanKaySha\_22, Harella\_19, Harley\_13, Henry\_20, Highbury\_22, Hlubikazi\_13, Holt\_22, Hoonter\_23, Ibhubesi\_12, Icee\_20, Inca\_20, Inventum\_13, JalFarm20\_14, James\_13, Jarcob\_13, JeTaime\_23, JoeyJr\_13, Juice456\_14, Juniper1\_13, Kersh\_13, Kimchi\_23, KingMidas\_13, Kingsley\_14, Koella\_13, LastJedi\_13, Latretium\_13, Leozinho\_14, Leperchaun\_13, Lilizi\_23, Lilpickle\_20, LittleShirley\_14, Lizziana\_13, Llama\_13, Lorde\_14, LunaStella\_14, MISSy\_20, MPhalcon\_20, MadMen\_13, MadamMonkfish\_21, Mahavrat\_13, Mandlovu\_13, Mantra\_13, Maravista\_13, Marker\_14, Marshmallow\_21, Martik\_13, Mattes\_13, Miniwave\_21, Misfit\_21, Misha28\_14, MisterCuddles\_13, Modragons\_13, Moldemort\_22, Moonbeam\_13, Mova\_14, Murica\_19, NelitzaMV\_21, Nimbo\_13, Nitzel\_14, Nivrat\_13, NoSleep\_22, NormanBulbieJr\_13, Ochi17\_13, OfUltron\_13, OldBen\_13, OrionPax\_22, OwlsT2W\_14, Pacc40\_13, Palpatine\_20, Paperbeatsrock\_23, Phatniss\_13, Philus\_13, Piper2020\_14, Pippy\_12, Plumbus\_14, Poenanya\_13, Policronamos\_20, Polka14\_13, Pollywog\_14, Priscilla\_13, Quallification\_22, QueenHazel\_15, Radiance\_13, Ramsey\_14, Renaud18\_14, Rialto\_14, Rimmer\_20, RitaG\_13, Rockne\_13, RockyHorror\_14, Saal\_13, Sabbb\_13, Saints25\_22, Sandalphon\_13, Sarma624\_14, Sassafras\_13, Sassay\_20, Sbash\_14, Seabastian\_13, Seagreen\_14, ShamWow\_21, ShereKhan\_23, ShowerHandel\_13, Simpliphy\_22, SimranZ1\_13, Sotrice96\_21, Sparkdehlily\_13, Spikelee\_14, Spoonbill\_13, Squirty\_14, Stank\_23, Stap\_14, Starceвич\_14, Stark\_22, StolenFromERC\_23, Strokeseat\_13, SwagPiggett\_13, TBrady12\_23, TChen\_14, TDanisky\_13, Tarkin\_23, TeardropMSU\_20, Terminus\_21, ThetaBob\_14, Thresher\_22, Tomaszewski\_20, TootsiePop\_14, Tootsieroll\_14, Totinger\_14, Traaww1\_18, Tuco\_21, UncleRicky\_14, VRedHorse\_13, Velveteen\_14, Wachhund\_13, Whouxphf\_13, Wiggin\_23, Willez\_20, Xandras\_23, Xula\_14, YassJohnny\_21, Yorick\_13, Youngblood\_21, Zerg\_13, Zizzle\_13, xkcd\_21,

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

- ABCat\_20, ByChance\_13, CrystalP\_21, Czyszczonek\_22, Dusk\_20, Gator\_19, Glexan\_19, Hopeny\_22, IHOP\_20, Kanye\_23, Karhdo\_13, Kimberlium\_13, Maxxinista\_22, Myrale\_21, Nimrod\_21, Ogopogo\_16, Phaja\_20, Pharsalus\_22, Ruby\_13, Scottish\_13, ShiLan\_13, SophKB\_21, StellaBean\_21, Teaspoon\_21,

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

- Aggie\_15, Akhila\_14, Andies\_15, ArcusAngelus\_13, Ardmore\_12, Aubs\_13, BabeRuth\_15, Batiatus\_13, Bipolar\_13, Blessica\_54, Bobi\_14, Bosection6\_15, Butters\_15, Byougenkin\_13, CaptainTrips\_14, Carcharodon\_15, Catdawg\_53, Charlie\_15, Chevrolet\_13, Chewbacca\_15, Chuckly\_13, DLane\_12, DeadP\_13, DillTech15\_13, DotProduct\_13, Duplicity\_15, EleanorGeorge\_13, Emma\_13, Familton\_54, Filuzino\_13, Firehouse51\_13, Flathead\_14, Fruitloop\_13, Fulbright\_15,

GUmbie\_12, Galactic\_13, Gex\_15, Girafales\_14, Guppsters\_13, Hamulus\_13, Hanako\_15, Hegedechwinu\_14, IrishSherpFalk\_13, Jamie19\_15, JangDynasty\_53, Job42\_14, Journey\_15, Kenuha5\_13, Kevin1\_15, Krakatau\_14, Krili\_52, KristaRAM\_14, LunaBlu\_13, Madiba\_14, Magsby\_15, Melissauren88\_13, Melville\_15, MichelleMyBell\_15, MilanaBonita\_14, MilleniumForce\_14, MinionDave\_14, MooMoo\_13, Mori\_52, Mozy\_13, Murai\_53, Mutaforma13\_13, Nenae\_15, NiebruSaylor\_52, OlympiaSaint\_13, Ovechkin\_13, Panchino\_15, Parmesanjohn\_15, Phalconet\_13, PhancyPhin\_15, Phanphagia\_13, Phasih\_13, PhesterPhotato\_13, Philonius\_15, Phloss\_15, Phrann\_15, Pipsqueaks\_15, PopTart\_13, QuickMath\_13, Quico\_14, Raymond7\_15, Rebel\_15, Redi\_15, Rita\_13, Royals2015\_13, Rubeelu\_15, Ryadel\_57, SG4\_13, SassyB\_13, Schnauzer\_15, SchoolBus\_53, Shauna1\_12, Shida\_53, ShrimpFriedEgg\_15, ShroomBoi\_13, Shweta\_15, SiSi\_13, Silvafighter\_15, Silvy\_15, SkinnyPete\_15, Smooch\_55, Smurph\_15, Snekmaggon\_15, Spartacus\_13, SpongeBob\_15, StAnnes\_13, SuperGrey\_13, Taj\_13, Tapioca\_15, TelAviv\_50, Tweety\_12, Vagabond\_53, Veteran\_13, Vorrrps\_51, Wee\_12, Whatsapiecost\_13, WillSterrel\_13, Winget\_54, XFactor\_13, Xeno\_15, Xerxes\_15, YungJamal\_56, Zakhe101\_53,

### Summary by start number:

#### Start 4:

- Found in 59 of 373 ( 15.8% ) of genes in pham
- Manual Annotations of this start: 6 of 372
- Called 10.2% of time when present
- Phage (with cluster) where this start called: ByChance\_13 (F1), Karhdo\_13 (F1), Kimberlium\_13 (F1), Ogopogo\_16 (F1), Ruby\_13 (F1), ShiLan\_13 (F1),

#### Start 7:

- Found in 95 of 373 ( 25.5% ) of genes in pham
- Manual Annotations of this start: 17 of 372
- Called 17.9% of time when present
- Phage (with cluster) where this start called: ABCat\_20 (E), CrystalP\_21 (E), Czystczon1\_22 (E), Dusk\_20 (E), Gator\_19 (E), Glexan\_19 (E), Hopey\_22 (E), IHOP\_20 (E), Kanye\_23 (E), Maxxinista\_22 (E), Myrale\_21 (E), Nimrod\_21 (E), Phaja\_20 (E), Pharsalus\_22 (E), SophKB\_21 (E), StellaBean\_21 (E), Teaspoon\_21 (E),

#### Start 9:

- Found in 18 of 373 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 15 of 372
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Blessica\_54 (O), Catdawg\_53 (O), Familton\_54 (O), Krili\_52 (O), Mori\_52 (O), Murai\_53 (O), NiebruSaylor\_52 (O), Ryadel\_57 (O), Shida\_53 (O), TelAviv\_50 (O), Vagabond\_53 (O), Vorrrps\_51 (O), Winget\_54 (O), YungJamal\_56 (O), Zakhe101\_53 (O),

#### Start 10:

- Found in 18 of 373 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 3 of 372
- Called 16.7% of time when present
- Phage (with cluster) where this start called: JangDynasty\_53 (O), SchoolBus\_53 (O), Smooch\_55 (O),

Start 11:

- Found in 1 of 373 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 1 of 372
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MooMoo\_13 (singleton),

Start 12:

- Found in 246 of 373 ( 66.0% ) of genes in pham
- Manual Annotations of this start: 222 of 372
- Called 90.2% of time when present
- Phage (with cluster) where this start called: Adnama\_23 (E), Alexphander\_14 (F1), AmericanBeauty\_23 (E), Argent26\_23 (E), Asriel\_20 (E), Awesomesauce\_14 (F1), Babsiella\_15 (I1), BadStone\_20 (E), Balomoji\_20 (E), Barbarian\_20 (E), Beakin\_14 (F1), Bench\_23 (E), BigBubba\_21 (E), BigPhil\_14 (F1), Blexus\_13 (F1), BlueCrab\_13 (F1), BobaPhett\_13 (F1), BodEinwohner17\_13 (F1), Brocalys\_13 (F1), Bubbles123\_13 (F1), Buck\_20 (E), Burwell21\_13 (F1), BuzzLyseyear\_14 (F1), Cabrinians\_13 (F1), Cactus\_22 (E), Cerasum\_14 (F1), Che8\_13 (F1), ChosenOne\_20 (E), ChotaBhai\_21 (E), Clifton\_13 (F1), Coco12\_14 (F1), Command613\_22 (E), Cookies\_21 (E), Cornie\_14 (F5), Cornucopia\_14 (F1), Crumble\_13 (F1), DRBy19\_13 (F1), DaWorst\_14 (F1), Daenerys\_13 (F1), Dante\_13 (F1), Deb65\_13 (F1), DirtMcgirt\_14 (F1), DocMcStuffins\_14 (F1), DoctorDiddles\_21 (E), Donkeykong\_12 (F1), Doomphist\_13 (F1), Dorothy\_13 (F1), DosHalletts\_14 (F1), Doug\_13 (F1), Drago\_14 (F1), Easy2Say\_22 (E), Eish\_13 (F1), Elite2014\_20 (E), Emmina\_21 (E), Enby\_14 (F1), Eradicator\_13 (F1), Estave1\_13 (F1), Fancypants\_13 (F1), Fastidio\_13 (F1), Filch\_22 (E), FireRed\_20 (E), Florinda\_13 (F1), Flypotenuse\_19 (E), Frankie\_14 (F1), FreddyB\_13 (F1), Gage\_23 (E), Gandolph\_13 (F1), Gemini\_23 (E), Geralt\_13 (F1), GigiOuiOui\_13 (F1), Girr\_13 (F1), GoldenSpark\_23 (E), Goldilocks\_22 (E), GooberAzure\_23 (E), Gorge\_13 (F1), Hades\_13 (F1), HanKaySha\_22 (E), Harella\_19 (E), Harley\_13 (F1), Henry\_20 (E), Highbury\_22 (E), Hlubikazi\_13 (F1), Holt\_22 (E), Hoonter\_23 (E), Ibhubesi\_12 (F1), Icee\_20 (E), Inca\_20 (E), Inventum\_13 (F1), JaFarm20\_14 (F1), James\_13 (F1), Jarcob\_13 (F1), JeTaime\_23 (E), JoeyJr\_13 (F1), Juice456\_14 (F1), Juniper1\_13 (F1), Kersh\_13 (F1), Kimchi\_23 (E), KingMidas\_13 (F1), Kingsley\_14 (F1), Koella\_13 (F1), LastJedi\_13 (F1), Latretium\_13 (F1), Leozinho\_14 (F1), Leperchaun\_13 (F1), Lilizi\_23 (E), Lilpickle\_20 (E), LittleShirley\_14 (F1), Lizziana\_13 (F1), Llama\_13 (F1), Lorde\_14 (F1), LunaStella\_14 (F4), MISSy\_20 (E), MPhalcon\_20 (E), MadMen\_13 (F1), MadamMonkfish\_21 (E), Mahavrat\_13 (F1), Mandlovu\_13 (F1), Mantra\_13 (F1), Maravista\_13 (F1), Marker\_14 (F1), Marshmallow\_21 (E), Martik\_13 (F1), Mattes\_13 (F1), Miniwave\_21 (E), Misfit\_21 (E), Misha28\_14 (F1), MisterCuddles\_13 (F1), Modragons\_13 (F1), Moldemort\_22 (E), Moonbeam\_13 (F1), Mova\_14 (F1), Murica\_19 (E), NelitzaMV\_21 (E), Nimbo\_13 (F1), Nitzel\_14 (F1), Nivrat\_13 (F1), NoSleep\_22 (E), NormanBulbieJr\_13 (F1), Ochi17\_13 (F1), OfUltron\_13 (F1), OldBen\_13 (F1), OrionPax\_22 (E), OwlsT2W\_14 (F1), Pacc40\_13 (F1), Palpatine\_20 (E), Paperbeatsrock\_23 (E), Phatniss\_13 (F1), Philus\_13 (F1), Piper2020\_14 (F1), Pippy\_12 (F1), Plumbus\_14 (F1), Poenanya\_13 (F1), Policronamos\_20 (E), Polka14\_13 (F1), Pollywog\_14 (F1), Priscilla\_13 (F1), Qualification\_22 (E), QueenHazel\_15 (I1), Radiance\_13 (F1), Ramsey\_14 (F1), Renaud18\_14 (F4), Rialto\_14 (F1), Rimmer\_20 (E), RitaG\_13 (F1), Rockne\_13 (F1), RockyHorror\_14 (F1), Saal\_13 (F1), Sabbb\_13 (F1), Saints25\_22 (E), Sandalphon\_13 (F1), Sarma624\_14 (F1), Sassafra\_13 (F1), Sassay\_20 (E), Sbash\_14 (I2), Seabastian\_13 (F1), Seagreen\_14 (F1), ShamWow\_21 (E), ShereKhan\_23 (E), ShowerHandel\_13 (F1), Simpliphy\_22 (E), SimranZ1\_13 (F1), Sotrice96\_21 (E), Sparkdehlily\_13 (F1), Spikelee\_14 (F1), Spoonbill\_13 (F1), Squirty\_14 (F3), Stank\_23



(E), Stap\_14 (F1), Starcevich\_14 (F1), Stark\_22 (E), StolenFromERC\_23 (E), Strokeseat\_13 (F1), SwagPigglett\_13 (F1), TBrady12\_23 (E), TChen\_14 (F4), TDanisky\_13 (F1), Tarkin\_23 (E), TeardropMSU\_20 (E), Terminus\_21 (E), ThetaBob\_14 (F4), Thresher\_22 (E), Tomaszewski\_20 (E), TootsiePop\_14 (F1), Tootsieroll\_14 (F1), Totinger\_14 (F1), Traaww1\_18 (E), Tuco\_21 (E), UncleRicky\_14 (F1), VRedHorse\_13 (F1), Velveteen\_14 (F1), Wachhund\_13 (F1), Whouxphf\_13 (F1), Wiggin\_23 (E), Willez\_20 (E), Xandras\_23 (E), Xula\_14 (I1), YassJohnny\_21 (E), Yorick\_13 (F1), Youngblood\_21 (E), Zerg\_13 (F1), Zizzle\_13 (F1), xkcd\_21 (E),

#### Start 13:

- Found in 204 of 373 ( 54.7% ) of genes in pham
- Manual Annotations of this start: 66 of 372
- Called 32.8% of time when present
- Phage (with cluster) where this start called: Akhila\_14 (F1), ArcusAngelus\_13 (F1), Ardmore\_12 (F1), Aubs\_13 (F1), Batiatus\_13 (F1), Bipolar\_13 (F1), Bobi\_14 (F1), Byougenkin\_13 (F1), CaptainTrips\_14 (F1), Chevrolet\_13 (F1), Chuckly\_13 (F1), DLane\_12 (F1), DeadP\_13 (F1), DillTech15\_13 (F1), DotProduct\_13 (F1), EleanorGeorge\_13 (F1), Emma\_13 (F1), Filuzino\_13 (F1), Firehouse51\_13 (F1), Flathead\_14 (F1), Fruitloop\_13 (F1), GUmble\_12 (F1), Galactic\_13 (F1), Girafales\_14 (F1), Guppsters\_13 (F1), Hamulus\_13 (F1), Hegedechwinu\_14 (F1), IrishSherpFalk\_13 (F1), Job42\_14 (F1), Kenuha5\_13 (F1), Krakatau\_14 (F1), KristaRAM\_14 (F1), LunaBlu\_13 (F1), Madiba\_14 (F1), Melissauren88\_13 (F1), MilanaBonita\_14 (F1), MilleniumForce\_14 (F1), MinionDave\_14 (F1), Mozy\_13 (F1), Mutaforma13\_13 (F1), OlympiaSaint\_13 (F1), Ovechkin\_13 (F1), Phalconet\_13 (F1), Phanphagia\_13 (F1), Phasih\_13 (F1), PhesterPhotato\_13 (F1), PopTart\_13 (F1), QuickMath\_13 (F1), Quico\_14 (F1), Rita\_13 (F1), Royals2015\_13 (F1), SG4\_13 (F1), SassyB\_13 (F1), Scottish\_13 (F1), Shauna1\_12 (F1), ShroomBoi\_13 (F1), SiSi\_13 (F1), Spartacus\_13 (F1), StAnnes\_13 (F1), SuperGrey\_13 (F1), Taj\_13 (F1), Tweety\_12 (F1), Veteran\_13 (F1), Wee\_12 (F1), Whatsapiecost\_13 (F1), WillSterrel\_13 (F1), XFactor\_13 (F1),

#### Start 15:

- Found in 42 of 373 ( 11.3% ) of genes in pham
- Manual Annotations of this start: 42 of 372
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aggie\_15 (N), Andies\_15 (N), BabeRuth\_15 (N), Bosection6\_15 (N), Butters\_15 (N), Carcharodon\_15 (N), Charlie\_15 (N), Chewbacca\_15 (N), Duplicity\_15 (N), Fulbright\_15 (N), Gex\_15 (N), Hanako\_15 (N), Jamie19\_15 (N), Journey\_15 (N), Kevin1\_15 (N), Magsby\_15 (N), Melville\_15 (N), MichelleMyBell\_15 (N), Nenae\_15 (N), Panchino\_15 (N), Parmesanjohn\_15 (N), PhancyPhin\_15 (N), Philonius\_15 (N), Phloss\_15 (N), Phrann\_15 (N), Pipsqueaks\_15 (N), Raymond7\_15 (N), Rebel\_15 (N), Redi\_15 (N), Rubeelu\_15 (N), Schnauzer\_15 (N), ShrimpFriedEgg\_15 (N), Shweta\_15 (N), Silvafighter\_15 (N), Silvy\_15 (N), SkinnyPete\_15 (N), Smurph\_15 (N), Snekmaggon\_15 (N), SpongeBob\_15 (N), Tapioca\_15 (N), Xeno\_15 (N), Xerxes\_15 (N),

#### Summary by clusters:

There are 10 clusters represented in this pham: F1, singleton, F3, E, F5, I1, I2, O, N, F4,

Info for manual annotations of cluster E:

- Start number 7 was manually annotated 17 times for cluster E.
- Start number 12 was manually annotated 78 times for cluster E.

Info for manual annotations of cluster F1:

- Start number 4 was manually annotated 6 times for cluster F1.
- Start number 12 was manually annotated 134 times for cluster F1.
- Start number 13 was manually annotated 66 times for cluster F1.

Info for manual annotations of cluster F3:

- Start number 12 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 12 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 12 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster I1:

- Start number 12 was manually annotated 3 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 12 was manually annotated 1 time for cluster I2.

Info for manual annotations of cluster N:

- Start number 15 was manually annotated 42 times for cluster N.

Info for manual annotations of cluster O:

- Start number 9 was manually annotated 15 times for cluster O.
- Start number 10 was manually annotated 3 times for cluster O.

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

Gene: ABCat\_20 Start: 12397, Stop: 13340, Start Num: 7

Candidate Starts for ABCat\_20:

(Start: 7 @12397 has 17 MA's), (Start: 12 @12469 has 222 MA's), (30, 12613), (42, 12706), (48, 12730), (50, 12742), (53, 12766), (60, 12784), (63, 12808), (86, 12967), (96, 13120), (99, 13141), (100, 13186), (101, 13207), (102, 13222), (104, 13333),

Gene: Adnama\_23 Start: 12463, Stop: 13337, Start Num: 12

Candidate Starts for Adnama\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: Aggie\_15 Start: 9037, Stop: 9943, Start Num: 15

Candidate Starts for Aggie\_15:

(Start: 15 @9037 has 42 MA's), (25, 9145), (35, 9208), (38, 9256), (49, 9313), (61, 9376), (62, 9382), (64, 9394), (65, 9397), (81, 9487), (89, 9589), (94, 9703), (98, 9760),

Gene: Akhila\_14 Start: 9227, Stop: 10163, Start Num: 13

Candidate Starts for Akhila\_14:

(8, 9200), (Start: 13 @9227 has 66 MA's), (21, 9335), (28, 9365), (42, 9485), (51, 9518), (57, 9554), (61, 9572), (64, 9590), (67, 9599), (70, 9614), (71, 9617), (73, 9662), (83, 9740), (84, 9746), (91, 9812), (97, 9959), (104, 10160),

Gene: Alexphander\_14 Start: 8386, Stop: 9322, Start Num: 12

Candidate Starts for Alexphander\_14:

(Start: 12 @8386 has 222 MA's), (Start: 13 @8392 has 66 MA's), (21, 8494), (28, 8524), (38, 8620), (42, 8644), (44, 8647), (45, 8650), (57, 8713), (61, 8731), (64, 8749), (67, 8758), (73, 8821), (83, 8899), (91, 8971), (104, 9319),

Gene: AmericanBeauty\_23 Start: 12460, Stop: 13331, Start Num: 12

Candidate Starts for AmericanBeauty\_23:

(Start: 7 @12388 has 17 MA's), (Start: 12 @12460 has 222 MA's), (30, 12604), (42, 12697), (48, 12721), (50, 12733), (53, 12757), (60, 12775), (63, 12799), (86, 12958), (96, 13111), (99, 13132), (100, 13177), (101, 13198), (102, 13213), (104, 13324),

Gene: Andies\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Andies\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: ArcusAngelus\_13 Start: 8567, Stop: 9503, Start Num: 13

Candidate Starts for ArcusAngelus\_13:

(8, 8540), (Start: 13 @8567 has 66 MA's), (21, 8675), (28, 8705), (37, 8780), (42, 8825), (44, 8828), (45, 8831), (51, 8858), (57, 8894), (64, 8930), (65, 8933), (67, 8939), (70, 8954), (71, 8957), (73, 9002), (83, 9080), (84, 9086), (91, 9152), (104, 9500),

Gene: Ardmore\_12 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for Ardmore\_12:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (67, 8949), (70, 8964), (71, 8967), (73, 9012), (83, 9090), (84, 9096), (91, 9162), (97, 9309), (104, 9510),

Gene: Argent26\_23 Start: 12463, Stop: 13334, Start Num: 12

Candidate Starts for Argent26\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: Asriel\_20 Start: 11341, Stop: 12212, Start Num: 12

Candidate Starts for Asriel\_20:

(Start: 7 @11269 has 17 MA's), (Start: 12 @11341 has 222 MA's), (30, 11485), (42, 11578), (48, 11602), (50, 11614), (53, 11638), (60, 11656), (63, 11680), (86, 11839), (96, 11992), (99, 12013), (100, 12058), (101, 12079), (102, 12094), (104, 12205),

Gene: Aubs\_13 Start: 8576, Stop: 9512, Start Num: 13

Candidate Starts for Aubs\_13:

(8, 8549), (Start: 13 @8576 has 66 MA's), (21, 8684), (28, 8714), (37, 8789), (42, 8834), (44, 8837), (45, 8840), (51, 8867), (57, 8903), (64, 8939), (65, 8942), (67, 8948), (73, 9011), (83, 9089), (91, 9161), (104, 9509),

Gene: Awesomesauce\_14 Start: 8400, Stop: 9336, Start Num: 12

Candidate Starts for Awesomesauce\_14:

(Start: 12 @8400 has 222 MA's), (Start: 13 @8406 has 66 MA's), (21, 8508), (28, 8538), (38, 8634), (42, 8658), (57, 8727), (61, 8745), (64, 8763), (65, 8766), (67, 8772), (70, 8787), (71, 8790), (73, 8835), (83, 8913), (91, 8985), (97, 9132), (104, 9333),

Gene: BabeRuth\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for BabeRuth\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: Babsiella\_15 Start: 9775, Stop: 10768, Start Num: 12

Candidate Starts for Babsiella\_15:

(6, 9688), (Start: 12 @9775 has 222 MA's), (17, 9859), (30, 9922), (32, 9934), (33, 9940), (41, 10027), (52, 10078), (55, 10096), (69, 10162), (72, 10186), (76, 10216), (77, 10219), (84, 10282), (85, 10285), (90, 10348), (91, 10351), (105, 10765),

Gene: BadStone\_20 Start: 12469, Stop: 13340, Start Num: 12

Candidate Starts for BadStone\_20:

(Start: 7 @12397 has 17 MA's), (Start: 12 @12469 has 222 MA's), (30, 12613), (42, 12706), (48, 12730), (50, 12742), (53, 12766), (60, 12784), (63, 12808), (86, 12967), (96, 13120), (99, 13141), (100, 13186), (101, 13207), (102, 13222), (104, 13333),

Gene: Balomoji\_20 Start: 12203, Stop: 13074, Start Num: 12

Candidate Starts for Balomoji\_20:

(Start: 7 @12131 has 17 MA's), (Start: 12 @12203 has 222 MA's), (30, 12347), (42, 12440), (48, 12464), (50, 12476), (53, 12500), (60, 12518), (63, 12542), (86, 12701), (96, 12854), (99, 12875), (100, 12920), (101, 12941), (102, 12956), (104, 13067),

Gene: Barbarian\_20 Start: 11341, Stop: 12212, Start Num: 12

Candidate Starts for Barbarian\_20:

(Start: 7 @11269 has 17 MA's), (Start: 12 @11341 has 222 MA's), (30, 11485), (42, 11578), (48, 11602), (50, 11614), (53, 11638), (60, 11656), (63, 11680), (86, 11839), (96, 11992), (99, 12013), (100, 12058), (101, 12079), (102, 12094), (104, 12205),

Gene: Batiatus\_13 Start: 8576, Stop: 9512, Start Num: 13

Candidate Starts for Batiatus\_13:

(8, 8549), (Start: 13 @8576 has 66 MA's), (21, 8684), (28, 8714), (42, 8834), (44, 8837), (45, 8840), (51, 8867), (57, 8903), (61, 8921), (64, 8939), (65, 8942), (67, 8948), (70, 8963), (71, 8966), (73, 9011), (83, 9089), (84, 9095), (91, 9161), (97, 9308), (104, 9509),

Gene: Beakin\_14 Start: 8392, Stop: 9328, Start Num: 12

Candidate Starts for Beakin\_14:

(Start: 12 @8392 has 222 MA's), (Start: 13 @8398 has 66 MA's), (21, 8500), (28, 8530), (38, 8626), (42, 8650), (44, 8653), (45, 8656), (57, 8719), (61, 8737), (64, 8755), (67, 8764), (70, 8779), (71, 8782), (73, 8827), (83, 8905), (91, 8977), (104, 9325),

Gene: Bench\_23 Start: 12336, Stop: 13207, Start Num: 12

Candidate Starts for Bench\_23:

(Start: 7 @12264 has 17 MA's), (Start: 12 @12336 has 222 MA's), (30, 12480), (42, 12573), (48, 12597), (50, 12609), (53, 12633), (60, 12651), (63, 12675), (86, 12834), (96, 12987), (99, 13008), (100, 13053), (101, 13074), (102, 13089), (104, 13200),

Gene: BigBubba\_21 Start: 11720, Stop: 12594, Start Num: 12

Candidate Starts for BigBubba\_21:

(Start: 7 @11648 has 17 MA's), (Start: 12 @11720 has 222 MA's), (30, 11864), (42, 11957), (48, 11981), (50, 11993), (53, 12017), (60, 12035), (63, 12059), (86, 12218), (96, 12371), (99, 12392), (100, 12437), (101, 12458), (102, 12473), (104, 12584),

Gene: BigPhil\_14 Start: 8383, Stop: 9319, Start Num: 12

Candidate Starts for BigPhil\_14:

(Start: 12 @8383 has 222 MA's), (Start: 13 @8389 has 66 MA's), (21, 8491), (28, 8521), (38, 8617), (42, 8641), (57, 8710), (61, 8728), (64, 8746), (65, 8749), (67, 8755), (70, 8770), (71, 8773), (73, 8818), (83, 8896), (91, 8968), (104, 9316),

Gene: Bipolar\_13 Start: 8545, Stop: 9481, Start Num: 13

Candidate Starts for Bipolar\_13:

(8, 8518), (Start: 13 @8545 has 66 MA's), (21, 8653), (28, 8683), (42, 8803), (51, 8836), (57, 8872), (61, 8890), (64, 8908), (67, 8917), (70, 8932), (71, 8935), (73, 8980), (83, 9058), (84, 9064), (91, 9130), (97, 9277), (104, 9478),

Gene: Blessica\_54 Start: 26060, Stop: 27011, Start Num: 9

Candidate Starts for Blessica\_54:

(Start: 9 @26060 has 15 MA's), (Start: 10 @26072 has 3 MA's), (16, 26144), (22, 26189), (23, 26192), (28, 26216), (31, 26234), (35, 26264), (43, 26342), (44, 26345), (56, 26402), (61, 26426), (73, 26501), (84, 26585), (91, 26651), (93, 26747),

Gene: Blexus\_13 Start: 8548, Stop: 9484, Start Num: 12

Candidate Starts for Blexus\_13:

(Start: 12 @8548 has 222 MA's), (Start: 13 @8554 has 66 MA's), (21, 8656), (28, 8686), (38, 8782), (42, 8806), (57, 8875), (61, 8893), (64, 8911), (65, 8914), (67, 8920), (70, 8935), (71, 8938), (73, 8983), (83, 9061), (91, 9133), (104, 9481),

Gene: BlueCrab\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for BlueCrab\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: BobaPhett\_13 Start: 8529, Stop: 9465, Start Num: 12

Candidate Starts for BobaPhett\_13:

(Start: 4 @8436 has 6 MA's), (Start: 12 @8529 has 222 MA's), (Start: 13 @8535 has 66 MA's), (21, 8637), (28, 8667), (38, 8763), (42, 8787), (44, 8790), (45, 8793), (57, 8856), (61, 8874), (64, 8892), (67, 8901), (73, 8964), (83, 9042), (91, 9114), (104, 9462),

Gene: Bobi\_14 Start: 8406, Stop: 9342, Start Num: 13

Candidate Starts for Bobi\_14:

(8, 8379), (Start: 13 @8406 has 66 MA's), (21, 8514), (28, 8544), (42, 8664), (44, 8667), (45, 8670), (51, 8697), (57, 8733), (61, 8751), (64, 8769), (67, 8778), (70, 8793), (71, 8796), (73, 8841), (83, 8919), (84, 8925), (91, 8991), (97, 9138), (104, 9339),

Gene: BodEinwohner17\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for BodEinwohner17\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Bosection6\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Bosection6\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Brocalys\_13 Start: 8521, Stop: 9457, Start Num: 12

Candidate Starts for Brocalys\_13:

(Start: 12 @8521 has 222 MA's), (Start: 13 @8527 has 66 MA's), (21, 8629), (28, 8659), (38, 8755), (42, 8779), (57, 8848), (61, 8866), (64, 8884), (65, 8887), (67, 8893), (70, 8908), (71, 8911), (73, 8956), (83, 9034), (91, 9106), (104, 9454),

Gene: Bubbles123\_13 Start: 8557, Stop: 9493, Start Num: 12

Candidate Starts for Bubbles123\_13:

(Start: 4 @8464 has 6 MA's), (Start: 12 @8557 has 222 MA's), (Start: 13 @8563 has 66 MA's), (21, 8665), (28, 8695), (38, 8791), (42, 8815), (44, 8818), (45, 8821), (57, 8884), (61, 8902), (64, 8920), (67, 8929), (73, 8992), (83, 9070), (91, 9142), (104, 9490),

Gene: Buck\_20 Start: 12426, Stop: 13297, Start Num: 12

Candidate Starts for Buck\_20:

(Start: 7 @12354 has 17 MA's), (Start: 12 @12426 has 222 MA's), (30, 12570), (42, 12663), (48, 12687), (50, 12699), (53, 12723), (60, 12741), (63, 12765), (86, 12924), (96, 13077), (99, 13098), (100, 13143), (101, 13164), (102, 13179), (104, 13290),

Gene: Burwell21\_13 Start: 8536, Stop: 9472, Start Num: 12

Candidate Starts for Burwell21\_13:

(Start: 4 @8443 has 6 MA's), (Start: 12 @8536 has 222 MA's), (Start: 13 @8542 has 66 MA's), (21, 8644), (28, 8674), (38, 8770), (42, 8794), (44, 8797), (45, 8800), (57, 8863), (61, 8881), (64, 8899), (67, 8908), (73, 8971), (83, 9049), (91, 9121), (104, 9469),

Gene: Butters\_15 Start: 9056, Stop: 9962, Start Num: 15

Candidate Starts for Butters\_15:

(Start: 15 @9056 has 42 MA's), (25, 9164), (35, 9227), (38, 9275), (49, 9332), (61, 9395), (62, 9401), (65, 9416), (81, 9506), (84, 9554), (94, 9722), (98, 9779),

Gene: BuzzLyseyear\_14 Start: 8386, Stop: 9322, Start Num: 12

Candidate Starts for BuzzLyseyear\_14:

(Start: 12 @8386 has 222 MA's), (Start: 13 @8392 has 66 MA's), (21, 8494), (26, 8518), (28, 8524), (38, 8620), (42, 8644), (61, 8731), (65, 8752), (67, 8758), (73, 8821), (83, 8899), (91, 8971), (104, 9319),

Gene: ByChance\_13 Start: 8446, Stop: 9475, Start Num: 4

Candidate Starts for ByChance\_13:

(Start: 4 @8446 has 6 MA's), (Start: 12 @8539 has 222 MA's), (Start: 13 @8545 has 66 MA's), (21, 8647), (28, 8677), (38, 8773), (42, 8797), (44, 8800), (45, 8803), (57, 8866), (61, 8884), (64, 8902), (67, 8911), (73, 8974), (83, 9052), (91, 9124), (104, 9472),

Gene: Byougenkin\_13 Start: 8548, Stop: 9484, Start Num: 13

Candidate Starts for Byougenkin\_13:

(8, 8521), (Start: 13 @8548 has 66 MA's), (21, 8656), (28, 8686), (42, 8806), (51, 8839), (57, 8875), (61, 8893), (64, 8911), (65, 8914), (67, 8920), (70, 8935), (71, 8938), (73, 8983), (83, 9061), (84, 9067), (91, 9133), (97, 9280), (104, 9481),

Gene: Cabrinians\_13 Start: 8529, Stop: 9465, Start Num: 12

Candidate Starts for Cabrinians\_13:

(Start: 4 @8436 has 6 MA's), (Start: 12 @8529 has 222 MA's), (Start: 13 @8535 has 66 MA's), (21, 8637), (28, 8667), (38, 8763), (42, 8787), (44, 8790), (45, 8793), (57, 8856), (61, 8874), (64, 8892), (67, 8901), (73, 8964), (83, 9042), (91, 9114), (104, 9462),

Gene: Cactus\_22 Start: 11682, Stop: 12553, Start Num: 12

Candidate Starts for Cactus\_22:

(Start: 7 @11610 has 17 MA's), (Start: 12 @11682 has 222 MA's), (30, 11826), (42, 11919), (48, 11943), (50, 11955), (53, 11979), (60, 11997), (63, 12021), (86, 12180), (96, 12333), (99, 12354), (100, 12399), (101, 12420), (102, 12435), (104, 12546),

Gene: CaptainTrips\_14 Start: 9225, Stop: 10161, Start Num: 13

Candidate Starts for CaptainTrips\_14:

(8, 9198), (Start: 13 @9225 has 66 MA's), (21, 9333), (28, 9363), (42, 9483), (51, 9516), (57, 9552), (61, 9570), (64, 9588), (65, 9591), (67, 9597), (70, 9612), (71, 9615), (73, 9660), (83, 9738), (84, 9744), (91, 9810), (97, 9957), (104, 10158),

Gene: Carcharodon\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Carcharodon\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Catdawg\_53 Start: 25749, Stop: 26700, Start Num: 9

Candidate Starts for Catdawg\_53:

(Start: 9 @25749 has 15 MA's), (Start: 10 @25761 has 3 MA's), (16, 25833), (22, 25878), (23, 25881), (28, 25905), (31, 25923), (35, 25953), (43, 26031), (44, 26034), (56, 26091), (61, 26115), (73, 26190), (84, 26274), (91, 26340), (93, 26436),

Gene: Cerasum\_14 Start: 8383, Stop: 9319, Start Num: 12

Candidate Starts for Cerasum\_14:

(Start: 12 @8383 has 222 MA's), (Start: 13 @8389 has 66 MA's), (21, 8491), (28, 8521), (38, 8617), (42, 8641), (57, 8710), (61, 8728), (64, 8746), (65, 8749), (67, 8755), (70, 8770), (71, 8773), (73, 8818), (83, 8896), (91, 8968), (104, 9316),

Gene: Charlie\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Charlie\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Che8\_13 Start: 8536, Stop: 9472, Start Num: 12

Candidate Starts for Che8\_13:

(Start: 12 @8536 has 222 MA's), (21, 8644), (28, 8674), (38, 8770), (42, 8794), (57, 8863), (61, 8881), (64, 8899), (65, 8902), (67, 8908), (70, 8923), (71, 8926), (73, 8971), (83, 9049), (91, 9121), (104, 9469),

Gene: Chevrolet\_13 Start: 8567, Stop: 9503, Start Num: 13

Candidate Starts for Chevrolet\_13:

(8, 8540), (Start: 13 @8567 has 66 MA's), (21, 8675), (28, 8705), (37, 8780), (42, 8825), (44, 8828), (45, 8831), (51, 8858), (57, 8894), (64, 8930), (65, 8933), (67, 8939), (70, 8954), (71, 8957), (73, 9002), (83, 9080), (84, 9086), (91, 9152), (104, 9500),

Gene: Chewbacca\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Chewbacca\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: ChosenOne\_20 Start: 11683, Stop: 12554, Start Num: 12

Candidate Starts for ChosenOne\_20:

(Start: 7 @11611 has 17 MA's), (Start: 12 @11683 has 222 MA's), (30, 11827), (42, 11920), (48, 11944), (50, 11956), (53, 11980), (60, 11998), (63, 12022), (86, 12181), (96, 12334), (99, 12355), (100, 12400), (101, 12421), (102, 12436), (104, 12547),

Gene: ChotaBhai\_21 Start: 11719, Stop: 12590, Start Num: 12

Candidate Starts for ChotaBhai\_21:

(Start: 7 @11647 has 17 MA's), (Start: 12 @11719 has 222 MA's), (30, 11863), (42, 11956), (48, 11980), (50, 11992), (53, 12016), (60, 12034), (63, 12058), (86, 12217), (96, 12370), (99, 12391), (100, 12436), (101, 12457), (102, 12472), (104, 12583),

Gene: Chuckly\_13 Start: 8578, Stop: 9514, Start Num: 13

Candidate Starts for Chuckly\_13:

(8, 8551), (Start: 13 @8578 has 66 MA's), (21, 8686), (28, 8716), (42, 8836), (51, 8869), (57, 8905), (61, 8923), (64, 8941), (65, 8944), (67, 8950), (70, 8965), (71, 8968), (73, 9013), (83, 9091), (84, 9097), (91, 9163), (97, 9310), (104, 9511),

Gene: Clifton\_13 Start: 8520, Stop: 9456, Start Num: 12

Candidate Starts for Clifton\_13:

(Start: 12 @8520 has 222 MA's), (Start: 13 @8526 has 66 MA's), (21, 8628), (28, 8658), (38, 8754), (42, 8778), (57, 8847), (61, 8865), (64, 8883), (65, 8886), (67, 8892), (70, 8907), (71, 8910), (73, 8955), (83, 9033), (91, 9105), (104, 9453),

Gene: Coco12\_14 Start: 8385, Stop: 9321, Start Num: 12

Candidate Starts for Coco12\_14:

(Start: 12 @8385 has 222 MA's), (Start: 13 @8391 has 66 MA's), (21, 8493), (28, 8523), (38, 8619), (42, 8643), (57, 8712), (61, 8730), (64, 8748), (65, 8751), (67, 8757), (73, 8820), (83, 8898), (91, 8970), (95, 9096), (97, 9117), (104, 9318),

Gene: Command613\_22 Start: 12738, Stop: 13609, Start Num: 12

Candidate Starts for Command613\_22:

(Start: 7 @12666 has 17 MA's), (Start: 12 @12738 has 222 MA's), (30, 12882), (42, 12975), (48, 12999), (50, 13011), (53, 13035), (60, 13053), (63, 13077), (86, 13236), (96, 13389), (99, 13410), (100, 13455), (101, 13476), (102, 13491), (104, 13602),

Gene: Cookies\_21 Start: 12342, Stop: 13213, Start Num: 12

Candidate Starts for Cookies\_21:

(Start: 7 @12270 has 17 MA's), (Start: 12 @12342 has 222 MA's), (30, 12486), (42, 12579), (48, 12603), (50, 12615), (53, 12639), (60, 12657), (63, 12681), (86, 12840), (96, 12993), (99, 13014), (100, 13059), (101, 13080), (102, 13095), (104, 13206),

Gene: Cornie\_14 Start: 8819, Stop: 9710, Start Num: 12

Candidate Starts for Cornie\_14:

(Start: 12 @8819 has 222 MA's), (14, 8828), (18, 8909), (28, 8963), (39, 9062), (40, 9065), (46, 9101), (47, 9104), (74, 9257), (75, 9260), (80, 9284), (82, 9296), (84, 9335), (97, 9500),

Gene: Cornucopia\_14 Start: 8418, Stop: 9354, Start Num: 12

Candidate Starts for Cornucopia\_14:



(Start: 12 @8418 has 222 MA's), (21, 8526), (28, 8556), (38, 8652), (42, 8676), (44, 8679), (45, 8682), (51, 8709), (57, 8745), (61, 8763), (64, 8781), (65, 8784), (67, 8790), (70, 8805), (71, 8808), (73, 8853), (83, 8931), (84, 8937), (91, 9003), (97, 9150), (104, 9351),

Gene: Crumble\_13 Start: 8537, Stop: 9473, Start Num: 12

Candidate Starts for Crumble\_13:

(2, 8372), (3, 8441), (Start: 12 @8537 has 222 MA's), (Start: 13 @8543 has 66 MA's), (21, 8645), (28, 8675), (38, 8771), (42, 8795), (61, 8882), (64, 8900), (67, 8909), (73, 8972), (83, 9050), (91, 9122), (104, 9470),

Gene: CrystalP\_21 Start: 12398, Stop: 13341, Start Num: 7

Candidate Starts for CrystalP\_21:

(Start: 7 @12398 has 17 MA's), (Start: 12 @12470 has 222 MA's), (30, 12614), (42, 12707), (48, 12731), (50, 12743), (53, 12767), (60, 12785), (63, 12809), (86, 12968), (96, 13121), (99, 13142), (100, 13187), (101, 13208), (102, 13223), (104, 13334),

Gene: Czyszczone1\_22 Start: 12146, Stop: 13089, Start Num: 7

Candidate Starts for Czyszczone1\_22:

(Start: 7 @12146 has 17 MA's), (Start: 12 @12218 has 222 MA's), (30, 12362), (42, 12455), (48, 12479), (50, 12491), (53, 12515), (60, 12533), (63, 12557), (86, 12716), (96, 12869), (99, 12890), (100, 12935), (101, 12956), (102, 12971), (104, 13082),

Gene: DLane\_12 Start: 8576, Stop: 9512, Start Num: 13

Candidate Starts for DLane\_12:

(8, 8549), (Start: 13 @8576 has 66 MA's), (21, 8684), (28, 8714), (42, 8834), (44, 8837), (45, 8840), (51, 8867), (57, 8903), (61, 8921), (64, 8939), (65, 8942), (67, 8948), (70, 8963), (71, 8966), (73, 9011), (83, 9089), (84, 9095), (91, 9161), (97, 9308), (104, 9509),

Gene: DRBy19\_13 Start: 8561, Stop: 9497, Start Num: 12

Candidate Starts for DRBy19\_13:

(Start: 12 @8561 has 222 MA's), (Start: 13 @8567 has 66 MA's), (21, 8669), (28, 8699), (42, 8819), (57, 8888), (61, 8906), (64, 8924), (67, 8933), (70, 8948), (71, 8951), (73, 8996), (83, 9074), (91, 9146), (104, 9494),

Gene: DaWorst\_14 Start: 8391, Stop: 9327, Start Num: 12

Candidate Starts for DaWorst\_14:

(Start: 4 @8298 has 6 MA's), (Start: 12 @8391 has 222 MA's), (Start: 13 @8397 has 66 MA's), (21, 8499), (26, 8523), (28, 8529), (38, 8625), (42, 8649), (44, 8652), (45, 8655), (57, 8718), (61, 8736), (64, 8754), (67, 8763), (73, 8826), (83, 8904), (91, 8976), (104, 9324),

Gene: Daenerys\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Daenerys\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Dante\_13 Start: 8563, Stop: 9499, Start Num: 12

Candidate Starts for Dante\_13:

(Start: 12 @8563 has 222 MA's), (21, 8671), (28, 8701), (38, 8797), (42, 8821), (57, 8890), (61, 8908), (64, 8926), (65, 8929), (67, 8935), (70, 8950), (71, 8953), (73, 8998), (83, 9076), (91, 9148), (104, 9496),

Gene: DeadP\_13 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for DeadP\_13:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (65, 8943), (67, 8949), (70, 8964), (71, 8967), (73, 9012), (83, 9090), (84, 9096), (91, 9162), (97, 9309), (104, 9510),

Gene: Deb65\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Deb65\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: DillTech15\_13 Start: 8576, Stop: 9512, Start Num: 13

Candidate Starts for DillTech15\_13:

(8, 8549), (Start: 13 @8576 has 66 MA's), (21, 8684), (28, 8714), (42, 8834), (51, 8867), (57, 8903), (61, 8921), (64, 8939), (67, 8948), (70, 8963), (71, 8966), (73, 9011), (83, 9089), (84, 9095), (91, 9161), (97, 9308), (104, 9509),

Gene: DirtMcgirt\_14 Start: 8392, Stop: 9328, Start Num: 12

Candidate Starts for DirtMcgirt\_14:

(Start: 4 @8299 has 6 MA's), (Start: 12 @8392 has 222 MA's), (Start: 13 @8398 has 66 MA's), (21, 8500), (28, 8530), (38, 8626), (42, 8650), (57, 8719), (61, 8737), (64, 8755), (65, 8758), (67, 8764), (70, 8779), (71, 8782), (73, 8827), (83, 8905), (84, 8911), (91, 8977), (104, 9325),

Gene: DocMcStuffins\_14 Start: 8399, Stop: 9335, Start Num: 12

Candidate Starts for DocMcStuffins\_14:

(Start: 12 @8399 has 222 MA's), (Start: 13 @8405 has 66 MA's), (21, 8507), (26, 8531), (28, 8537), (42, 8657), (51, 8690), (57, 8726), (61, 8744), (64, 8762), (65, 8765), (67, 8771), (70, 8786), (71, 8789), (73, 8834), (83, 8912), (91, 8984), (97, 9131), (104, 9332),

Gene: DoctorDiddles\_21 Start: 11635, Stop: 12506, Start Num: 12

Candidate Starts for DoctorDiddles\_21:

(Start: 7 @11563 has 17 MA's), (Start: 12 @11635 has 222 MA's), (30, 11779), (42, 11872), (48, 11896), (50, 11908), (53, 11932), (60, 11950), (63, 11974), (86, 12133), (96, 12286), (99, 12307), (100, 12352), (101, 12373), (102, 12388), (104, 12499),

Gene: Donkeykong\_12 Start: 8555, Stop: 9491, Start Num: 12

Candidate Starts for Donkeykong\_12:

(Start: 4 @8462 has 6 MA's), (Start: 12 @8555 has 222 MA's), (Start: 13 @8561 has 66 MA's), (21, 8663), (28, 8693), (38, 8789), (42, 8813), (44, 8816), (45, 8819), (57, 8882), (61, 8900), (64, 8918), (67, 8927), (73, 8990), (83, 9068), (91, 9140), (104, 9488),

Gene: Doomphist\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Doomphist\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (26, 8664), (28, 8670), (38, 8766), (42, 8790), (51, 8823), (61, 8877), (64, 8895), (67, 8904), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Dorothy\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Dorothy\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: DosHalletts\_14 Start: 8385, Stop: 9321, Start Num: 12

Candidate Starts for DosHalletts\_14:

(Start: 12 @8385 has 222 MA's), (Start: 13 @8391 has 66 MA's), (21, 8493), (28, 8523), (38, 8619), (42, 8643), (57, 8712), (61, 8730), (64, 8748), (65, 8751), (67, 8757), (70, 8772), (71, 8775), (73, 8820), (83, 8898), (91, 8970), (97, 9117), (104, 9318),

Gene: DotProduct\_13 Start: 8578, Stop: 9514, Start Num: 13

Candidate Starts for DotProduct\_13:

(8, 8551), (Start: 13 @8578 has 66 MA's), (21, 8686), (28, 8716), (42, 8836), (51, 8869), (57, 8905), (61, 8923), (64, 8941), (67, 8950), (70, 8965), (71, 8968), (73, 9013), (83, 9091), (84, 9097), (91, 9163), (97, 9310), (104, 9511),

Gene: Doug\_13 Start: 8539, Stop: 9475, Start Num: 12

Candidate Starts for Doug\_13:

(Start: 4 @8446 has 6 MA's), (Start: 12 @8539 has 222 MA's), (Start: 13 @8545 has 66 MA's), (21, 8647), (28, 8677), (38, 8773), (42, 8797), (44, 8800), (45, 8803), (51, 8830), (57, 8866), (61, 8884), (64, 8902), (67, 8911), (70, 8926), (71, 8929), (73, 8974), (83, 9052), (84, 9058), (91, 9124), (104, 9472),

Gene: Drago\_14 Start: 8390, Stop: 9326, Start Num: 12

Candidate Starts for Drago\_14:

(Start: 4 @8297 has 6 MA's), (Start: 12 @8390 has 222 MA's), (Start: 13 @8396 has 66 MA's), (21, 8498), (28, 8528), (42, 8648), (57, 8717), (61, 8735), (64, 8753), (67, 8762), (73, 8825), (83, 8903), (84, 8909), (91, 8975), (104, 9323),

Gene: Duplicity\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Duplicity\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Dusk\_20 Start: 12057, Stop: 13000, Start Num: 7

Candidate Starts for Dusk\_20:

(Start: 7 @12057 has 17 MA's), (Start: 12 @12129 has 222 MA's), (30, 12273), (42, 12366), (48, 12390), (50, 12402), (53, 12426), (60, 12444), (63, 12468), (86, 12627), (96, 12780), (99, 12801), (100, 12846), (101, 12867), (102, 12882), (104, 12993),

Gene: Easy2Say\_22 Start: 13206, Stop: 14080, Start Num: 12

Candidate Starts for Easy2Say\_22:

(Start: 7 @13134 has 17 MA's), (Start: 12 @13206 has 222 MA's), (30, 13350), (42, 13443), (48, 13467), (50, 13479), (53, 13503), (60, 13521), (63, 13545), (86, 13704), (96, 13857), (99, 13878), (100, 13923), (101, 13944), (102, 13959), (104, 14070),

Gene: Eish\_13 Start: 8528, Stop: 9464, Start Num: 12

Candidate Starts for Eish\_13:

(Start: 4 @8435 has 6 MA's), (Start: 12 @8528 has 222 MA's), (Start: 13 @8534 has 66 MA's), (21, 8636), (28, 8666), (38, 8762), (42, 8786), (44, 8789), (45, 8792), (57, 8855), (61, 8873), (64, 8891), (65, 8894), (67, 8900), (73, 8963), (83, 9041), (91, 9113), (104, 9461),

Gene: EleanorGeorge\_13 Start: 8579, Stop: 9515, Start Num: 13

Candidate Starts for EleanorGeorge\_13:

(8, 8552), (Start: 13 @8579 has 66 MA's), (21, 8687), (28, 8717), (42, 8837), (51, 8870), (57, 8906), (61, 8924), (64, 8942), (67, 8951), (70, 8966), (71, 8969), (73, 9014), (83, 9092), (84, 9098), (91, 9164), (97, 9311), (104, 9512),

Gene: Elite2014\_20 Start: 11683, Stop: 12554, Start Num: 12

Candidate Starts for Elite2014\_20:

(Start: 7 @11611 has 17 MA's), (Start: 12 @11683 has 222 MA's), (30, 11827), (42, 11920), (48, 11944), (50, 11956), (53, 11980), (60, 11998), (63, 12022), (86, 12181), (96, 12334), (99, 12355), (100, 12400), (101, 12421), (102, 12436), (104, 12547),

Gene: Emma\_13 Start: 8576, Stop: 9512, Start Num: 13

Candidate Starts for Emma\_13:

(8, 8549), (Start: 13 @8576 has 66 MA's), (21, 8684), (28, 8714), (42, 8834), (44, 8837), (45, 8840), (51, 8867), (57, 8903), (61, 8921), (64, 8939), (65, 8942), (67, 8948), (70, 8963), (71, 8966), (73, 9011), (83, 9089), (84, 9095), (91, 9161), (97, 9308), (104, 9509),

Gene: Emmina\_21 Start: 11788, Stop: 12662, Start Num: 12

Candidate Starts for Emmina\_21:

(Start: 7 @11716 has 17 MA's), (Start: 12 @11788 has 222 MA's), (30, 11932), (42, 12025), (48, 12049), (50, 12061), (53, 12085), (60, 12103), (63, 12127), (86, 12286), (96, 12439), (99, 12460), (100, 12505), (101, 12526), (102, 12541), (104, 12652),

Gene: Enby\_14 Start: 8390, Stop: 9326, Start Num: 12

Candidate Starts for Enby\_14:

(Start: 4 @8297 has 6 MA's), (Start: 12 @8390 has 222 MA's), (Start: 13 @8396 has 66 MA's), (21, 8498), (28, 8528), (42, 8648), (57, 8717), (61, 8735), (64, 8753), (67, 8762), (73, 8825), (83, 8903), (84, 8909), (91, 8975), (104, 9323),

Gene: Eradicator\_13 Start: 8533, Stop: 9469, Start Num: 12

Candidate Starts for Eradicator\_13:

(Start: 12 @8533 has 222 MA's), (Start: 13 @8539 has 66 MA's), (21, 8641), (28, 8671), (38, 8767), (42, 8791), (57, 8860), (61, 8878), (64, 8896), (65, 8899), (67, 8905), (70, 8920), (71, 8923), (73, 8968), (83, 9046), (91, 9118), (104, 9466),

Gene: Estave1\_13 Start: 8548, Stop: 9484, Start Num: 12

Candidate Starts for Estave1\_13:

(Start: 12 @8548 has 222 MA's), (Start: 13 @8554 has 66 MA's), (21, 8656), (28, 8686), (38, 8782), (42, 8806), (57, 8875), (61, 8893), (64, 8911), (67, 8920), (70, 8935), (71, 8938), (73, 8983), (83, 9061), (91, 9133), (104, 9481),

Gene: Familton\_54 Start: 25753, Stop: 26704, Start Num: 9

Candidate Starts for Familton\_54:

(Start: 9 @25753 has 15 MA's), (Start: 10 @25765 has 3 MA's), (16, 25837), (22, 25882), (23, 25885), (28, 25909), (31, 25927), (35, 25957), (43, 26035), (44, 26038), (56, 26095), (61, 26119), (73, 26194), (84, 26278), (91, 26344), (93, 26440),

Gene: Fancypants\_13 Start: 8539, Stop: 9475, Start Num: 12

Candidate Starts for Fancypants\_13:

(Start: 4 @8446 has 6 MA's), (Start: 12 @8539 has 222 MA's), (Start: 13 @8545 has 66 MA's), (21, 8647), (28, 8677), (38, 8773), (42, 8797), (44, 8800), (45, 8803), (51, 8830), (57, 8866), (61, 8884), (64, 8902), (67, 8911), (73, 8974), (83, 9052), (91, 9124), (104, 9472),

Gene: Fastidio\_13 Start: 8546, Stop: 9482, Start Num: 12

Candidate Starts for Fastidio\_13:

(Start: 12 @8546 has 222 MA's), (Start: 13 @8552 has 66 MA's), (21, 8654), (28, 8684), (42, 8804), (51, 8837), (57, 8873), (61, 8891), (64, 8909), (67, 8918), (70, 8933), (71, 8936), (73, 8981), (83, 9059), (84, 9065), (91, 9131), (97, 9278), (104, 9479),

Gene: Filch\_22 Start: 12228, Stop: 13099, Start Num: 12

Candidate Starts for Filch\_22:

(Start: 7 @12156 has 17 MA's), (Start: 12 @12228 has 222 MA's), (30, 12372), (42, 12465), (48, 12489), (50, 12501), (53, 12525), (60, 12543), (63, 12567), (86, 12726), (96, 12879), (99, 12900), (100, 12945), (101, 12966), (102, 12981), (104, 13092),

Gene: Filuzino\_13 Start: 8578, Stop: 9514, Start Num: 13

Candidate Starts for Filuzino\_13:

(8, 8551), (Start: 13 @8578 has 66 MA's), (21, 8686), (28, 8716), (42, 8836), (51, 8869), (57, 8905), (61, 8923), (64, 8941), (67, 8950), (70, 8965), (71, 8968), (73, 9013), (83, 9091), (84, 9097), (91, 9163), (97, 9310), (104, 9511),

Gene: FireRed\_20 Start: 11979, Stop: 12853, Start Num: 12

Candidate Starts for FireRed\_20:

(Start: 7 @11907 has 17 MA's), (Start: 12 @11979 has 222 MA's), (30, 12123), (42, 12216), (48, 12240), (50, 12252), (53, 12276), (60, 12294), (63, 12318), (86, 12477), (96, 12630), (99, 12651), (100, 12696), (101, 12717), (102, 12732), (104, 12843),

Gene: Firehouse51\_13 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for Firehouse51\_13:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (65, 8943), (67, 8949), (70, 8964), (71, 8967), (73, 9012), (83, 9090), (84, 9096), (91, 9162), (97, 9309), (104, 9510),

Gene: Flathead\_14 Start: 8409, Stop: 9345, Start Num: 13

Candidate Starts for Flathead\_14:

(8, 8382), (Start: 13 @8409 has 66 MA's), (21, 8517), (26, 8541), (28, 8547), (42, 8667), (51, 8700), (57, 8736), (61, 8754), (64, 8772), (65, 8775), (67, 8781), (70, 8796), (71, 8799), (73, 8844), (83, 8922), (84, 8928), (91, 8994), (97, 9141), (104, 9342),

Gene: Florinda\_13 Start: 8559, Stop: 9495, Start Num: 12

Candidate Starts for Florinda\_13:

(Start: 4 @8466 has 6 MA's), (Start: 12 @8559 has 222 MA's), (Start: 13 @8565 has 66 MA's), (21, 8667), (26, 8691), (28, 8697), (38, 8793), (42, 8817), (44, 8820), (45, 8823), (51, 8850), (57, 8886), (61, 8904), (64, 8922), (67, 8931), (73, 8994), (83, 9072), (91, 9144), (97, 9291), (104, 9492),

Gene: Flypotenuse\_19 Start: 12086, Stop: 12957, Start Num: 12

Candidate Starts for Flypotenuse\_19:

(Start: 7 @12014 has 17 MA's), (Start: 12 @12086 has 222 MA's), (30, 12230), (42, 12323), (48, 12347), (50, 12359), (53, 12383), (60, 12401), (63, 12425), (86, 12584), (96, 12737), (99, 12758), (100, 12803), (101, 12824), (102, 12839), (104, 12950),

Gene: Frankie\_14 Start: 8588, Stop: 9524, Start Num: 12

Candidate Starts for Frankie\_14:

(Start: 12 @8588 has 222 MA's), (Start: 13 @8594 has 66 MA's), (21, 8696), (26, 8720), (28, 8726), (42, 8846), (51, 8879), (57, 8915), (61, 8933), (64, 8951), (65, 8954), (67, 8960), (70, 8975), (71, 8978), (73, 9023), (83, 9101), (84, 9107), (91, 9173), (104, 9521),

Gene: FreddyB\_13 Start: 8538, Stop: 9474, Start Num: 12

Candidate Starts for FreddyB\_13:

(Start: 4 @8445 has 6 MA's), (Start: 12 @8538 has 222 MA's), (Start: 13 @8544 has 66 MA's), (21, 8646), (28, 8676), (38, 8772), (42, 8796), (44, 8799), (45, 8802), (57, 8865), (61, 8883), (64, 8901), (67,

8910), (73, 8973), (83, 9051), (91, 9123), (104, 9471),

Gene: Fruitloop\_13 Start: 8578, Stop: 9514, Start Num: 13

Candidate Starts for Fruitloop\_13:

(8, 8551), (Start: 13 @8578 has 66 MA's), (21, 8686), (28, 8716), (42, 8836), (51, 8869), (57, 8905), (61, 8923), (64, 8941), (65, 8944), (67, 8950), (70, 8965), (71, 8968), (73, 9013), (83, 9091), (84, 9097), (91, 9163), (97, 9310), (104, 9511),

Gene: Fulbright\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Fulbright\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: GUmbie\_12 Start: 8572, Stop: 9508, Start Num: 13

Candidate Starts for GUmbie\_12:

(8, 8545), (Start: 13 @8572 has 66 MA's), (21, 8680), (28, 8710), (42, 8830), (51, 8863), (57, 8899), (61, 8917), (64, 8935), (65, 8938), (67, 8944), (70, 8959), (71, 8962), (73, 9007), (83, 9085), (84, 9091), (91, 9157), (97, 9304), (104, 9505),

Gene: Gage\_23 Start: 12463, Stop: 13334, Start Num: 12

Candidate Starts for Gage\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: Galactic\_13 Start: 8552, Stop: 9488, Start Num: 13

Candidate Starts for Galactic\_13:

(8, 8525), (Start: 13 @8552 has 66 MA's), (21, 8660), (28, 8690), (42, 8810), (44, 8813), (45, 8816), (51, 8843), (57, 8879), (61, 8897), (64, 8915), (65, 8918), (67, 8924), (70, 8939), (71, 8942), (73, 8987), (83, 9065), (84, 9071), (91, 9137), (97, 9284), (104, 9485),

Gene: Gandalph\_13 Start: 8550, Stop: 9486, Start Num: 12

Candidate Starts for Gandalph\_13:

(Start: 12 @8550 has 222 MA's), (Start: 13 @8556 has 66 MA's), (21, 8658), (28, 8688), (38, 8784), (42, 8808), (57, 8877), (61, 8895), (64, 8913), (65, 8916), (67, 8922), (70, 8937), (71, 8940), (73, 8985), (83, 9063), (91, 9135), (104, 9483),

Gene: Gator\_19 Start: 12013, Stop: 12956, Start Num: 7

Candidate Starts for Gator\_19:

(Start: 7 @12013 has 17 MA's), (Start: 12 @12085 has 222 MA's), (30, 12229), (42, 12322), (48, 12346), (50, 12358), (53, 12382), (60, 12400), (63, 12424), (86, 12583), (96, 12736), (99, 12757), (100, 12802), (101, 12823), (102, 12838), (104, 12949),

Gene: Gemini\_23 Start: 12463, Stop: 13337, Start Num: 12

Candidate Starts for Gemini\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: Geralt\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Geralt\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967),

(83, 9045), (91, 9117), (104, 9465),

Gene: Gex\_15 Start: 9035, Stop: 9941, Start Num: 15

Candidate Starts for Gex\_15:

(Start: 15 @9035 has 42 MA's), (25, 9143), (35, 9206), (49, 9311), (61, 9374), (62, 9380), (64, 9392), (65, 9395), (81, 9485), (89, 9587), (94, 9701), (98, 9758),

Gene: GigiOuiOui\_13 Start: 8549, Stop: 9485, Start Num: 12

Candidate Starts for GigiOuiOui\_13:

(Start: 12 @8549 has 222 MA's), (Start: 13 @8555 has 66 MA's), (21, 8657), (28, 8687), (38, 8783), (42, 8807), (57, 8876), (61, 8894), (64, 8912), (65, 8915), (67, 8921), (70, 8936), (71, 8939), (73, 8984), (83, 9062), (84, 9068), (91, 9134), (97, 9281), (104, 9482),

Gene: Girafales\_14 Start: 8403, Stop: 9339, Start Num: 13

Candidate Starts for Girafales\_14:

(8, 8376), (Start: 13 @8403 has 66 MA's), (21, 8511), (28, 8541), (42, 8661), (44, 8664), (45, 8667), (51, 8694), (57, 8730), (64, 8766), (65, 8769), (67, 8775), (70, 8790), (71, 8793), (73, 8838), (83, 8916), (84, 8922), (91, 8988), (97, 9135), (104, 9336),

Gene: Girr\_13 Start: 8542, Stop: 9478, Start Num: 12

Candidate Starts for Girr\_13:

(Start: 4 @8449 has 6 MA's), (Start: 12 @8542 has 222 MA's), (Start: 13 @8548 has 66 MA's), (21, 8650), (28, 8680), (38, 8776), (42, 8800), (44, 8803), (45, 8806), (57, 8869), (61, 8887), (64, 8905), (65, 8908), (67, 8914), (73, 8977), (83, 9055), (84, 9061), (91, 9127), (104, 9475),

Gene: Glexan\_19 Start: 12014, Stop: 12957, Start Num: 7

Candidate Starts for Glexan\_19:

(Start: 7 @12014 has 17 MA's), (Start: 12 @12086 has 222 MA's), (30, 12230), (42, 12323), (48, 12347), (50, 12359), (53, 12383), (60, 12401), (63, 12425), (86, 12584), (96, 12737), (99, 12758), (100, 12803), (101, 12824), (102, 12839), (104, 12950),

Gene: GoldenSpark\_23 Start: 12463, Stop: 13334, Start Num: 12

Candidate Starts for GoldenSpark\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: Goldilocks\_22 Start: 11880, Stop: 12751, Start Num: 12

Candidate Starts for Goldilocks\_22:

(Start: 7 @11808 has 17 MA's), (Start: 12 @11880 has 222 MA's), (30, 12024), (42, 12117), (48, 12141), (50, 12153), (53, 12177), (60, 12195), (63, 12219), (86, 12378), (96, 12531), (99, 12552), (100, 12597), (101, 12618), (102, 12633), (104, 12744),

Gene: GooberAzure\_23 Start: 12463, Stop: 13334, Start Num: 12

Candidate Starts for GooberAzure\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: Gorge\_13 Start: 8521, Stop: 9457, Start Num: 12

Candidate Starts for Gorge\_13:

(Start: 12 @8521 has 222 MA's), (Start: 13 @8527 has 66 MA's), (21, 8629), (28, 8659), (38, 8755), (42, 8779), (57, 8848), (61, 8866), (64, 8884), (65, 8887), (67, 8893), (70, 8908), (71, 8911), (73, 8956),

(83, 9034), (91, 9106), (104, 9454),

Gene: Guppsters\_13 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for Guppsters\_13:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (67, 8949), (73, 9012), (83, 9090), (91, 9162), (104, 9510),

Gene: Hades\_13 Start: 8539, Stop: 9475, Start Num: 12

Candidate Starts for Hades\_13:

(Start: 4 @8446 has 6 MA's), (Start: 12 @8539 has 222 MA's), (Start: 13 @8545 has 66 MA's), (21, 8647), (28, 8677), (38, 8773), (42, 8797), (44, 8800), (45, 8803), (57, 8866), (61, 8884), (64, 8902), (67, 8911), (73, 8974), (83, 9052), (84, 9058), (91, 9124), (104, 9472),

Gene: Hamulus\_13 Start: 8583, Stop: 9519, Start Num: 13

Candidate Starts for Hamulus\_13:

(8, 8556), (Start: 13 @8583 has 66 MA's), (21, 8691), (28, 8721), (42, 8841), (51, 8874), (57, 8910), (61, 8928), (64, 8946), (67, 8955), (70, 8970), (71, 8973), (73, 9018), (83, 9096), (84, 9102), (91, 9168), (97, 9315), (104, 9516),

Gene: HanKaySha\_22 Start: 12218, Stop: 13089, Start Num: 12

Candidate Starts for HanKaySha\_22:

(Start: 7 @12146 has 17 MA's), (Start: 12 @12218 has 222 MA's), (30, 12362), (42, 12455), (48, 12479), (50, 12491), (53, 12515), (60, 12533), (63, 12557), (86, 12716), (96, 12869), (99, 12890), (100, 12935), (101, 12956), (102, 12971), (104, 13082),

Gene: Hanako\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for Hanako\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: Harella\_19 Start: 12086, Stop: 12960, Start Num: 12

Candidate Starts for Harella\_19:

(Start: 7 @12014 has 17 MA's), (Start: 12 @12086 has 222 MA's), (30, 12230), (42, 12323), (48, 12347), (50, 12359), (53, 12383), (60, 12401), (63, 12425), (86, 12584), (96, 12737), (99, 12758), (100, 12803), (101, 12824), (102, 12839), (104, 12950),

Gene: Harley\_13 Start: 8528, Stop: 9464, Start Num: 12

Candidate Starts for Harley\_13:

(Start: 4 @8435 has 6 MA's), (Start: 12 @8528 has 222 MA's), (Start: 13 @8534 has 66 MA's), (21, 8636), (28, 8666), (38, 8762), (42, 8786), (51, 8819), (61, 8873), (64, 8891), (67, 8900), (73, 8963), (83, 9041), (91, 9113), (104, 9461),

Gene: Hegedechwinu\_14 Start: 8409, Stop: 9345, Start Num: 13

Candidate Starts for Hegedechwinu\_14:

(8, 8382), (Start: 13 @8409 has 66 MA's), (21, 8517), (26, 8541), (28, 8547), (42, 8667), (44, 8670), (45, 8673), (51, 8700), (57, 8736), (61, 8754), (64, 8772), (65, 8775), (67, 8781), (70, 8796), (71, 8799), (73, 8844), (83, 8922), (84, 8928), (91, 8994), (97, 9141), (104, 9342),

Gene: Henry\_20 Start: 12469, Stop: 13340, Start Num: 12

Candidate Starts for Henry\_20:

(Start: 7 @12397 has 17 MA's), (Start: 12 @12469 has 222 MA's), (30, 12613), (42, 12706), (48, 12730), (50, 12742), (53, 12766), (60, 12784), (63, 12808), (86, 12967), (96, 13120), (99, 13141), (100, 13186), (101, 13207), (102, 13222), (104, 13333),



Gene: Highbury\_22 Start: 12137, Stop: 13008, Start Num: 12

Candidate Starts for Highbury\_22:

(Start: 7 @12065 has 17 MA's), (Start: 12 @12137 has 222 MA's), (30, 12281), (42, 12374), (48, 12398), (50, 12410), (53, 12434), (60, 12452), (63, 12476), (86, 12635), (96, 12788), (99, 12809), (100, 12854), (101, 12875), (102, 12890), (104, 13001),

Gene: Hlubikazi\_13 Start: 8534, Stop: 9470, Start Num: 12

Candidate Starts for Hlubikazi\_13:

(Start: 12 @8534 has 222 MA's), (Start: 13 @8540 has 66 MA's), (21, 8642), (28, 8672), (38, 8768), (42, 8792), (57, 8861), (61, 8879), (64, 8897), (65, 8900), (67, 8906), (70, 8921), (71, 8924), (73, 8969), (83, 9047), (91, 9119), (104, 9467),

Gene: Holt\_22 Start: 11753, Stop: 12624, Start Num: 12

Candidate Starts for Holt\_22:

(Start: 7 @11681 has 17 MA's), (Start: 12 @11753 has 222 MA's), (30, 11897), (42, 11990), (48, 12014), (50, 12026), (53, 12050), (60, 12068), (63, 12092), (86, 12251), (96, 12404), (99, 12425), (100, 12470), (101, 12491), (102, 12506), (104, 12617),

Gene: Hoonter\_23 Start: 12463, Stop: 13334, Start Num: 12

Candidate Starts for Hoonter\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: Hokey\_22 Start: 12156, Stop: 13102, Start Num: 7

Candidate Starts for Hokey\_22:

(Start: 7 @12156 has 17 MA's), (Start: 12 @12228 has 222 MA's), (30, 12372), (42, 12465), (48, 12489), (50, 12501), (53, 12525), (60, 12543), (63, 12567), (86, 12726), (96, 12879), (99, 12900), (100, 12945), (101, 12966), (102, 12981), (104, 13092),

Gene: IHOP\_20 Start: 12057, Stop: 13003, Start Num: 7

Candidate Starts for IHOP\_20:

(Start: 7 @12057 has 17 MA's), (Start: 12 @12129 has 222 MA's), (30, 12273), (42, 12366), (48, 12390), (50, 12402), (53, 12426), (60, 12444), (63, 12468), (86, 12627), (96, 12780), (99, 12801), (100, 12846), (101, 12867), (102, 12882), (104, 12993),

Gene: Ibhubesi\_12 Start: 8528, Stop: 9464, Start Num: 12

Candidate Starts for Ibhubesi\_12:

(Start: 4 @8435 has 6 MA's), (Start: 12 @8528 has 222 MA's), (Start: 13 @8534 has 66 MA's), (21, 8636), (28, 8666), (38, 8762), (42, 8786), (51, 8819), (61, 8873), (64, 8891), (67, 8900), (73, 8963), (83, 9041), (91, 9113), (104, 9461),

Gene: Icee\_20 Start: 12129, Stop: 13000, Start Num: 12

Candidate Starts for Icee\_20:

(Start: 7 @12057 has 17 MA's), (Start: 12 @12129 has 222 MA's), (30, 12273), (42, 12366), (48, 12390), (50, 12402), (53, 12426), (60, 12444), (63, 12468), (86, 12627), (96, 12780), (99, 12801), (100, 12846), (101, 12867), (102, 12882), (104, 12993),

Gene: Inca\_20 Start: 11149, Stop: 12020, Start Num: 12

Candidate Starts for Inca\_20:

(Start: 7 @11077 has 17 MA's), (Start: 12 @11149 has 222 MA's), (30, 11293), (42, 11386), (48, 11410), (50, 11422), (53, 11446), (60, 11464), (63, 11488), (86, 11647), (96, 11800), (99, 11821), (100,

11866), (101, 11887), (102, 11902), (104, 12013),

Gene: Inventum\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Inventum\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: IrishSherpFalk\_13 Start: 8563, Stop: 9499, Start Num: 13

Candidate Starts for IrishSherpFalk\_13:

(8, 8536), (Start: 13 @8563 has 66 MA's), (21, 8671), (28, 8701), (42, 8821), (51, 8854), (57, 8890), (61, 8908), (64, 8926), (67, 8935), (73, 8998), (83, 9076), (91, 9148), (104, 9496),

Gene: JalFarm20\_14 Start: 8385, Stop: 9321, Start Num: 12

Candidate Starts for JalFarm20\_14:

(Start: 12 @8385 has 222 MA's), (Start: 13 @8391 has 66 MA's), (21, 8493), (28, 8523), (38, 8619), (42, 8643), (57, 8712), (61, 8730), (64, 8748), (65, 8751), (67, 8757), (70, 8772), (71, 8775), (73, 8820), (83, 8898), (91, 8970), (104, 9318),

Gene: James\_13 Start: 8529, Stop: 9465, Start Num: 12

Candidate Starts for James\_13:

(Start: 4 @8436 has 6 MA's), (Start: 12 @8529 has 222 MA's), (Start: 13 @8535 has 66 MA's), (21, 8637), (28, 8667), (38, 8763), (42, 8787), (44, 8790), (45, 8793), (57, 8856), (61, 8874), (64, 8892), (67, 8901), (73, 8964), (83, 9042), (91, 9114), (104, 9462),

Gene: Jamie19\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for Jamie19\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: JangDynasty\_53 Start: 25854, Stop: 26793, Start Num: 10

Candidate Starts for JangDynasty\_53:

(Start: 9 @25842 has 15 MA's), (Start: 10 @25854 has 3 MA's), (16, 25926), (22, 25971), (23, 25974), (28, 25998), (31, 26016), (35, 26046), (43, 26124), (44, 26127), (56, 26184), (61, 26208), (73, 26283), (84, 26367), (91, 26433), (93, 26529),

Gene: Jacob\_13 Start: 8537, Stop: 9473, Start Num: 12

Candidate Starts for Jacob\_13:

(Start: 4 @8444 has 6 MA's), (Start: 12 @8537 has 222 MA's), (Start: 13 @8543 has 66 MA's), (21, 8645), (28, 8675), (38, 8771), (42, 8795), (44, 8798), (45, 8801), (57, 8864), (61, 8882), (64, 8900), (67, 8909), (73, 8972), (83, 9050), (91, 9122), (104, 9470),

Gene: JeTaime\_23 Start: 13268, Stop: 14139, Start Num: 12

Candidate Starts for JeTaime\_23:

(Start: 7 @13196 has 17 MA's), (Start: 12 @13268 has 222 MA's), (30, 13412), (42, 13505), (48, 13529), (50, 13541), (53, 13565), (60, 13583), (63, 13607), (86, 13766), (96, 13919), (99, 13940), (100, 13985), (101, 14006), (102, 14021), (104, 14132),

Gene: Job42\_14 Start: 8408, Stop: 9344, Start Num: 13

Candidate Starts for Job42\_14:

(8, 8381), (Start: 13 @8408 has 66 MA's), (21, 8516), (28, 8546), (42, 8666), (44, 8669), (45, 8672), (51, 8699), (57, 8735), (61, 8753), (64, 8771), (65, 8774), (67, 8780), (70, 8795), (71, 8798), (73, 8843), (83, 8921), (84, 8927), (91, 8993), (97, 9140), (104, 9341),

Gene: JoeyJr\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for JoeyJr\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Journey\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Journey\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Juice456\_14 Start: 8391, Stop: 9327, Start Num: 12

Candidate Starts for Juice456\_14:

(Start: 4 @8298 has 6 MA's), (Start: 12 @8391 has 222 MA's), (Start: 13 @8397 has 66 MA's), (21, 8499), (26, 8523), (28, 8529), (38, 8625), (42, 8649), (44, 8652), (45, 8655), (57, 8718), (61, 8736), (64, 8754), (67, 8763), (70, 8778), (71, 8781), (73, 8826), (83, 8904), (91, 8976), (104, 9324),

Gene: Juniper1\_13 Start: 8529, Stop: 9465, Start Num: 12

Candidate Starts for Juniper1\_13:

(Start: 4 @8436 has 6 MA's), (Start: 12 @8529 has 222 MA's), (Start: 13 @8535 has 66 MA's), (21, 8637), (26, 8661), (28, 8667), (38, 8763), (42, 8787), (51, 8820), (61, 8874), (65, 8895), (67, 8901), (73, 8964), (83, 9042), (91, 9114), (104, 9462),

Gene: Kanye\_23 Start: 13384, Stop: 14327, Start Num: 7

Candidate Starts for Kanye\_23:

(Start: 7 @13384 has 17 MA's), (Start: 12 @13456 has 222 MA's), (30, 13600), (42, 13693), (48, 13717), (50, 13729), (53, 13753), (60, 13771), (63, 13795), (86, 13954), (96, 14107), (99, 14128), (100, 14173), (101, 14194), (102, 14209), (104, 14320),

Gene: Karhdo\_13 Start: 8447, Stop: 9476, Start Num: 4

Candidate Starts for Karhdo\_13:

(Start: 4 @8447 has 6 MA's), (Start: 12 @8540 has 222 MA's), (Start: 13 @8546 has 66 MA's), (21, 8648), (26, 8672), (28, 8678), (38, 8774), (42, 8798), (44, 8801), (45, 8804), (51, 8831), (57, 8867), (61, 8885), (64, 8903), (67, 8912), (73, 8975), (83, 9053), (91, 9125), (104, 9473),

Gene: Kenuha5\_13 Start: 8545, Stop: 9481, Start Num: 13

Candidate Starts for Kenuha5\_13:

(8, 8518), (Start: 13 @8545 has 66 MA's), (21, 8653), (26, 8677), (28, 8683), (42, 8803), (51, 8836), (57, 8872), (61, 8890), (64, 8908), (67, 8917), (70, 8932), (71, 8935), (73, 8980), (83, 9058), (84, 9064), (91, 9130), (97, 9277), (104, 9478),

Gene: Kersh\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Kersh\_13:

(2, 8364), (3, 8433), (Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (44, 8793), (45, 8796), (51, 8823), (61, 8877), (64, 8895), (67, 8904), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Kevin1\_15 Start: 9056, Stop: 9962, Start Num: 15

Candidate Starts for Kevin1\_15:

(Start: 15 @9056 has 42 MA's), (25, 9164), (27, 9176), (35, 9227), (38, 9275), (49, 9332), (61, 9395), (62, 9401), (65, 9416), (81, 9506), (84, 9554), (94, 9722), (98, 9779),

Gene: Kimberlium\_13 Start: 8298, Stop: 9327, Start Num: 4

Candidate Starts for Kimberlium\_13:

(Start: 4 @8298 has 6 MA's), (Start: 12 @8391 has 222 MA's), (Start: 13 @8397 has 66 MA's), (21, 8499), (26, 8523), (28, 8529), (38, 8625), (42, 8649), (44, 8652), (45, 8655), (57, 8718), (61, 8736), (64, 8754), (67, 8763), (70, 8778), (71, 8781), (73, 8826), (83, 8904), (91, 8976), (104, 9324),

Gene: Kimchi\_23 Start: 12463, Stop: 13334, Start Num: 12

Candidate Starts for Kimchi\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: KingMidas\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for KingMidas\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (84, 9051), (91, 9117), (104, 9465),

Gene: Kingsley\_14 Start: 8383, Stop: 9319, Start Num: 12

Candidate Starts for Kingsley\_14:

(Start: 12 @8383 has 222 MA's), (Start: 13 @8389 has 66 MA's), (21, 8491), (28, 8521), (38, 8617), (42, 8641), (57, 8710), (61, 8728), (64, 8746), (65, 8749), (67, 8755), (70, 8770), (71, 8773), (73, 8818), (83, 8896), (91, 8968), (104, 9316),

Gene: Koella\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Koella\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Krakatau\_14 Start: 9229, Stop: 10165, Start Num: 13

Candidate Starts for Krakatau\_14:

(8, 9202), (Start: 13 @9229 has 66 MA's), (21, 9337), (28, 9367), (42, 9487), (44, 9490), (45, 9493), (51, 9520), (57, 9556), (61, 9574), (64, 9592), (67, 9601), (70, 9616), (71, 9619), (73, 9664), (83, 9742), (84, 9748), (91, 9814), (97, 9961), (104, 10162),

Gene: Krili\_52 Start: 25464, Stop: 26415, Start Num: 9

Candidate Starts for Krili\_52:

(Start: 9 @25464 has 15 MA's), (Start: 10 @25476 has 3 MA's), (16, 25548), (22, 25593), (23, 25596), (28, 25620), (31, 25638), (35, 25668), (43, 25746), (44, 25749), (56, 25806), (61, 25830), (73, 25905), (84, 25989), (91, 26055), (93, 26151),

Gene: KristaRAM\_14 Start: 9226, Stop: 10162, Start Num: 13

Candidate Starts for KristaRAM\_14:

(8, 9199), (Start: 13 @9226 has 66 MA's), (21, 9334), (28, 9364), (42, 9484), (51, 9517), (57, 9553), (61, 9571), (64, 9589), (65, 9592), (67, 9598), (70, 9613), (71, 9616), (73, 9661), (83, 9739), (84, 9745), (91, 9811), (97, 9958), (104, 10159),

Gene: LastJedi\_13 Start: 8528, Stop: 9464, Start Num: 12

Candidate Starts for LastJedi\_13:

(Start: 12 @8528 has 222 MA's), (Start: 13 @8534 has 66 MA's), (21, 8636), (28, 8666), (38, 8762), (42, 8786), (44, 8789), (45, 8792), (57, 8855), (61, 8873), (64, 8891), (67, 8900), (73, 8963), (83, 9041), (91, 9113), (104, 9461),

Gene: Latretium\_13 Start: 8521, Stop: 9457, Start Num: 12

Candidate Starts for Latretium\_13:

(Start: 12 @8521 has 222 MA's), (Start: 13 @8527 has 66 MA's), (21, 8629), (28, 8659), (38, 8755), (42, 8779), (57, 8848), (61, 8866), (64, 8884), (65, 8887), (67, 8893), (70, 8908), (71, 8911), (73, 8956), (83, 9034), (91, 9106), (104, 9454),

Gene: Leozinho\_14 Start: 8390, Stop: 9326, Start Num: 12

Candidate Starts for Leozinho\_14:

(3, 8291), (Start: 12 @8390 has 222 MA's), (Start: 13 @8396 has 66 MA's), (21, 8498), (28, 8528), (38, 8624), (42, 8648), (44, 8651), (45, 8654), (51, 8681), (57, 8717), (61, 8735), (64, 8753), (67, 8762), (73, 8825), (83, 8903), (91, 8975), (104, 9323),

Gene: Leperchaun\_13 Start: 8521, Stop: 9457, Start Num: 12

Candidate Starts for Leperchaun\_13:

(Start: 12 @8521 has 222 MA's), (Start: 13 @8527 has 66 MA's), (21, 8629), (28, 8659), (38, 8755), (42, 8779), (57, 8848), (61, 8866), (64, 8884), (65, 8887), (67, 8893), (70, 8908), (71, 8911), (73, 8956), (83, 9034), (91, 9106), (104, 9454),

Gene: Lilizi\_23 Start: 12175, Stop: 13046, Start Num: 12

Candidate Starts for Lilizi\_23:

(Start: 7 @12103 has 17 MA's), (Start: 12 @12175 has 222 MA's), (30, 12319), (42, 12412), (48, 12436), (50, 12448), (53, 12472), (60, 12490), (63, 12514), (86, 12673), (96, 12826), (99, 12847), (100, 12892), (101, 12913), (102, 12928), (104, 13039),

Gene: Lilpickle\_20 Start: 11683, Stop: 12554, Start Num: 12

Candidate Starts for Lilpickle\_20:

(Start: 7 @11611 has 17 MA's), (Start: 12 @11683 has 222 MA's), (30, 11827), (42, 11920), (48, 11944), (50, 11956), (53, 11980), (60, 11998), (63, 12022), (86, 12181), (96, 12334), (99, 12355), (100, 12400), (101, 12421), (102, 12436), (104, 12547),

Gene: LittleShirley\_14 Start: 8386, Stop: 9322, Start Num: 12

Candidate Starts for LittleShirley\_14:

(Start: 12 @8386 has 222 MA's), (Start: 13 @8392 has 66 MA's), (21, 8494), (28, 8524), (38, 8620), (42, 8644), (57, 8713), (61, 8731), (64, 8749), (65, 8752), (67, 8758), (70, 8773), (71, 8776), (73, 8821), (83, 8899), (91, 8971), (97, 9118), (104, 9319),

Gene: Lizziana\_13 Start: 8538, Stop: 9474, Start Num: 12

Candidate Starts for Lizziana\_13:

(Start: 4 @8445 has 6 MA's), (Start: 12 @8538 has 222 MA's), (Start: 13 @8544 has 66 MA's), (21, 8646), (28, 8676), (38, 8772), (42, 8796), (44, 8799), (45, 8802), (57, 8865), (61, 8883), (64, 8901), (67, 8910), (73, 8973), (83, 9051), (91, 9123), (104, 9471),

Gene: Llama\_13 Start: 8535, Stop: 9471, Start Num: 12

Candidate Starts for Llama\_13:

(Start: 4 @8442 has 6 MA's), (Start: 12 @8535 has 222 MA's), (Start: 13 @8541 has 66 MA's), (21, 8643), (28, 8673), (38, 8769), (42, 8793), (44, 8796), (45, 8799), (51, 8826), (57, 8862), (61, 8880), (64, 8898), (67, 8907), (73, 8970), (83, 9048), (91, 9120), (104, 9468),

Gene: Lorde\_14 Start: 8390, Stop: 9326, Start Num: 12

Candidate Starts for Lorde\_14:

(Start: 4 @8297 has 6 MA's), (Start: 12 @8390 has 222 MA's), (Start: 13 @8396 has 66 MA's), (21, 8498), (28, 8528), (42, 8648), (57, 8717), (61, 8735), (64, 8753), (67, 8762), (73, 8825), (83, 8903), (84,

8909), (91, 8975), (104, 9323),

Gene: LunaBlu\_13 Start: 8552, Stop: 9488, Start Num: 13

Candidate Starts for LunaBlu\_13:

(8, 8525), (Start: 13 @8552 has 66 MA's), (21, 8660), (26, 8684), (28, 8690), (42, 8810), (44, 8813), (45, 8816), (51, 8843), (57, 8879), (61, 8897), (64, 8915), (65, 8918), (67, 8924), (70, 8939), (71, 8942), (73, 8987), (83, 9065), (84, 9071), (91, 9137), (97, 9284), (104, 9485),

Gene: LunaStella\_14 Start: 8979, Stop: 9921, Start Num: 12

Candidate Starts for LunaStella\_14:

(Start: 12 @8979 has 222 MA's), (16, 9051), (19, 9072), (20, 9075), (22, 9096), (28, 9123), (34, 9159), (51, 9276), (58, 9327), (73, 9435), (80, 9468), (83, 9513), (84, 9519), (91, 9585),

Gene: MISSy\_20 Start: 11979, Stop: 12850, Start Num: 12

Candidate Starts for MISSy\_20:

(Start: 7 @11907 has 17 MA's), (Start: 12 @11979 has 222 MA's), (30, 12123), (42, 12216), (48, 12240), (50, 12252), (53, 12276), (60, 12294), (63, 12318), (86, 12477), (96, 12630), (99, 12651), (100, 12696), (101, 12717), (102, 12732), (104, 12843),

Gene: MPhalcon\_20 Start: 11979, Stop: 12850, Start Num: 12

Candidate Starts for MPhalcon\_20:

(Start: 7 @11907 has 17 MA's), (Start: 12 @11979 has 222 MA's), (30, 12123), (42, 12216), (48, 12240), (50, 12252), (53, 12276), (60, 12294), (63, 12318), (86, 12477), (96, 12630), (99, 12651), (100, 12696), (101, 12717), (102, 12732), (104, 12843),

Gene: MadMen\_13 Start: 8561, Stop: 9497, Start Num: 12

Candidate Starts for MadMen\_13:

(Start: 12 @8561 has 222 MA's), (Start: 13 @8567 has 66 MA's), (21, 8669), (28, 8699), (42, 8819), (57, 8888), (61, 8906), (64, 8924), (67, 8933), (70, 8948), (71, 8951), (73, 8996), (83, 9074), (91, 9146), (104, 9494),

Gene: MadamMonkfish\_21 Start: 11894, Stop: 12765, Start Num: 12

Candidate Starts for MadamMonkfish\_21:

(Start: 7 @11822 has 17 MA's), (Start: 12 @11894 has 222 MA's), (30, 12038), (42, 12131), (48, 12155), (50, 12167), (53, 12191), (60, 12209), (63, 12233), (86, 12392), (96, 12545), (99, 12566), (100, 12611), (101, 12632), (102, 12647), (104, 12758),

Gene: Madiba\_14 Start: 8404, Stop: 9340, Start Num: 13

Candidate Starts for Madiba\_14:

(8, 8377), (Start: 13 @8404 has 66 MA's), (21, 8512), (28, 8542), (42, 8662), (51, 8695), (57, 8731), (61, 8749), (64, 8767), (67, 8776), (70, 8791), (71, 8794), (73, 8839), (83, 8917), (84, 8923), (91, 8989), (97, 9136), (104, 9337),

Gene: Magsby\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Magsby\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Mahavrat\_13 Start: 8526, Stop: 9462, Start Num: 12

Candidate Starts for Mahavrat\_13:

(Start: 4 @8433 has 6 MA's), (Start: 12 @8526 has 222 MA's), (Start: 13 @8532 has 66 MA's), (21, 8634), (26, 8658), (28, 8664), (38, 8760), (42, 8784), (51, 8817), (61, 8871), (65, 8892), (67, 8898), (73, 8961), (83, 9039), (91, 9111), (104, 9459),

Gene: Mandlovu\_13 Start: 8534, Stop: 9470, Start Num: 12

Candidate Starts for Mandlovu\_13:

(Start: 12 @8534 has 222 MA's), (Start: 13 @8540 has 66 MA's), (21, 8642), (28, 8672), (38, 8768), (42, 8792), (57, 8861), (61, 8879), (64, 8897), (65, 8900), (67, 8906), (70, 8921), (71, 8924), (73, 8969), (83, 9047), (91, 9119), (104, 9467),

Gene: Mantra\_13 Start: 8549, Stop: 9485, Start Num: 12

Candidate Starts for Mantra\_13:

(Start: 12 @8549 has 222 MA's), (Start: 13 @8555 has 66 MA's), (21, 8657), (28, 8687), (38, 8783), (42, 8807), (57, 8876), (61, 8894), (64, 8912), (65, 8915), (67, 8921), (71, 8939), (73, 8984), (83, 9062), (91, 9134), (104, 9482),

Gene: Maravista\_13 Start: 8526, Stop: 9462, Start Num: 12

Candidate Starts for Maravista\_13:

(Start: 4 @8433 has 6 MA's), (Start: 12 @8526 has 222 MA's), (Start: 13 @8532 has 66 MA's), (21, 8634), (28, 8664), (38, 8760), (42, 8784), (44, 8787), (45, 8790), (57, 8853), (61, 8871), (64, 8889), (67, 8898), (73, 8961), (83, 9039), (91, 9111), (104, 9459),

Gene: Marker\_14 Start: 8397, Stop: 9333, Start Num: 12

Candidate Starts for Marker\_14:

(Start: 12 @8397 has 222 MA's), (21, 8505), (28, 8535), (38, 8631), (42, 8655), (44, 8658), (45, 8661), (51, 8688), (57, 8724), (61, 8742), (64, 8760), (65, 8763), (67, 8769), (70, 8784), (71, 8787), (73, 8832), (83, 8910), (84, 8916), (91, 8982), (97, 9129), (104, 9330),

Gene: Marshmallow\_21 Start: 12469, Stop: 13340, Start Num: 12

Candidate Starts for Marshmallow\_21:

(Start: 7 @12397 has 17 MA's), (Start: 12 @12469 has 222 MA's), (30, 12613), (42, 12706), (48, 12730), (50, 12742), (53, 12766), (60, 12784), (63, 12808), (86, 12967), (96, 13120), (99, 13141), (100, 13186), (101, 13207), (102, 13222), (104, 13333),

Gene: Martik\_13 Start: 8538, Stop: 9474, Start Num: 12

Candidate Starts for Martik\_13:

(Start: 4 @8445 has 6 MA's), (Start: 12 @8538 has 222 MA's), (Start: 13 @8544 has 66 MA's), (21, 8646), (28, 8676), (38, 8772), (42, 8796), (44, 8799), (45, 8802), (57, 8865), (61, 8883), (64, 8901), (67, 8910), (73, 8973), (83, 9051), (91, 9123), (104, 9471),

Gene: Mattes\_13 Start: 8529, Stop: 9465, Start Num: 12

Candidate Starts for Mattes\_13:

(Start: 4 @8436 has 6 MA's), (Start: 12 @8529 has 222 MA's), (Start: 13 @8535 has 66 MA's), (21, 8637), (28, 8667), (38, 8763), (42, 8787), (44, 8790), (45, 8793), (57, 8856), (61, 8874), (64, 8892), (67, 8901), (73, 8964), (83, 9042), (91, 9114), (104, 9462),

Gene: Maxxinista\_22 Start: 11871, Stop: 12814, Start Num: 7

Candidate Starts for Maxxinista\_22:

(Start: 7 @11871 has 17 MA's), (Start: 12 @11943 has 222 MA's), (30, 12087), (42, 12180), (48, 12204), (50, 12216), (53, 12240), (60, 12258), (63, 12282), (86, 12441), (96, 12594), (99, 12615), (100, 12660), (101, 12681), (102, 12696), (104, 12807),

Gene: Melissauren88\_13 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for Melissauren88\_13:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (65, 8943), (67, 8949), (70, 8964), (71, 8967), (73, 9012), (83, 9090), (84, 9096),

(91, 9162), (97, 9309), (104, 9510),

Gene: Melville\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Melville\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: MichelleMyBell\_15 Start: 9075, Stop: 9981, Start Num: 15

Candidate Starts for MichelleMyBell\_15:

(Start: 15 @9075 has 42 MA's), (25, 9183), (27, 9195), (35, 9246), (38, 9294), (49, 9351), (61, 9414), (62, 9420), (65, 9435), (81, 9525), (84, 9573), (94, 9741), (98, 9798),

Gene: MilanaBonita\_14 Start: 9227, Stop: 10163, Start Num: 13

Candidate Starts for MilanaBonita\_14:

(8, 9200), (Start: 13 @9227 has 66 MA's), (21, 9335), (28, 9365), (42, 9485), (51, 9518), (57, 9554), (61, 9572), (64, 9590), (67, 9599), (70, 9614), (71, 9617), (73, 9662), (83, 9740), (84, 9746), (91, 9812), (97, 9959), (104, 10160),

Gene: MilleniumForce\_14 Start: 9223, Stop: 10159, Start Num: 13

Candidate Starts for MilleniumForce\_14:

(8, 9196), (Start: 13 @9223 has 66 MA's), (21, 9331), (28, 9361), (42, 9481), (44, 9484), (45, 9487), (51, 9514), (57, 9550), (61, 9568), (64, 9586), (65, 9589), (67, 9595), (70, 9610), (71, 9613), (73, 9658), (83, 9736), (84, 9742), (91, 9808), (97, 9955), (104, 10156),

Gene: MinionDave\_14 Start: 9227, Stop: 10163, Start Num: 13

Candidate Starts for MinionDave\_14:

(8, 9200), (Start: 13 @9227 has 66 MA's), (21, 9335), (28, 9365), (42, 9485), (57, 9554), (61, 9572), (64, 9590), (67, 9599), (73, 9662), (83, 9740), (84, 9746), (91, 9812), (97, 9959), (104, 10160),

Gene: Miniwave\_21 Start: 12667, Stop: 13538, Start Num: 12

Candidate Starts for Miniwave\_21:

(Start: 7 @12595 has 17 MA's), (Start: 12 @12667 has 222 MA's), (30, 12811), (42, 12904), (48, 12928), (50, 12940), (53, 12964), (60, 12982), (63, 13006), (86, 13165), (96, 13318), (99, 13339), (100, 13384), (101, 13405), (102, 13420), (104, 13531),

Gene: Misfit\_21 Start: 12560, Stop: 13431, Start Num: 12

Candidate Starts for Misfit\_21:

(Start: 7 @12488 has 17 MA's), (Start: 12 @12560 has 222 MA's), (30, 12704), (42, 12797), (48, 12821), (50, 12833), (53, 12857), (60, 12875), (63, 12899), (86, 13058), (96, 13211), (99, 13232), (100, 13277), (101, 13298), (102, 13313), (104, 13424),

Gene: Misha28\_14 Start: 8399, Stop: 9335, Start Num: 12

Candidate Starts for Misha28\_14:

(Start: 12 @8399 has 222 MA's), (Start: 13 @8405 has 66 MA's), (21, 8507), (26, 8531), (28, 8537), (42, 8657), (51, 8690), (57, 8726), (61, 8744), (64, 8762), (65, 8765), (67, 8771), (70, 8786), (71, 8789), (73, 8834), (83, 8912), (91, 8984), (97, 9131), (104, 9332),

Gene: MisterCuddles\_13 Start: 8542, Stop: 9478, Start Num: 12

Candidate Starts for MisterCuddles\_13:

(Start: 4 @8449 has 6 MA's), (Start: 12 @8542 has 222 MA's), (Start: 13 @8548 has 66 MA's), (21, 8650), (28, 8680), (38, 8776), (42, 8800), (44, 8803), (45, 8806), (57, 8869), (61, 8887), (64, 8905), (65, 8908), (67, 8914), (73, 8977), (83, 9055), (84, 9061), (91, 9127), (104, 9475),



Gene: Modragons\_13 Start: 8535, Stop: 9471, Start Num: 12

Candidate Starts for Modragons\_13:

(Start: 4 @8442 has 6 MA's), (Start: 12 @8535 has 222 MA's), (Start: 13 @8541 has 66 MA's), (21, 8643), (28, 8673), (38, 8769), (42, 8793), (44, 8796), (45, 8799), (51, 8826), (57, 8862), (61, 8880), (64, 8898), (67, 8907), (73, 8970), (83, 9048), (91, 9120), (104, 9468),

Gene: Moldemort\_22 Start: 12218, Stop: 13089, Start Num: 12

Candidate Starts for Moldemort\_22:

(Start: 7 @12146 has 17 MA's), (Start: 12 @12218 has 222 MA's), (30, 12362), (42, 12455), (48, 12479), (50, 12491), (53, 12515), (60, 12533), (63, 12557), (86, 12716), (96, 12869), (99, 12890), (100, 12935), (101, 12956), (102, 12971), (104, 13082),

Gene: MooMoo\_13 Start: 8071, Stop: 8992, Start Num: 11

Candidate Starts for MooMoo\_13:

(Start: 4 @7981 has 6 MA's), (Start: 11 @8071 has 1 MA's), (17, 8158), (29, 8218), (32, 8233), (36, 8266), (41, 8326), (54, 8392), (55, 8395), (77, 8518), (79, 8530), (84, 8581), (85, 8584), (87, 8617), (90, 8647), (91, 8650), (92, 8680), (103, 8878),

Gene: Moonbeam\_13 Start: 8539, Stop: 9475, Start Num: 12

Candidate Starts for Moonbeam\_13:

(Start: 4 @8446 has 6 MA's), (Start: 12 @8539 has 222 MA's), (Start: 13 @8545 has 66 MA's), (21, 8647), (26, 8671), (28, 8677), (38, 8773), (42, 8797), (44, 8800), (45, 8803), (51, 8830), (57, 8866), (61, 8884), (64, 8902), (67, 8911), (73, 8974), (83, 9052), (84, 9058), (91, 9124), (97, 9271), (104, 9472),

Gene: Mori\_52 Start: 25335, Stop: 26286, Start Num: 9

Candidate Starts for Mori\_52:

(Start: 9 @25335 has 15 MA's), (Start: 10 @25347 has 3 MA's), (16, 25419), (22, 25464), (23, 25467), (28, 25491), (31, 25509), (35, 25539), (43, 25617), (44, 25620), (56, 25677), (61, 25701), (73, 25776), (84, 25860), (91, 25926), (93, 26022),

Gene: Mova\_14 Start: 8392, Stop: 9328, Start Num: 12

Candidate Starts for Mova\_14:

(Start: 4 @8299 has 6 MA's), (Start: 12 @8392 has 222 MA's), (Start: 13 @8398 has 66 MA's), (21, 8500), (28, 8530), (38, 8626), (42, 8650), (57, 8719), (61, 8737), (65, 8758), (67, 8764), (73, 8827), (83, 8905), (91, 8977), (104, 9325),

Gene: Mozy\_13 Start: 8425, Stop: 9361, Start Num: 13

Candidate Starts for Mozy\_13:

(8, 8398), (Start: 13 @8425 has 66 MA's), (21, 8533), (28, 8563), (37, 8638), (42, 8683), (44, 8686), (45, 8689), (51, 8716), (57, 8752), (64, 8788), (65, 8791), (67, 8797), (70, 8812), (71, 8815), (73, 8860), (83, 8938), (84, 8944), (91, 9010), (104, 9358),

Gene: Murai\_53 Start: 25525, Stop: 26476, Start Num: 9

Candidate Starts for Murai\_53:

(Start: 9 @25525 has 15 MA's), (Start: 10 @25537 has 3 MA's), (16, 25609), (22, 25654), (23, 25657), (28, 25681), (31, 25699), (35, 25729), (43, 25807), (44, 25810), (56, 25867), (61, 25891), (73, 25966), (84, 26050), (91, 26116), (93, 26212),

Gene: Murica\_19 Start: 11935, Stop: 12809, Start Num: 12

Candidate Starts for Murica\_19:

(Start: 7 @11863 has 17 MA's), (Start: 12 @11935 has 222 MA's), (30, 12079), (42, 12172), (48, 12196), (50, 12208), (53, 12232), (60, 12250), (63, 12274), (86, 12433), (96, 12586), (99, 12607), (100, 12652), (101, 12673), (102, 12688), (104, 12799),

Gene: Mutaforma13\_13 Start: 8576, Stop: 9512, Start Num: 13

Candidate Starts for Mutaforma13\_13:

(8, 8549), (Start: 13 @8576 has 66 MA's), (21, 8684), (26, 8708), (28, 8714), (42, 8834), (51, 8867), (57, 8903), (61, 8921), (64, 8939), (67, 8948), (70, 8963), (71, 8966), (73, 9011), (83, 9089), (84, 9095), (91, 9161), (104, 9509),

Gene: Myrale\_21 Start: 12268, Stop: 13211, Start Num: 7

Candidate Starts for Myrale\_21:

(Start: 7 @12268 has 17 MA's), (Start: 12 @12340 has 222 MA's), (30, 12484), (42, 12577), (48, 12601), (50, 12613), (53, 12637), (60, 12655), (63, 12679), (86, 12838), (96, 12991), (99, 13012), (100, 13057), (101, 13078), (102, 13093), (104, 13204),

Gene: NelitzaMV\_21 Start: 12539, Stop: 13410, Start Num: 12

Candidate Starts for NelitzaMV\_21:

(Start: 7 @12467 has 17 MA's), (Start: 12 @12539 has 222 MA's), (30, 12683), (42, 12776), (48, 12800), (50, 12812), (53, 12836), (60, 12854), (63, 12878), (86, 13037), (96, 13190), (99, 13211), (100, 13256), (101, 13277), (102, 13292), (104, 13403),

Gene: Nenae\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for Nenae\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: NiebruSaylor\_52 Start: 25336, Stop: 26287, Start Num: 9

Candidate Starts for NiebruSaylor\_52:

(Start: 9 @25336 has 15 MA's), (Start: 10 @25348 has 3 MA's), (16, 25420), (22, 25465), (23, 25468), (28, 25492), (31, 25510), (35, 25540), (43, 25618), (44, 25621), (56, 25678), (61, 25702), (73, 25777), (84, 25861), (91, 25927), (93, 26023),

Gene: Nimbo\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Nimbo\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Nimrod\_21 Start: 12643, Stop: 13586, Start Num: 7

Candidate Starts for Nimrod\_21:

(Start: 7 @12643 has 17 MA's), (Start: 12 @12715 has 222 MA's), (30, 12859), (42, 12952), (48, 12976), (50, 12988), (53, 13012), (60, 13030), (63, 13054), (86, 13213), (96, 13366), (99, 13387), (100, 13432), (101, 13453), (102, 13468), (104, 13579),

Gene: Nitzel\_14 Start: 9198, Stop: 10134, Start Num: 12

Candidate Starts for Nitzel\_14:

(Start: 12 @9198 has 222 MA's), (Start: 13 @9204 has 66 MA's), (21, 9306), (28, 9336), (38, 9432), (42, 9456), (57, 9525), (61, 9543), (64, 9561), (65, 9564), (67, 9570), (70, 9585), (71, 9588), (73, 9633), (83, 9711), (91, 9783), (104, 10131),

Gene: Nivrat\_13 Start: 8537, Stop: 9473, Start Num: 12

Candidate Starts for Nivrat\_13:

(Start: 4 @8444 has 6 MA's), (Start: 12 @8537 has 222 MA's), (Start: 13 @8543 has 66 MA's), (21, 8645), (28, 8675), (38, 8771), (42, 8795), (44, 8798), (45, 8801), (57, 8864), (61, 8882), (64, 8900), (67, 8909), (73, 8972), (83, 9050), (91, 9122), (104, 9470),

Gene: NoSleep\_22 Start: 12215, Stop: 13086, Start Num: 12

Candidate Starts for NoSleep\_22:

(Start: 7 @12143 has 17 MA's), (Start: 12 @12215 has 222 MA's), (30, 12359), (42, 12452), (48, 12476), (50, 12488), (53, 12512), (60, 12530), (63, 12554), (86, 12713), (96, 12866), (99, 12887), (100, 12932), (101, 12953), (102, 12968), (104, 13079),

Gene: NormanBulbieJr\_13 Start: 8523, Stop: 9459, Start Num: 12

Candidate Starts for NormanBulbieJr\_13:

(2, 8358), (3, 8427), (Start: 12 @8523 has 222 MA's), (Start: 13 @8529 has 66 MA's), (21, 8631), (28, 8661), (38, 8757), (42, 8781), (61, 8868), (64, 8886), (67, 8895), (73, 8958), (83, 9036), (91, 9108), (104, 9456),

Gene: Ochi17\_13 Start: 8535, Stop: 9471, Start Num: 12

Candidate Starts for Ochi17\_13:

(Start: 4 @8442 has 6 MA's), (Start: 12 @8535 has 222 MA's), (Start: 13 @8541 has 66 MA's), (21, 8643), (28, 8673), (38, 8769), (42, 8793), (44, 8796), (45, 8799), (51, 8826), (57, 8862), (61, 8880), (64, 8898), (67, 8907), (73, 8970), (83, 9048), (91, 9120), (104, 9468),

Gene: OfUltron\_13 Start: 8535, Stop: 9471, Start Num: 12

Candidate Starts for OfUltron\_13:

(Start: 4 @8442 has 6 MA's), (Start: 12 @8535 has 222 MA's), (Start: 13 @8541 has 66 MA's), (21, 8643), (28, 8673), (38, 8769), (42, 8793), (44, 8796), (45, 8799), (51, 8826), (57, 8862), (61, 8880), (64, 8898), (67, 8907), (73, 8970), (83, 9048), (91, 9120), (104, 9468),

Gene: Ogotogo\_16 Start: 8698, Stop: 9727, Start Num: 4

Candidate Starts for Ogotogo\_16:

(Start: 4 @8698 has 6 MA's), (Start: 12 @8791 has 222 MA's), (Start: 13 @8797 has 66 MA's), (21, 8899), (28, 8929), (38, 9025), (42, 9049), (57, 9118), (61, 9136), (64, 9154), (67, 9163), (70, 9178), (71, 9181), (73, 9226), (83, 9304), (91, 9376), (104, 9724),

Gene: OldBen\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for OldBen\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: OlympiaSaint\_13 Start: 8556, Stop: 9492, Start Num: 13

Candidate Starts for OlympiaSaint\_13:

(8, 8529), (Start: 13 @8556 has 66 MA's), (21, 8664), (28, 8694), (42, 8814), (51, 8847), (57, 8883), (61, 8901), (64, 8919), (67, 8928), (70, 8943), (71, 8946), (73, 8991), (83, 9069), (91, 9141), (104, 9489),

Gene: OrionPax\_22 Start: 12218, Stop: 13089, Start Num: 12

Candidate Starts for OrionPax\_22:

(Start: 7 @12146 has 17 MA's), (Start: 12 @12218 has 222 MA's), (30, 12362), (42, 12455), (48, 12479), (50, 12491), (53, 12515), (60, 12533), (63, 12557), (86, 12716), (96, 12869), (99, 12890), (100, 12935), (101, 12956), (102, 12971), (104, 13082),

Gene: Ovechkin\_13 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for Ovechkin\_13:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (65, 8943), (67, 8949), (70, 8964), (71, 8967), (73, 9012), (83, 9090), (84, 9096),

(91, 9162), (97, 9309), (104, 9510),

Gene: OwlsT2W\_14 Start: 8398, Stop: 9334, Start Num: 12

Candidate Starts for OwlsT2W\_14:

(Start: 12 @8398 has 222 MA's), (Start: 13 @8404 has 66 MA's), (21, 8506), (28, 8536), (38, 8632), (42, 8656), (57, 8725), (61, 8743), (64, 8761), (65, 8764), (67, 8770), (70, 8785), (71, 8788), (73, 8833), (83, 8911), (91, 8983), (104, 9331),

Gene: Pacc40\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Pacc40\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Palpatine\_20 Start: 11974, Stop: 12848, Start Num: 12

Candidate Starts for Palpatine\_20:

(Start: 7 @11902 has 17 MA's), (Start: 12 @11974 has 222 MA's), (30, 12118), (42, 12211), (48, 12235), (50, 12247), (53, 12271), (60, 12289), (63, 12313), (86, 12472), (96, 12625), (99, 12646), (100, 12691), (101, 12712), (102, 12727), (104, 12838),

Gene: Panchino\_15 Start: 9057, Stop: 9963, Start Num: 15

Candidate Starts for Panchino\_15:

(Start: 15 @9057 has 42 MA's), (25, 9165), (35, 9228), (38, 9276), (49, 9333), (61, 9396), (62, 9402), (64, 9414), (65, 9417), (80, 9504), (81, 9507), (89, 9609), (94, 9723), (98, 9780),

Gene: Paperbeatsrock\_23 Start: 13450, Stop: 14321, Start Num: 12

Candidate Starts for Paperbeatsrock\_23:

(Start: 7 @13378 has 17 MA's), (Start: 12 @13450 has 222 MA's), (30, 13594), (42, 13687), (48, 13711), (50, 13723), (53, 13747), (60, 13765), (63, 13789), (86, 13948), (96, 14101), (99, 14122), (100, 14167), (101, 14188), (102, 14203), (104, 14314),

Gene: Parmesanjohn\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Parmesanjohn\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Phaja\_20 Start: 12057, Stop: 13003, Start Num: 7

Candidate Starts for Phaja\_20:

(Start: 7 @12057 has 17 MA's), (Start: 12 @12129 has 222 MA's), (30, 12273), (42, 12366), (48, 12390), (50, 12402), (53, 12426), (60, 12444), (63, 12468), (86, 12627), (96, 12780), (99, 12801), (100, 12846), (101, 12867), (102, 12882), (104, 12993),

Gene: Phalconet\_13 Start: 8579, Stop: 9515, Start Num: 13

Candidate Starts for Phalconet\_13:

(8, 8552), (Start: 13 @8579 has 66 MA's), (21, 8687), (28, 8717), (42, 8837), (51, 8870), (57, 8906), (61, 8924), (64, 8942), (67, 8951), (70, 8966), (71, 8969), (73, 9014), (83, 9092), (84, 9098), (91, 9164), (97, 9311), (104, 9512),

Gene: PhancyPhin\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for PhancyPhin\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: Phanphagia\_13 Start: 8578, Stop: 9514, Start Num: 13

Candidate Starts for Phanphagia\_13:

(8, 8551), (Start: 13 @8578 has 66 MA's), (21, 8686), (28, 8716), (42, 8836), (44, 8839), (45, 8842), (51, 8869), (57, 8905), (61, 8923), (64, 8941), (67, 8950), (70, 8965), (71, 8968), (73, 9013), (83, 9091), (84, 9097), (91, 9163), (97, 9310), (104, 9511),

Gene: Pharsalus\_22 Start: 13178, Stop: 14121, Start Num: 7

Candidate Starts for Pharsalus\_22:

(Start: 7 @13178 has 17 MA's), (Start: 12 @13250 has 222 MA's), (30, 13394), (42, 13487), (48, 13511), (50, 13523), (53, 13547), (60, 13565), (63, 13589), (86, 13748), (96, 13901), (99, 13922), (100, 13967), (101, 13988), (102, 14003), (104, 14114),

Gene: Phasih\_13 Start: 8571, Stop: 9507, Start Num: 13

Candidate Starts for Phasih\_13:

(8, 8544), (Start: 13 @8571 has 66 MA's), (21, 8679), (28, 8709), (42, 8829), (51, 8862), (57, 8898), (61, 8916), (64, 8934), (67, 8943), (70, 8958), (71, 8961), (73, 9006), (83, 9084), (84, 9090), (91, 9156), (97, 9303), (104, 9504),

Gene: Phatniss\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Phatniss\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: PhesterPhotato\_13 Start: 8578, Stop: 9514, Start Num: 13

Candidate Starts for PhesterPhotato\_13:

(8, 8551), (Start: 13 @8578 has 66 MA's), (21, 8686), (28, 8716), (42, 8836), (51, 8869), (57, 8905), (64, 8941), (67, 8950), (70, 8965), (71, 8968), (73, 9013), (83, 9091), (84, 9097), (91, 9163), (97, 9310), (104, 9511),

Gene: Philonius\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Philonius\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Philus\_13 Start: 8537, Stop: 9473, Start Num: 12

Candidate Starts for Philus\_13:

(Start: 4 @8444 has 6 MA's), (Start: 12 @8537 has 222 MA's), (Start: 13 @8543 has 66 MA's), (21, 8645), (28, 8675), (38, 8771), (42, 8795), (44, 8798), (45, 8801), (57, 8864), (61, 8882), (64, 8900), (67, 8909), (73, 8972), (83, 9050), (91, 9122), (104, 9470),

Gene: Phloss\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Phloss\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Phrann\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for Phrann\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (94, 9747), (98, 9804),

Gene: Piper2020\_14 Start: 8399, Stop: 9335, Start Num: 12

Candidate Starts for Piper2020\_14:

(Start: 12 @8399 has 222 MA's), (Start: 13 @8405 has 66 MA's), (21, 8507), (28, 8537), (38, 8633), (42, 8657), (57, 8726), (61, 8744), (64, 8762), (65, 8765), (67, 8771), (70, 8786), (71, 8789), (73, 8834), (83, 8912), (91, 8984), (97, 9131), (104, 9332),

Gene: Pippy\_12 Start: 8520, Stop: 9456, Start Num: 12

Candidate Starts for Pippy\_12:

(Start: 12 @8520 has 222 MA's), (Start: 13 @8526 has 66 MA's), (21, 8628), (28, 8658), (38, 8754), (42, 8778), (57, 8847), (61, 8865), (64, 8883), (65, 8886), (67, 8892), (70, 8907), (71, 8910), (73, 8955), (83, 9033), (91, 9105), (104, 9453),

Gene: Pipsqueaks\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Pipsqueaks\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Plumbus\_14 Start: 8391, Stop: 9327, Start Num: 12

Candidate Starts for Plumbus\_14:

(Start: 4 @8298 has 6 MA's), (Start: 12 @8391 has 222 MA's), (Start: 13 @8397 has 66 MA's), (21, 8499), (26, 8523), (28, 8529), (38, 8625), (42, 8649), (44, 8652), (45, 8655), (57, 8718), (61, 8736), (64, 8754), (67, 8763), (70, 8778), (71, 8781), (73, 8826), (83, 8904), (91, 8976), (104, 9324),

Gene: Poenanya\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Poenanya\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (26, 8664), (28, 8670), (38, 8766), (42, 8790), (51, 8823), (61, 8877), (64, 8895), (67, 8904), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Policronamos\_20 Start: 11979, Stop: 12853, Start Num: 12

Candidate Starts for Policronamos\_20:

(Start: 7 @11907 has 17 MA's), (Start: 12 @11979 has 222 MA's), (30, 12123), (42, 12216), (48, 12240), (50, 12252), (53, 12276), (60, 12294), (63, 12318), (86, 12477), (96, 12630), (99, 12651), (100, 12696), (101, 12717), (102, 12732), (104, 12843),

Gene: Polka14\_13 Start: 8533, Stop: 9469, Start Num: 12

Candidate Starts for Polka14\_13:

(Start: 12 @8533 has 222 MA's), (Start: 13 @8539 has 66 MA's), (21, 8641), (26, 8665), (28, 8671), (38, 8767), (42, 8791), (51, 8824), (57, 8860), (61, 8878), (64, 8896), (67, 8905), (73, 8968), (83, 9046), (91, 9118), (104, 9466),

Gene: Pollywog\_14 Start: 8385, Stop: 9321, Start Num: 12

Candidate Starts for Pollywog\_14:

(Start: 12 @8385 has 222 MA's), (Start: 13 @8391 has 66 MA's), (21, 8493), (28, 8523), (38, 8619), (42, 8643), (57, 8712), (61, 8730), (64, 8748), (65, 8751), (67, 8757), (70, 8772), (71, 8775), (73, 8820), (83, 8898), (91, 8970), (104, 9318),

Gene: PopTart\_13 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for PopTart\_13:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (65, 8943), (67, 8949), (70, 8964), (71, 8967), (73, 9012), (83, 9090), (84, 9096), (91, 9162), (97, 9309), (104, 9510),

Gene: Priscilla\_13 Start: 8538, Stop: 9474, Start Num: 12

Candidate Starts for Priscilla\_13:

(Start: 4 @8445 has 6 MA's), (Start: 12 @8538 has 222 MA's), (Start: 13 @8544 has 66 MA's), (21, 8646), (28, 8676), (38, 8772), (42, 8796), (44, 8799), (45, 8802), (57, 8865), (61, 8883), (64, 8901), (67, 8910), (73, 8973), (83, 9051), (91, 9123), (104, 9471),

Gene: Quallification\_22 Start: 12676, Stop: 13547, Start Num: 12

Candidate Starts for Quallification\_22:

(Start: 7 @12604 has 17 MA's), (Start: 12 @12676 has 222 MA's), (30, 12820), (42, 12913), (48, 12937), (50, 12949), (53, 12973), (60, 12991), (63, 13015), (86, 13174), (96, 13327), (99, 13348), (100, 13393), (101, 13414), (102, 13429), (104, 13540),

Gene: QueenHazel\_15 Start: 9782, Stop: 10775, Start Num: 12

Candidate Starts for QueenHazel\_15:

(6, 9695), (Start: 12 @9782 has 222 MA's), (17, 9866), (30, 9929), (32, 9941), (33, 9947), (41, 10034), (52, 10085), (55, 10103), (69, 10169), (72, 10193), (76, 10223), (77, 10226), (84, 10289), (85, 10292), (90, 10355), (91, 10358), (105, 10772),

Gene: QuickMath\_13 Start: 8578, Stop: 9514, Start Num: 13

Candidate Starts for QuickMath\_13:

(8, 8551), (Start: 13 @8578 has 66 MA's), (21, 8686), (28, 8716), (42, 8836), (51, 8869), (57, 8905), (61, 8923), (64, 8941), (65, 8944), (67, 8950), (70, 8965), (71, 8968), (73, 9013), (83, 9091), (84, 9097), (91, 9163), (97, 9310), (104, 9511),

Gene: Quico\_14 Start: 8403, Stop: 9339, Start Num: 13

Candidate Starts for Quico\_14:

(8, 8376), (Start: 13 @8403 has 66 MA's), (21, 8511), (28, 8541), (42, 8661), (44, 8664), (45, 8667), (51, 8694), (57, 8730), (64, 8766), (65, 8769), (67, 8775), (70, 8790), (71, 8793), (73, 8838), (83, 8916), (84, 8922), (91, 8988), (97, 9135), (104, 9336),

Gene: Radiance\_13 Start: 8531, Stop: 9467, Start Num: 12

Candidate Starts for Radiance\_13:

(Start: 12 @8531 has 222 MA's), (Start: 13 @8537 has 66 MA's), (21, 8639), (28, 8669), (38, 8765), (42, 8789), (57, 8858), (61, 8876), (64, 8894), (65, 8897), (67, 8903), (70, 8918), (71, 8921), (73, 8966), (83, 9044), (91, 9116), (104, 9464),

Gene: Ramsey\_14 Start: 8388, Stop: 9324, Start Num: 12

Candidate Starts for Ramsey\_14:

(Start: 4 @8295 has 6 MA's), (Start: 12 @8388 has 222 MA's), (Start: 13 @8394 has 66 MA's), (21, 8496), (26, 8520), (28, 8526), (38, 8622), (42, 8646), (44, 8649), (45, 8652), (51, 8679), (57, 8715), (61, 8733), (64, 8751), (67, 8760), (73, 8823), (83, 8901), (91, 8973), (104, 9321),

Gene: Raymond7\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for Raymond7\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: Rebel\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for Rebel\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: Redi\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for Redi\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: Renaud18\_14 Start: 8852, Stop: 9794, Start Num: 12

Candidate Starts for Renaud18\_14:

(Start: 12 @8852 has 222 MA's), (16, 8924), (22, 8969), (28, 8996), (31, 9014), (34, 9032), (58, 9200), (71, 9263), (73, 9308), (80, 9341), (84, 9392), (91, 9458),

Gene: Rialto\_14 Start: 8391, Stop: 9327, Start Num: 12

Candidate Starts for Rialto\_14:

(Start: 4 @8298 has 6 MA's), (Start: 12 @8391 has 222 MA's), (Start: 13 @8397 has 66 MA's), (21, 8499), (26, 8523), (28, 8529), (38, 8625), (42, 8649), (44, 8652), (45, 8655), (51, 8682), (57, 8718), (61, 8736), (64, 8754), (67, 8763), (73, 8826), (83, 8904), (84, 8910), (91, 8976), (97, 9123), (104, 9324),

Gene: Rimmer\_20 Start: 12036, Stop: 12907, Start Num: 12

Candidate Starts for Rimmer\_20:

(Start: 7 @11964 has 17 MA's), (Start: 12 @12036 has 222 MA's), (30, 12180), (42, 12273), (48, 12297), (50, 12309), (53, 12333), (60, 12351), (63, 12375), (86, 12534), (96, 12687), (99, 12708), (100, 12753), (101, 12774), (102, 12789), (104, 12900),

Gene: Rita\_13 Start: 8546, Stop: 9482, Start Num: 13

Candidate Starts for Rita\_13:

(8, 8519), (Start: 13 @8546 has 66 MA's), (21, 8654), (26, 8678), (28, 8684), (42, 8804), (51, 8837), (57, 8873), (61, 8891), (64, 8909), (67, 8918), (70, 8933), (71, 8936), (73, 8981), (83, 9059), (84, 9065), (91, 9131), (97, 9278), (104, 9479),

Gene: RitaG\_13 Start: 8532, Stop: 9441, Start Num: 12

Candidate Starts for RitaG\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (42, 8763), (57, 8832), (61, 8850), (64, 8868), (65, 8871), (67, 8877), (70, 8892), (71, 8895), (73, 8940), (83, 9018), (91, 9090), (104, 9438),

Gene: Rockne\_13 Start: 8549, Stop: 9485, Start Num: 12

Candidate Starts for Rockne\_13:

(Start: 12 @8549 has 222 MA's), (Start: 13 @8555 has 66 MA's), (21, 8657), (28, 8687), (38, 8783), (42, 8807), (57, 8876), (61, 8894), (64, 8912), (65, 8915), (67, 8921), (70, 8936), (71, 8939), (73, 8984), (83, 9062), (91, 9134), (104, 9482),

Gene: RockyHorror\_14 Start: 8389, Stop: 9325, Start Num: 12

Candidate Starts for RockyHorror\_14:

(Start: 4 @8296 has 6 MA's), (Start: 12 @8389 has 222 MA's), (Start: 13 @8395 has 66 MA's), (21, 8497), (26, 8521), (28, 8527), (38, 8623), (42, 8647), (44, 8650), (45, 8653), (51, 8680), (57, 8716), (61, 8734), (64, 8752), (67, 8761), (73, 8824), (83, 8902), (91, 8974), (104, 9322),

Gene: Royals2015\_13 Start: 8576, Stop: 9512, Start Num: 13

Candidate Starts for Royals2015\_13:

(8, 8549), (Start: 13 @8576 has 66 MA's), (21, 8684), (28, 8714), (42, 8834), (51, 8867), (57, 8903), (61, 8921), (64, 8939), (65, 8942), (67, 8948), (70, 8963), (71, 8966), (73, 9011), (83, 9089), (84, 9095), (91, 9161), (97, 9308), (104, 9509),

Gene: Rubeelu\_15 Start: 9056, Stop: 9962, Start Num: 15

Candidate Starts for Rubeelu\_15:



(Start: 15 @9056 has 42 MA's), (25, 9164), (35, 9227), (38, 9275), (49, 9332), (61, 9395), (62, 9401), (65, 9416), (81, 9506), (84, 9554), (94, 9722), (98, 9779),

Gene: Ruby\_13 Start: 8449, Stop: 9478, Start Num: 4

Candidate Starts for Ruby\_13:

(Start: 4 @8449 has 6 MA's), (Start: 12 @8542 has 222 MA's), (Start: 13 @8548 has 66 MA's), (21, 8650), (28, 8680), (38, 8776), (42, 8800), (44, 8803), (45, 8806), (57, 8869), (61, 8887), (64, 8905), (65, 8908), (67, 8914), (73, 8977), (83, 9055), (84, 9061), (91, 9127), (104, 9475),

Gene: Ryadel\_57 Start: 26800, Stop: 27751, Start Num: 9

Candidate Starts for Ryadel\_57:

(Start: 9 @26800 has 15 MA's), (Start: 10 @26812 has 3 MA's), (16, 26884), (22, 26929), (23, 26932), (28, 26956), (31, 26974), (35, 27004), (43, 27082), (44, 27085), (56, 27142), (61, 27166), (73, 27241), (91, 27391), (93, 27487),

Gene: SG4\_13 Start: 8576, Stop: 9512, Start Num: 13

Candidate Starts for SG4\_13:

(8, 8549), (Start: 13 @8576 has 66 MA's), (21, 8684), (28, 8714), (42, 8834), (51, 8867), (57, 8903), (61, 8921), (64, 8939), (65, 8942), (67, 8948), (70, 8963), (71, 8966), (73, 9011), (83, 9089), (84, 9095), (91, 9161), (97, 9308), (104, 9509),

Gene: Saal\_13 Start: 8521, Stop: 9457, Start Num: 12

Candidate Starts for Saal\_13:

(Start: 12 @8521 has 222 MA's), (Start: 13 @8527 has 66 MA's), (21, 8629), (28, 8659), (38, 8755), (42, 8779), (57, 8848), (61, 8866), (64, 8884), (65, 8887), (67, 8893), (70, 8908), (71, 8911), (73, 8956), (83, 9034), (91, 9106), (104, 9454),

Gene: Sabbb\_13 Start: 8550, Stop: 9486, Start Num: 12

Candidate Starts for Sabbb\_13:

(Start: 12 @8550 has 222 MA's), (Start: 13 @8556 has 66 MA's), (21, 8658), (26, 8682), (28, 8688), (38, 8784), (42, 8808), (51, 8841), (61, 8895), (64, 8913), (67, 8922), (73, 8985), (83, 9063), (91, 9135), (104, 9483),

Gene: Saints25\_22 Start: 12137, Stop: 13008, Start Num: 12

Candidate Starts for Saints25\_22:

(Start: 7 @12065 has 17 MA's), (Start: 12 @12137 has 222 MA's), (30, 12281), (42, 12374), (48, 12398), (50, 12410), (53, 12434), (60, 12452), (63, 12476), (86, 12635), (96, 12788), (99, 12809), (100, 12854), (101, 12875), (102, 12890), (104, 13001),

Gene: Sandalphon\_13 Start: 8549, Stop: 9485, Start Num: 12

Candidate Starts for Sandalphon\_13:

(Start: 12 @8549 has 222 MA's), (Start: 13 @8555 has 66 MA's), (21, 8657), (26, 8681), (28, 8687), (38, 8783), (42, 8807), (44, 8810), (45, 8813), (61, 8894), (65, 8915), (67, 8921), (73, 8984), (83, 9062), (91, 9134), (104, 9482),

Gene: Sarma624\_14 Start: 8383, Stop: 9319, Start Num: 12

Candidate Starts for Sarma624\_14:

(Start: 12 @8383 has 222 MA's), (Start: 13 @8389 has 66 MA's), (21, 8491), (28, 8521), (38, 8617), (42, 8641), (57, 8710), (61, 8728), (64, 8746), (65, 8749), (67, 8755), (70, 8770), (71, 8773), (73, 8818), (83, 8896), (91, 8968), (104, 9316),

Gene: Sassafra\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Sassafra\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Sassay\_20 Start: 11977, Stop: 12848, Start Num: 12

Candidate Starts for Sassay\_20:

(Start: 7 @11905 has 17 MA's), (Start: 12 @11977 has 222 MA's), (30, 12121), (42, 12214), (48, 12238), (50, 12250), (53, 12274), (60, 12292), (63, 12316), (86, 12475), (96, 12628), (99, 12649), (100, 12694), (101, 12715), (102, 12730), (104, 12841),

Gene: SassyB\_13 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for SassyB\_13:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (65, 8943), (67, 8949), (70, 8964), (71, 8967), (73, 9012), (83, 9090), (84, 9096), (91, 9162), (97, 9309), (104, 9510),

Gene: Sbash\_14 Start: 9346, Stop: 10261, Start Num: 12

Candidate Starts for Sbash\_14:

(Start: 12 @9346 has 222 MA's), (17, 9430), (30, 9493), (32, 9505), (36, 9538), (41, 9598), (55, 9667), (59, 9679), (60, 9682), (66, 9718), (68, 9727), (76, 9787), (77, 9790), (84, 9853), (85, 9856), (88, 9898), (90, 9919), (91, 9922),

Gene: Schnauzer\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Schnauzer\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: SchoolBus\_53 Start: 25762, Stop: 26701, Start Num: 10

Candidate Starts for SchoolBus\_53:

(Start: 9 @25750 has 15 MA's), (Start: 10 @25762 has 3 MA's), (16, 25834), (22, 25879), (23, 25882), (28, 25906), (31, 25924), (35, 25954), (43, 26032), (44, 26035), (56, 26092), (61, 26116), (73, 26191), (84, 26275), (91, 26341), (93, 26437),

Gene: Scottish\_13 Start: 8538, Stop: 9468, Start Num: 13

Candidate Starts for Scottish\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (38, 8766), (42, 8790), (57, 8859), (61, 8877), (64, 8895), (65, 8898), (67, 8904), (70, 8919), (71, 8922), (73, 8967), (83, 9045), (91, 9117), (104, 9465),

Gene: Seabastian\_13 Start: 8535, Stop: 9471, Start Num: 12

Candidate Starts for Seabastian\_13:

(Start: 4 @8442 has 6 MA's), (Start: 12 @8535 has 222 MA's), (Start: 13 @8541 has 66 MA's), (21, 8643), (28, 8673), (38, 8769), (42, 8793), (44, 8796), (45, 8799), (51, 8826), (57, 8862), (61, 8880), (64, 8898), (67, 8907), (73, 8970), (83, 9048), (91, 9120), (104, 9468),

Gene: Seagreen\_14 Start: 8392, Stop: 9328, Start Num: 12

Candidate Starts for Seagreen\_14:

(Start: 12 @8392 has 222 MA's), (Start: 13 @8398 has 66 MA's), (21, 8500), (26, 8524), (28, 8530), (38, 8626), (42, 8650), (51, 8683), (61, 8737), (64, 8755), (67, 8764), (73, 8827), (83, 8905), (91, 8977), (104, 9325),

Gene: ShamWow\_21 Start: 12470, Stop: 13341, Start Num: 12

Candidate Starts for ShamWow\_21:

(Start: 7 @12398 has 17 MA's), (Start: 12 @12470 has 222 MA's), (30, 12614), (42, 12707), (48, 12731), (50, 12743), (53, 12767), (60, 12785), (63, 12809), (86, 12968), (96, 13121), (99, 13142), (100, 13187), (101, 13208), (102, 13223), (104, 13334),

Gene: Shauna1\_12 Start: 8578, Stop: 9514, Start Num: 13

Candidate Starts for Shauna1\_12:

(8, 8551), (Start: 13 @8578 has 66 MA's), (21, 8686), (28, 8716), (42, 8836), (44, 8839), (45, 8842), (51, 8869), (57, 8905), (61, 8923), (64, 8941), (67, 8950), (70, 8965), (71, 8968), (73, 9013), (83, 9091), (84, 9097), (91, 9163), (97, 9310), (104, 9511),

Gene: ShereKhan\_23 Start: 13456, Stop: 14327, Start Num: 12

Candidate Starts for ShereKhan\_23:

(Start: 7 @13384 has 17 MA's), (Start: 12 @13456 has 222 MA's), (30, 13600), (42, 13693), (48, 13717), (50, 13729), (53, 13753), (60, 13771), (63, 13795), (86, 13954), (96, 14107), (99, 14128), (100, 14173), (101, 14194), (102, 14209), (104, 14320),

Gene: ShiLan\_13 Start: 8444, Stop: 9473, Start Num: 4

Candidate Starts for ShiLan\_13:

(Start: 4 @8444 has 6 MA's), (Start: 12 @8537 has 222 MA's), (Start: 13 @8543 has 66 MA's), (21, 8645), (28, 8675), (38, 8771), (42, 8795), (44, 8798), (45, 8801), (57, 8864), (61, 8882), (64, 8900), (67, 8909), (73, 8972), (83, 9050), (91, 9122), (104, 9470),

Gene: Shida\_53 Start: 25590, Stop: 26541, Start Num: 9

Candidate Starts for Shida\_53:

(Start: 9 @25590 has 15 MA's), (Start: 10 @25602 has 3 MA's), (16, 25674), (22, 25719), (23, 25722), (28, 25746), (31, 25764), (35, 25794), (43, 25872), (44, 25875), (56, 25932), (61, 25956), (73, 26031), (84, 26115), (91, 26181), (93, 26277),

Gene: ShowerHandel\_13 Start: 8538, Stop: 9474, Start Num: 12

Candidate Starts for ShowerHandel\_13:

(Start: 4 @8445 has 6 MA's), (Start: 12 @8538 has 222 MA's), (Start: 13 @8544 has 66 MA's), (21, 8646), (28, 8676), (38, 8772), (42, 8796), (44, 8799), (45, 8802), (57, 8865), (61, 8883), (64, 8901), (67, 8910), (73, 8973), (83, 9051), (91, 9123), (104, 9471),

Gene: ShrimpFriedEgg\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for ShrimpFriedEgg\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: ShroomBoi\_13 Start: 8579, Stop: 9515, Start Num: 13

Candidate Starts for ShroomBoi\_13:

(8, 8552), (Start: 13 @8579 has 66 MA's), (21, 8687), (28, 8717), (42, 8837), (51, 8870), (57, 8906), (61, 8924), (64, 8942), (67, 8951), (70, 8966), (71, 8969), (73, 9014), (83, 9092), (84, 9098), (91, 9164), (97, 9311), (104, 9512),

Gene: Shweta\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for Shweta\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: SiSi\_13 Start: 8565, Stop: 9501, Start Num: 13

Candidate Starts for SiSi\_13:

(8, 8538), (Start: 13 @8565 has 66 MA's), (21, 8673), (28, 8703), (42, 8823), (44, 8826), (45, 8829), (51, 8856), (57, 8892), (61, 8910), (64, 8928), (65, 8931), (67, 8937), (70, 8952), (71, 8955), (73, 9000), (83, 9078), (84, 9084), (91, 9150), (97, 9297), (104, 9498),

Gene: Silvafighter\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Silvafighter\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Silvy\_15 Start: 9037, Stop: 9943, Start Num: 15

Candidate Starts for Silvy\_15:

(Start: 15 @9037 has 42 MA's), (25, 9145), (35, 9208), (38, 9256), (49, 9313), (61, 9376), (62, 9382), (64, 9394), (65, 9397), (81, 9487), (89, 9589), (94, 9703), (98, 9760),

Gene: Simpliphy\_22 Start: 12218, Stop: 13089, Start Num: 12

Candidate Starts for Simpliphy\_22:

(Start: 7 @12146 has 17 MA's), (Start: 12 @12218 has 222 MA's), (30, 12362), (42, 12455), (48, 12479), (50, 12491), (53, 12515), (60, 12533), (63, 12557), (86, 12716), (96, 12869), (99, 12890), (100, 12935), (101, 12956), (102, 12971), (104, 13082),

Gene: SimranZ1\_13 Start: 8388, Stop: 9324, Start Num: 12

Candidate Starts for SimranZ1\_13:

(Start: 4 @8295 has 6 MA's), (Start: 12 @8388 has 222 MA's), (Start: 13 @8394 has 66 MA's), (21, 8496), (28, 8526), (38, 8622), (42, 8646), (51, 8679), (57, 8715), (61, 8733), (64, 8751), (67, 8760), (73, 8823), (83, 8901), (91, 8973), (104, 9321),

Gene: SkinnyPete\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for SkinnyPete\_15:

(Start: 15 @9081 has 42 MA's), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: Smooch\_55 Start: 26890, Stop: 27829, Start Num: 10

Candidate Starts for Smooch\_55:

(Start: 9 @26878 has 15 MA's), (Start: 10 @26890 has 3 MA's), (16, 26962), (22, 27007), (23, 27010), (28, 27034), (31, 27052), (35, 27082), (43, 27160), (44, 27163), (56, 27220), (61, 27244), (73, 27319), (84, 27403), (91, 27469), (93, 27565),

Gene: Smurph\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Smurph\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Snekmaggedon\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for Snekmaggedon\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: SophKB\_21 Start: 12397, Stop: 13340, Start Num: 7

Candidate Starts for SophKB\_21:

(Start: 7 @12397 has 17 MA's), (Start: 12 @12469 has 222 MA's), (30, 12613), (42, 12706), (48, 12730), (50, 12742), (53, 12766), (60, 12784), (63, 12808), (86, 12967), (96, 13120), (99, 13141), (100, 13186), (101, 13207), (102, 13222), (104, 13333),

Gene: Sotrice96\_21 Start: 12425, Stop: 13296, Start Num: 12

Candidate Starts for Sotrice96\_21:

(Start: 7 @12353 has 17 MA's), (Start: 12 @12425 has 222 MA's), (30, 12569), (42, 12662), (48, 12686), (50, 12698), (53, 12722), (60, 12740), (63, 12764), (86, 12923), (96, 13076), (99, 13097), (100, 13142), (101, 13163), (102, 13178), (104, 13289),

Gene: Sparkdehlily\_13 Start: 8561, Stop: 9497, Start Num: 12

Candidate Starts for Sparkdehlily\_13:

(Start: 12 @8561 has 222 MA's), (Start: 13 @8567 has 66 MA's), (21, 8669), (28, 8699), (42, 8819), (57, 8888), (61, 8906), (64, 8924), (67, 8933), (70, 8948), (71, 8951), (73, 8996), (83, 9074), (91, 9146), (104, 9494),

Gene: Spartacus\_13 Start: 8563, Stop: 9499, Start Num: 13

Candidate Starts for Spartacus\_13:

(8, 8536), (Start: 13 @8563 has 66 MA's), (21, 8671), (28, 8701), (42, 8821), (51, 8854), (57, 8890), (61, 8908), (64, 8926), (67, 8935), (73, 8998), (83, 9076), (91, 9148), (104, 9496),

Gene: Spikelee\_14 Start: 8390, Stop: 9326, Start Num: 12

Candidate Starts for Spikelee\_14:

(3, 8291), (Start: 12 @8390 has 222 MA's), (Start: 13 @8396 has 66 MA's), (21, 8498), (28, 8528), (42, 8648), (44, 8651), (45, 8654), (51, 8681), (57, 8717), (61, 8735), (64, 8753), (67, 8762), (73, 8825), (83, 8903), (91, 8975), (104, 9323),

Gene: SpongeBob\_15 Start: 9081, Stop: 9987, Start Num: 15

Candidate Starts for SpongeBob\_15:

(Start: 15 @9081 has 42 MA's), (24, 9180), (25, 9189), (35, 9252), (38, 9300), (49, 9357), (61, 9420), (62, 9426), (64, 9438), (65, 9441), (80, 9528), (81, 9531), (89, 9633), (94, 9747), (98, 9804),

Gene: Spoonbill\_13 Start: 8538, Stop: 9474, Start Num: 12

Candidate Starts for Spoonbill\_13:

(Start: 4 @8445 has 6 MA's), (Start: 12 @8538 has 222 MA's), (Start: 13 @8544 has 66 MA's), (21, 8646), (28, 8676), (38, 8772), (42, 8796), (44, 8799), (45, 8802), (57, 8865), (61, 8883), (64, 8901), (65, 8904), (67, 8910), (73, 8973), (83, 9051), (91, 9123), (104, 9471),

Gene: Squirty\_14 Start: 8390, Stop: 9326, Start Num: 12

Candidate Starts for Squirty\_14:

(Start: 12 @8390 has 222 MA's), (Start: 13 @8396 has 66 MA's), (26, 8522), (28, 8528), (38, 8624), (42, 8648), (51, 8681), (57, 8717), (61, 8735), (64, 8753), (65, 8756), (67, 8762), (70, 8777), (71, 8780), (73, 8825), (83, 8903), (84, 8909), (91, 8975), (104, 9323),

Gene: StAnnes\_13 Start: 8579, Stop: 9515, Start Num: 13

Candidate Starts for StAnnes\_13:

(8, 8552), (Start: 13 @8579 has 66 MA's), (21, 8687), (28, 8717), (42, 8837), (51, 8870), (57, 8906), (61, 8924), (64, 8942), (65, 8945), (67, 8951), (70, 8966), (71, 8969), (73, 9014), (83, 9092), (84, 9098), (91, 9164), (104, 9512),

Gene: Stank\_23 Start: 12463, Stop: 13337, Start Num: 12

Candidate Starts for Stank\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: Stap\_14 Start: 8389, Stop: 9325, Start Num: 12

Candidate Starts for Stap\_14:

(Start: 4 @8296 has 6 MA's), (Start: 12 @8389 has 222 MA's), (Start: 13 @8395 has 66 MA's), (21, 8497), (26, 8521), (28, 8527), (38, 8623), (42, 8647), (44, 8650), (45, 8653), (51, 8680), (57, 8716), (61, 8734), (64, 8752), (67, 8761), (73, 8824), (83, 8902), (91, 8974), (104, 9322),

Gene: Starcevich\_14 Start: 8388, Stop: 9324, Start Num: 12

Candidate Starts for Starcevich\_14:

(Start: 12 @8388 has 222 MA's), (Start: 13 @8394 has 66 MA's), (21, 8496), (28, 8526), (38, 8622), (42, 8646), (57, 8715), (61, 8733), (64, 8751), (65, 8754), (67, 8760), (70, 8775), (71, 8778), (73, 8823), (83, 8901), (91, 8973), (97, 9120), (104, 9321),

Gene: Stark\_22 Start: 12231, Stop: 13102, Start Num: 12

Candidate Starts for Stark\_22:

(Start: 7 @12159 has 17 MA's), (Start: 12 @12231 has 222 MA's), (30, 12375), (42, 12468), (48, 12492), (50, 12504), (53, 12528), (60, 12546), (63, 12570), (86, 12729), (96, 12882), (99, 12903), (100, 12948), (101, 12969), (102, 12984), (104, 13095),

Gene: StellaBean\_21 Start: 12397, Stop: 13340, Start Num: 7

Candidate Starts for StellaBean\_21:

(Start: 7 @12397 has 17 MA's), (Start: 12 @12469 has 222 MA's), (30, 12613), (42, 12706), (48, 12730), (50, 12742), (53, 12766), (60, 12784), (63, 12808), (86, 12967), (96, 13120), (99, 13141), (100, 13186), (101, 13207), (102, 13222), (104, 13333),

Gene: StolenFromERC\_23 Start: 12463, Stop: 13334, Start Num: 12

Candidate Starts for StolenFromERC\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: Strokeseat\_13 Start: 8534, Stop: 9470, Start Num: 12

Candidate Starts for Strokeseat\_13:

(Start: 12 @8534 has 222 MA's), (Start: 13 @8540 has 66 MA's), (21, 8642), (28, 8672), (38, 8768), (42, 8792), (57, 8861), (61, 8879), (64, 8897), (65, 8900), (67, 8906), (70, 8921), (71, 8924), (73, 8969), (83, 9047), (91, 9119), (104, 9467),

Gene: SuperGrey\_13 Start: 8545, Stop: 9481, Start Num: 13

Candidate Starts for SuperGrey\_13:

(8, 8518), (Start: 13 @8545 has 66 MA's), (21, 8653), (26, 8677), (28, 8683), (42, 8803), (51, 8836), (57, 8872), (61, 8890), (64, 8908), (67, 8917), (70, 8932), (71, 8935), (73, 8980), (83, 9058), (84, 9064), (91, 9130), (97, 9277), (104, 9478),

Gene: SwagPigglett\_13 Start: 8538, Stop: 9474, Start Num: 12

Candidate Starts for SwagPigglett\_13:

(Start: 4 @8445 has 6 MA's), (Start: 12 @8538 has 222 MA's), (Start: 13 @8544 has 66 MA's), (21, 8646), (28, 8676), (38, 8772), (42, 8796), (44, 8799), (45, 8802), (57, 8865), (61, 8883), (64, 8901), (67, 8910), (73, 8973), (83, 9051), (91, 9123), (104, 9471),

Gene: TBrady12\_23 Start: 12460, Stop: 13331, Start Num: 12

Candidate Starts for TBrady12\_23:

(Start: 7 @12388 has 17 MA's), (Start: 12 @12460 has 222 MA's), (30, 12604), (42, 12697), (48, 12721), (50, 12733), (53, 12757), (60, 12775), (63, 12799), (78, 12877), (86, 12958), (96, 13111), (99, 13132), (100, 13177), (101, 13198), (102, 13213), (104, 13324),

Gene: TChen\_14 Start: 8979, Stop: 9921, Start Num: 12

Candidate Starts for TChen\_14:

(Start: 12 @8979 has 222 MA's), (16, 9051), (19, 9072), (20, 9075), (22, 9096), (28, 9123), (34, 9159), (51, 9276), (58, 9327), (73, 9435), (80, 9468), (83, 9513), (84, 9519), (91, 9585),

Gene: TDanisky\_13 Start: 8561, Stop: 9497, Start Num: 12

Candidate Starts for TDanisky\_13:

(Start: 12 @8561 has 222 MA's), (Start: 13 @8567 has 66 MA's), (21, 8669), (28, 8699), (42, 8819), (57, 8888), (61, 8906), (64, 8924), (67, 8933), (70, 8948), (71, 8951), (73, 8996), (83, 9074), (91, 9146), (104, 9494),

Gene: Taj\_13 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for Taj\_13:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (65, 8943), (67, 8949), (70, 8964), (71, 8967), (73, 9012), (83, 9090), (84, 9096), (91, 9162), (97, 9309), (104, 9510),

Gene: Tapioca\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Tapioca\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Tarkin\_23 Start: 13459, Stop: 14330, Start Num: 12

Candidate Starts for Tarkin\_23:

(Start: 7 @13387 has 17 MA's), (Start: 12 @13459 has 222 MA's), (30, 13603), (42, 13696), (48, 13720), (50, 13732), (53, 13756), (60, 13774), (63, 13798), (86, 13957), (96, 14110), (99, 14131), (100, 14176), (101, 14197), (102, 14212), (104, 14323),

Gene: TeardropMSU\_20 Start: 12377, Stop: 13248, Start Num: 12

Candidate Starts for TeardropMSU\_20:

(Start: 7 @12305 has 17 MA's), (Start: 12 @12377 has 222 MA's), (30, 12521), (42, 12614), (48, 12638), (50, 12650), (53, 12674), (60, 12692), (63, 12716), (86, 12875), (96, 13028), (99, 13049), (100, 13094), (101, 13115), (102, 13130), (104, 13241),

Gene: Teaspoon\_21 Start: 11841, Stop: 12787, Start Num: 7

Candidate Starts for Teaspoon\_21:

(Start: 7 @11841 has 17 MA's), (Start: 12 @11913 has 222 MA's), (30, 12057), (42, 12150), (48, 12174), (50, 12186), (53, 12210), (60, 12228), (63, 12252), (86, 12411), (96, 12564), (99, 12585), (100, 12630), (101, 12651), (102, 12666), (104, 12777),

Gene: TelAviv\_50 Start: 25744, Stop: 26695, Start Num: 9

Candidate Starts for TelAviv\_50:

(Start: 9 @25744 has 15 MA's), (Start: 10 @25756 has 3 MA's), (16, 25828), (22, 25873), (23, 25876), (28, 25900), (31, 25918), (35, 25948), (43, 26026), (44, 26029), (56, 26086), (61, 26110), (73, 26185), (84, 26269), (91, 26335), (93, 26431),

Gene: Terminus\_21 Start: 12560, Stop: 13431, Start Num: 12

Candidate Starts for Terminus\_21:

(Start: 7 @12488 has 17 MA's), (Start: 12 @12560 has 222 MA's), (30, 12704), (42, 12797), (48, 12821), (50, 12833), (53, 12857), (60, 12875), (63, 12899), (86, 13058), (96, 13211), (99, 13232), (100, 13277), (101, 13298), (102, 13313), (104, 13424),

Gene: ThetaBob\_14 Start: 8862, Stop: 9804, Start Num: 12

Candidate Starts for ThetaBob\_14:

(Start: 12 @8862 has 222 MA's), (16, 8934), (19, 8955), (20, 8958), (22, 8979), (28, 9006), (34, 9042), (51, 9159), (58, 9210), (73, 9318), (80, 9351), (83, 9396), (84, 9402), (91, 9468),

Gene: Thresher\_22 Start: 13221, Stop: 14092, Start Num: 12

Candidate Starts for Thresher\_22:

(Start: 7 @13149 has 17 MA's), (Start: 12 @13221 has 222 MA's), (30, 13365), (42, 13458), (48, 13482), (50, 13494), (53, 13518), (60, 13536), (63, 13560), (86, 13719), (96, 13872), (99, 13893), (100, 13938), (101, 13959), (102, 13974), (104, 14085),

Gene: Tomaszewski\_20 Start: 12070, Stop: 12941, Start Num: 12

Candidate Starts for Tomaszewski\_20:

(Start: 7 @11998 has 17 MA's), (Start: 12 @12070 has 222 MA's), (30, 12214), (42, 12307), (48, 12331), (50, 12343), (53, 12367), (60, 12385), (63, 12409), (86, 12568), (96, 12721), (99, 12742), (100, 12787), (101, 12808), (102, 12823), (104, 12934),

Gene: TootsiePop\_14 Start: 8399, Stop: 9335, Start Num: 12

Candidate Starts for TootsiePop\_14:

(Start: 12 @8399 has 222 MA's), (Start: 13 @8405 has 66 MA's), (21, 8507), (26, 8531), (28, 8537), (42, 8657), (51, 8690), (57, 8726), (61, 8744), (64, 8762), (65, 8765), (67, 8771), (70, 8786), (71, 8789), (73, 8834), (83, 8912), (91, 8984), (97, 9131), (104, 9332),

Gene: Tootsieroll\_14 Start: 8389, Stop: 9325, Start Num: 12

Candidate Starts for Tootsieroll\_14:

(Start: 4 @8296 has 6 MA's), (Start: 12 @8389 has 222 MA's), (Start: 13 @8395 has 66 MA's), (21, 8497), (26, 8521), (28, 8527), (38, 8623), (42, 8647), (44, 8650), (45, 8653), (51, 8680), (57, 8716), (61, 8734), (64, 8752), (67, 8761), (73, 8824), (83, 8902), (91, 8974), (104, 9322),

Gene: Totinger\_14 Start: 8386, Stop: 9322, Start Num: 12

Candidate Starts for Totinger\_14:

(Start: 12 @8386 has 222 MA's), (Start: 13 @8392 has 66 MA's), (21, 8494), (28, 8524), (38, 8620), (42, 8644), (57, 8713), (61, 8731), (64, 8749), (65, 8752), (67, 8758), (70, 8773), (71, 8776), (73, 8821), (83, 8899), (91, 8971), (97, 9118), (104, 9319),

Gene: Traaww1\_18 Start: 12115, Stop: 12986, Start Num: 12

Candidate Starts for Traaww1\_18:

(Start: 7 @12043 has 17 MA's), (Start: 12 @12115 has 222 MA's), (30, 12259), (42, 12352), (48, 12376), (50, 12388), (53, 12412), (60, 12430), (63, 12454), (86, 12613), (96, 12766), (99, 12787), (100, 12832), (101, 12853), (102, 12868), (104, 12979),

Gene: Tuco\_21 Start: 12469, Stop: 13343, Start Num: 12

Candidate Starts for Tuco\_21:

(Start: 7 @12397 has 17 MA's), (Start: 12 @12469 has 222 MA's), (30, 12613), (42, 12706), (48, 12730), (50, 12742), (53, 12766), (60, 12784), (63, 12808), (86, 12967), (96, 13120), (99, 13141), (100, 13186), (101, 13207), (102, 13222), (104, 13333),

Gene: Tweety\_12 Start: 8579, Stop: 9515, Start Num: 13

Candidate Starts for Tweety\_12:

(8, 8552), (Start: 13 @8579 has 66 MA's), (21, 8687), (28, 8717), (42, 8837), (51, 8870), (57, 8906), (61, 8924), (64, 8942), (65, 8945), (67, 8951), (70, 8966), (71, 8969), (73, 9014), (83, 9092), (84, 9098), (91, 9164), (97, 9311), (104, 9512),

Gene: UncleRicky\_14 Start: 8390, Stop: 9326, Start Num: 12



Candidate Starts for UncleRicky\_14:

(Start: 4 @8297 has 6 MA's), (Start: 12 @8390 has 222 MA's), (Start: 13 @8396 has 66 MA's), (21, 8498), (28, 8528), (42, 8648), (57, 8717), (61, 8735), (64, 8753), (67, 8762), (73, 8825), (83, 8903), (84, 8909), (91, 8975), (104, 9323),

Gene: VRedHorse\_13 Start: 8534, Stop: 9470, Start Num: 12

Candidate Starts for VRedHorse\_13:

(Start: 12 @8534 has 222 MA's), (Start: 13 @8540 has 66 MA's), (21, 8642), (28, 8672), (38, 8768), (42, 8792), (57, 8861), (61, 8879), (64, 8897), (65, 8900), (67, 8906), (70, 8921), (71, 8924), (73, 8969), (83, 9047), (91, 9119), (104, 9467),

Gene: Vagabond\_53 Start: 25577, Stop: 26528, Start Num: 9

Candidate Starts for Vagabond\_53:

(Start: 9 @25577 has 15 MA's), (Start: 10 @25589 has 3 MA's), (16, 25661), (22, 25706), (23, 25709), (28, 25733), (31, 25751), (35, 25781), (43, 25859), (44, 25862), (56, 25919), (61, 25943), (73, 26018), (84, 26102), (91, 26168), (93, 26264),

Gene: Velveteen\_14 Start: 8383, Stop: 9319, Start Num: 12

Candidate Starts for Velveteen\_14:

(Start: 12 @8383 has 222 MA's), (Start: 13 @8389 has 66 MA's), (21, 8491), (28, 8521), (38, 8617), (42, 8641), (57, 8710), (61, 8728), (64, 8746), (65, 8749), (67, 8755), (70, 8770), (71, 8773), (73, 8818), (83, 8896), (91, 8968), (104, 9316),

Gene: Veteran\_13 Start: 8572, Stop: 9508, Start Num: 13

Candidate Starts for Veteran\_13:

(8, 8545), (Start: 13 @8572 has 66 MA's), (21, 8680), (28, 8710), (42, 8830), (51, 8863), (57, 8899), (61, 8917), (64, 8935), (65, 8938), (67, 8944), (70, 8959), (71, 8962), (73, 9007), (83, 9085), (84, 9091), (91, 9157), (97, 9304), (104, 9505),

Gene: Vorrps\_51 Start: 25336, Stop: 26287, Start Num: 9

Candidate Starts for Vorrps\_51:

(Start: 9 @25336 has 15 MA's), (Start: 10 @25348 has 3 MA's), (16, 25420), (22, 25465), (23, 25468), (28, 25492), (31, 25510), (35, 25540), (43, 25618), (44, 25621), (56, 25678), (61, 25702), (73, 25777), (84, 25861), (91, 25927), (93, 26023),

Gene: Wachhund\_13 Start: 8532, Stop: 9468, Start Num: 12

Candidate Starts for Wachhund\_13:

(Start: 12 @8532 has 222 MA's), (Start: 13 @8538 has 66 MA's), (21, 8640), (28, 8670), (42, 8790), (51, 8823), (61, 8877), (64, 8895), (67, 8904), (73, 8967), (83, 9045), (84, 9051), (91, 9117), (97, 9264), (104, 9465),

Gene: Wee\_12 Start: 8576, Stop: 9512, Start Num: 13

Candidate Starts for Wee\_12:

(8, 8549), (Start: 13 @8576 has 66 MA's), (21, 8684), (28, 8714), (42, 8834), (51, 8867), (57, 8903), (61, 8921), (64, 8939), (65, 8942), (67, 8948), (70, 8963), (71, 8966), (73, 9011), (83, 9089), (84, 9095), (91, 9161), (97, 9308), (104, 9509),

Gene: Whatsapiecost\_13 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for Whatsapiecost\_13:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (65, 8943), (67, 8949), (70, 8964), (71, 8967), (73, 9012), (83, 9090), (84, 9096), (91, 9162), (97, 9309), (104, 9510),

Gene: Whouxphf\_13 Start: 8526, Stop: 9462, Start Num: 12

Candidate Starts for Whouxphf\_13:

(Start: 12 @8526 has 222 MA's), (Start: 13 @8532 has 66 MA's), (21, 8634), (28, 8664), (42, 8784), (44, 8787), (45, 8790), (51, 8817), (57, 8853), (61, 8871), (64, 8889), (67, 8898), (70, 8913), (71, 8916), (73, 8961), (83, 9039), (84, 9045), (91, 9111), (97, 9258), (104, 9459),

Gene: Wiggin\_23 Start: 12463, Stop: 13337, Start Num: 12

Candidate Starts for Wiggin\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: WillSterrel\_13 Start: 8563, Stop: 9499, Start Num: 13

Candidate Starts for WillSterrel\_13:

(8, 8536), (Start: 13 @8563 has 66 MA's), (21, 8671), (28, 8701), (42, 8821), (51, 8854), (57, 8890), (61, 8908), (64, 8926), (67, 8935), (73, 8998), (83, 9076), (91, 9148), (104, 9496),

Gene: Willez\_20 Start: 11977, Stop: 12848, Start Num: 12

Candidate Starts for Willez\_20:

(Start: 7 @11905 has 17 MA's), (Start: 12 @11977 has 222 MA's), (30, 12121), (42, 12214), (48, 12238), (50, 12250), (53, 12274), (60, 12292), (63, 12316), (86, 12475), (96, 12628), (99, 12649), (100, 12694), (101, 12715), (102, 12730), (104, 12841),

Gene: Winget\_54 Start: 26016, Stop: 26967, Start Num: 9

Candidate Starts for Winget\_54:

(Start: 9 @26016 has 15 MA's), (Start: 10 @26028 has 3 MA's), (16, 26100), (22, 26145), (23, 26148), (28, 26172), (31, 26190), (35, 26220), (43, 26298), (44, 26301), (56, 26358), (61, 26382), (73, 26457), (84, 26541), (91, 26607), (93, 26703),

Gene: XFactor\_13 Start: 8577, Stop: 9513, Start Num: 13

Candidate Starts for XFactor\_13:

(8, 8550), (Start: 13 @8577 has 66 MA's), (21, 8685), (28, 8715), (42, 8835), (51, 8868), (57, 8904), (61, 8922), (64, 8940), (67, 8949), (70, 8964), (71, 8967), (73, 9012), (83, 9090), (84, 9096), (91, 9162), (97, 9309), (104, 9510),

Gene: Xandras\_23 Start: 12463, Stop: 13334, Start Num: 12

Candidate Starts for Xandras\_23:

(Start: 7 @12391 has 17 MA's), (Start: 12 @12463 has 222 MA's), (30, 12607), (42, 12700), (48, 12724), (50, 12736), (53, 12760), (60, 12778), (63, 12802), (86, 12961), (96, 13114), (99, 13135), (100, 13180), (101, 13201), (102, 13216), (104, 13327),

Gene: Xeno\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Xeno\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (38, 9255), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Xerxes\_15 Start: 9036, Stop: 9942, Start Num: 15

Candidate Starts for Xerxes\_15:

(Start: 15 @9036 has 42 MA's), (25, 9144), (35, 9207), (49, 9312), (61, 9375), (62, 9381), (64, 9393), (65, 9396), (81, 9486), (89, 9588), (94, 9702), (98, 9759),

Gene: Xula\_14 Start: 9411, Stop: 10404, Start Num: 12

Candidate Starts for Xula\_14:

(1, 9222), (Start: 12 @9411 has 222 MA's), (17, 9495), (30, 9558), (32, 9570), (33, 9576), (41, 9663), (52, 9714), (55, 9732), (72, 9822), (76, 9852), (77, 9855), (84, 9918), (85, 9921), (90, 9984), (91, 9987), (105, 10401),

Gene: YassJohnny\_21 Start: 12469, Stop: 13343, Start Num: 12

Candidate Starts for YassJohnny\_21:

(Start: 7 @12397 has 17 MA's), (Start: 12 @12469 has 222 MA's), (30, 12613), (42, 12706), (48, 12730), (50, 12742), (53, 12766), (60, 12784), (63, 12808), (86, 12967), (96, 13120), (99, 13141), (100, 13186), (101, 13207), (102, 13222), (104, 13333),

Gene: Yorick\_13 Start: 8536, Stop: 9472, Start Num: 12

Candidate Starts for Yorick\_13:

(Start: 4 @8443 has 6 MA's), (Start: 12 @8536 has 222 MA's), (Start: 13 @8542 has 66 MA's), (21, 8644), (28, 8674), (38, 8770), (42, 8794), (44, 8797), (45, 8800), (57, 8863), (61, 8881), (64, 8899), (67, 8908), (73, 8971), (83, 9049), (91, 9121), (104, 9469),

Gene: Youngblood\_21 Start: 12641, Stop: 13512, Start Num: 12

Candidate Starts for Youngblood\_21:

(Start: 7 @12569 has 17 MA's), (Start: 12 @12641 has 222 MA's), (30, 12785), (42, 12878), (48, 12902), (50, 12914), (53, 12938), (60, 12956), (63, 12980), (86, 13139), (96, 13292), (99, 13313), (100, 13358), (101, 13379), (102, 13394), (104, 13505),

Gene: YungJamal\_56 Start: 26055, Stop: 27006, Start Num: 9

Candidate Starts for YungJamal\_56:

(Start: 9 @26055 has 15 MA's), (Start: 10 @26067 has 3 MA's), (16, 26139), (22, 26184), (23, 26187), (28, 26211), (31, 26229), (35, 26259), (43, 26337), (44, 26340), (56, 26397), (61, 26421), (73, 26496), (84, 26580), (91, 26646), (93, 26742),

Gene: Zakhe101\_53 Start: 25875, Stop: 26826, Start Num: 9

Candidate Starts for Zakhe101\_53:

(Start: 9 @25875 has 15 MA's), (Start: 10 @25887 has 3 MA's), (16, 25959), (22, 26004), (23, 26007), (28, 26031), (31, 26049), (35, 26079), (43, 26157), (44, 26160), (56, 26217), (61, 26241), (73, 26316), (84, 26400), (91, 26466), (93, 26562),

Gene: Zerg\_13 Start: 8538, Stop: 9474, Start Num: 12

Candidate Starts for Zerg\_13:

(5, 8451), (Start: 12 @8538 has 222 MA's), (Start: 13 @8544 has 66 MA's), (21, 8646), (26, 8670), (28, 8676), (38, 8772), (42, 8796), (57, 8865), (61, 8883), (64, 8901), (67, 8910), (70, 8925), (71, 8928), (73, 8973), (83, 9051), (91, 9123), (104, 9471),

Gene: Zizzle\_13 Start: 8540, Stop: 9476, Start Num: 12

Candidate Starts for Zizzle\_13:

(Start: 4 @8447 has 6 MA's), (Start: 12 @8540 has 222 MA's), (Start: 13 @8546 has 66 MA's), (21, 8648), (28, 8678), (38, 8774), (42, 8798), (44, 8801), (45, 8804), (57, 8867), (61, 8885), (64, 8903), (67, 8912), (73, 8975), (83, 9053), (91, 9125), (104, 9473),

Gene: xkcd\_21 Start: 12129, Stop: 13003, Start Num: 12

Candidate Starts for xkcd\_21:

(Start: 7 @12057 has 17 MA's), (Start: 12 @12129 has 222 MA's), (30, 12273), (42, 12366), (48, 12390), (50, 12402), (53, 12426), (60, 12444), (63, 12468), (86, 12627), (96, 12780), (99, 12801), (100, 12846), (101, 12867), (102, 12882), (104, 12993),