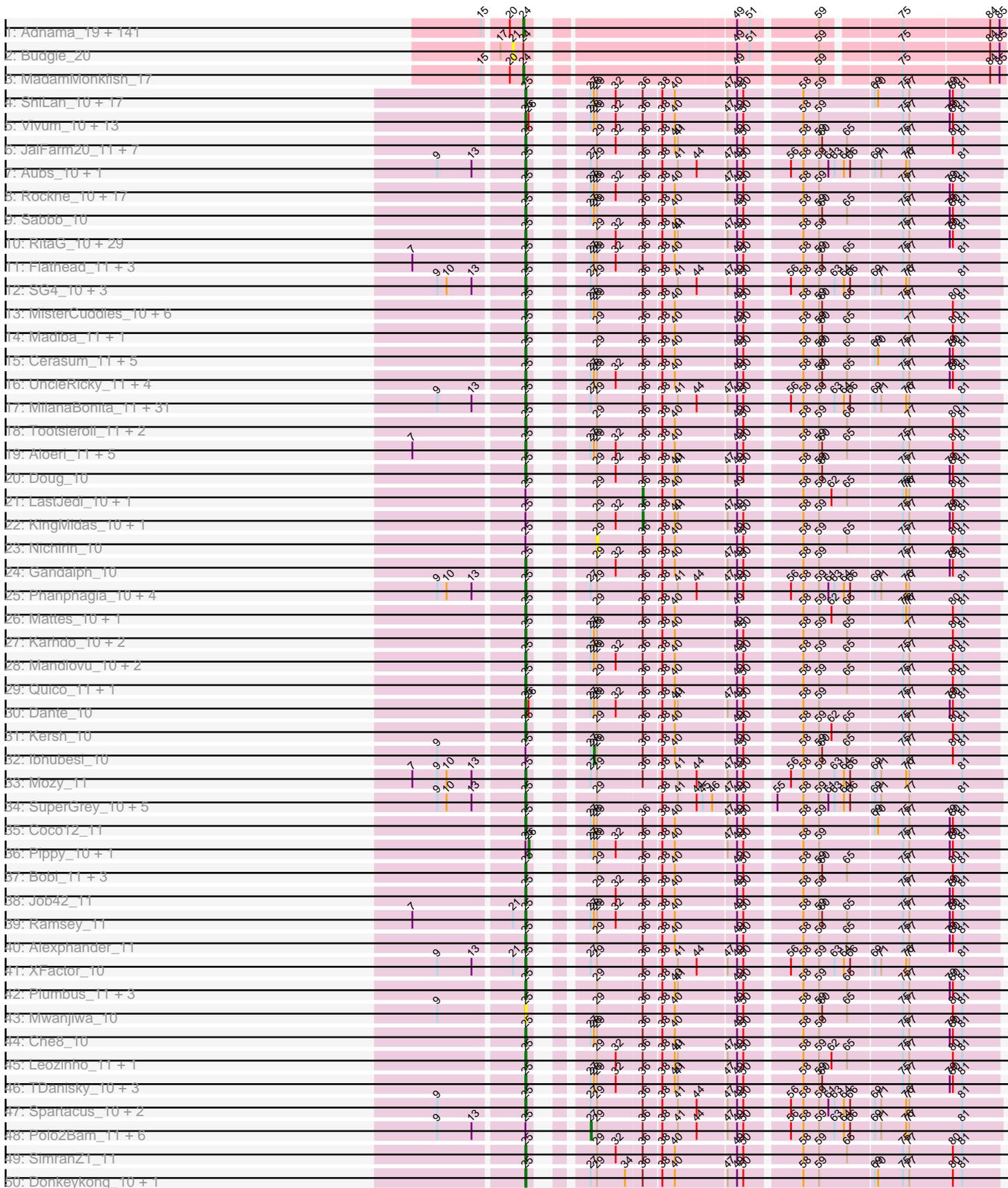


Pham 290689







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 290689 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290689 has 559 members, 60 are drafts.

Phages represented in each track:

- Track 1 : Adnama\_19, Palpatine\_17, Pat3\_17, IHOP\_17, Elite2014\_16, Hopey\_18, ShereKhan\_19, Easy2Say\_18, Quallification\_19, Filch\_18, Balomoji\_17, Dusk\_17, Mindy\_18, Hoonter\_19, FireRed\_17, Icee\_17, FairyPath\_18, BaboJay\_17, Czystczon1\_18, NelitzaMV\_18, Eureka\_18, Bask21\_17, Goldilocks\_19, Buck\_17, NonchalantPear\_17, Greep\_18, Contagion\_17, StolenFromERC\_19, Murphy\_17, Brewer\_17, Barbarian\_17, Traaww1\_16, Lilac\_19, Flypotenuse\_16, Ptowny\_17, Phaux\_16, Amao\_18, DoctorDiddles\_18, BigBubba\_17, Bruin\_17, Willez\_17, Terminus\_17, AmericanBeauty\_19, Bench\_19, Gator\_16, Command613\_19, CrystalP\_18, Cjw1\_17, Misfit\_17, Marshmallow\_18, ShamWow\_18, Goku\_18, ChosenOne\_16, Cookies\_18, Teaspoon\_17, Miniwave\_18, Pumpkin\_18, Highbury\_18, Henry\_18, ABCat\_17, Wiggin\_19, Xandras\_19, Elph10\_18, DrDrey\_18, Paperbeatsrock\_19, Murica\_16, Policronamos\_17, OrionPax\_18, Inca\_17, StormChicken\_18, PaddyBaddy\_18, Gemini\_19, Mosby\_17, Porky\_16, NoSleep\_18, Gage\_19, HuffyPuff\_16, Nala\_17, BugsBunny\_15, Petra64142\_18, Lilpickle\_16, Toto\_18, Lilizi\_19, MPhalcon\_17, StellaBean\_18, Pharsalus\_18, Maxxinista\_18, Tomaszewski\_17, Stark\_18, Harella\_16, TBrady12\_19, GoldenSpark\_19, Moldemort\_18, Rimmer\_17, Kostya\_18, Kanye\_19, TeardropMSU\_17, Emmina\_17, Sassay\_17, ChotaBhai\_17, Bogg\_18, MollyToe\_18, Argent26\_19, Glexan\_16, FoghornLeghorn\_17, Thresher\_18, HanKaySha\_18, MISSy\_17, Stank\_19, RiverMonster\_17, Rakim\_19, Tarkin\_19, 244\_18, Manda\_18, Myrale\_18, Ukulele\_17, Becksu\_17, YassJohnny\_18, SophKB\_18, Simpliphy\_18, Cactus\_19, Thimble\_18, Phaja\_17, Daikon\_16, GooberAzure\_19, Nimrod\_17, Sotrice96\_18, Youngblood\_17, Phrux\_17, BilboSwaggins\_18, xkcd\_18, SirDuracell\_17, Asriel\_17, PhatBacter\_17, Tuco\_18, Dumbo\_17, Holt\_19, TeamEdward\_18, Kimchi\_19, JeTaime\_19, BadStone\_17, Saints25\_18
- Track 2 : Budgie\_20
- Track 3 : MadamMonkfish\_17
- Track 4 : ShiLan\_10, Nitzel\_11, Nivrat\_10, Crumble\_10, Burwell21\_10, OlympiaSaint\_10, SwagPigglett\_10, Philus\_10, MulchSalad\_10, RockyHorror\_11, Jarcob\_10, Yorick\_10, Martik\_10, Zizzle\_10, Cheesepuff\_10, Fastidio\_10, Lizziana\_10, Mantra\_10
- Track 5 : Vivum\_10, Clifton\_10, ByChance\_10, Minnie\_10, NormanBulbieJr\_10, Gorge\_10, Priscilla\_10, Cabrinians\_10, Sandalphon\_10, Eradicator\_10, Brocalys\_10, Saal\_10, Jennelsea\_10, Koella\_10
- Track 6 : JalFarm20\_11, OfUltron\_10, Jinglebell\_10, Llama\_10, Modragons\_10, Seabastian\_10, AlpineSix\_10, Ochi17\_10
- Track 7 : Aubs\_10, IMpilo\_10

- Track 8 : Rockne\_10, Totinger\_11, Zerg\_10, VRedHorse\_10, Llij\_10, Moonbeam\_10, PMC\_10, Rialto\_11, Lucia\_11, Emmaloid\_11, Tchotchke\_11, GigiOuiOui\_10, Slim\_11, Awesomesauce\_11, EmiMonkey\_10, Phatniss\_10, PhilipPhlop\_10, Piper2020\_11
- Track 9 : Sabbb\_10
- Track 10 : RitaG\_10, BlueCrab\_10, Polka14\_10, LittleShirley\_11, OwlsT2W\_11, RedBird\_10, Daenerys\_10, Mova\_11, IbOuu\_10, Boomer\_11, Nimbo\_10, Blexus\_10, Pacc40\_10, Starcevich\_11, Geralt\_10, JoeyJr\_10, DosHalletts\_11, Inventum\_10, Empress\_10, Poenanya\_10, Pollywog\_11, Dorothy\_10, Leperchaun\_10, OldBen\_10, Deb65\_10, DaddyRickover\_10, Doomphist\_10, Scottish\_10, Sassafras\_10, PHappiness\_10
- Track 11 : Flathead\_11, Doomslug\_12, Brushbloom\_11, Hegedechwinu\_11
- Track 12 : SG4\_10, Chuckly\_10, EleanorGeorge\_10, Topiatin\_12
- Track 13 : MisterCuddles\_10, Hades\_10, Whouxphf\_10, Girr\_10, Spoonbill\_10, Phasih\_10, Ruby\_10
- Track 14 : Madiba\_11, Grimmer\_11
- Track 15 : Cerasum\_11, Velveteen\_11, BigPhil\_11, Brookers\_11, Sarma624\_11, Kingsley\_11
- Track 16 : UncleRicky\_11, Lorde\_11, Enby\_11, DirtMcgirt\_11, Drago\_11
- Track 17 : MilanaBonita\_11, StAnnes\_10, Firehouse51\_10, PatoPoderoso\_10, NewHope4\_10, MinionDave\_11, Taj\_10, PhesterPhotato\_10, ShroomBoi\_10, DLane\_10, LunaBlu\_10, Royals2015\_10, Phalconet\_10, KristaRAM\_11, Jant\_10, Ovechkin\_10, MilleniumForce\_11, SiSi\_10, Batiatus\_10, Whatsapiecost\_10, QuickMath\_10, Emma\_10, KingJulian\_10, DeadP\_10, Tweety\_10, Galactic\_10, Corium\_10, Hamulus\_10, Ardmore\_10, SeaLumen\_10, Wee\_10, Akhila\_11
- Track 18 : Tootsieroll\_11, Radiance\_10, Stap\_11
- Track 19 : Aloeri\_11, TootsiePop\_11, ChickenDinner\_11, DocMcStuffins\_11, Misha28\_11, Squirty\_11
- Track 20 : Doug\_10
- Track 21 : LastJedi\_10, James\_10
- Track 22 : KingMidas\_10, Peridot\_12
- Track 23 : Nichirin\_10
- Track 24 : Gandalph\_10
- Track 25 : Phanphagia\_10, Shauna1\_10, DotProduct\_10, Guppsters\_10, Cornucopia\_11
- Track 26 : Mattes\_10, BobaPhett\_10
- Track 27 : Karhdo\_10, GUmbie\_10, Veteran\_10
- Track 28 : Mandlovu\_10, Strokeseat\_10, Hlubikazi\_10
- Track 29 : Quico\_11, Girafales\_11
- Track 30 : Dante\_10
- Track 31 : Kersh\_10
- Track 32 : Ibhubesi\_10
- Track 33 : Mozy\_11
- Track 34 : SuperGrey\_10, DoRead\_10, Clank\_10, Bipolar\_10, Rita\_10, Kenuha5\_10
- Track 35 : Coco12\_11
- Track 36 : Pippy\_10, FreddyB\_10
- Track 37 : Bobi\_11, Fancypants\_10, Seagreen\_11, Latretium\_10
- Track 38 : Job42\_11
- Track 39 : Ramsey\_11
- Track 40 : Alexphander\_11
- Track 41 : XFactor\_10
- Track 42 : Plumbus\_11, DaWorst\_11, Kimberlium\_11, Juice456\_11
- Track 43 : Mwanjiwa\_10

- Track 44 : Che8\_10
- Track 45 : Leozinho\_11, Spikelee\_11
- Track 46 : TDanisky\_10, DRBy19\_10, MadMen\_10, Sparkdehlily\_10
- Track 47 : Spartacus\_10, WillSterrel\_10, IrishSherpFalk\_10
- Track 48 : Polo2Bam\_11, Krakatau\_11, Enzomatic\_11, DillTech15\_10, Medindi\_10, Fruitloop\_10, CaptainTrips\_11
- Track 49 : SimranZ1\_11
- Track 50 : Donkeykong\_10, LordVader\_12
- Track 51 : ShowerHandel\_10
- Track 52 : Bubbles123\_10
- Track 53 : Wachhund\_10
- Track 54 : ArcusAngelus\_10, Chevrolet\_10
- Track 55 : Oksu\_11
- Track 56 : Mahavrat\_10
- Track 57 : Ms6\_10, Melissauren88\_10, Filuzino\_10
- Track 58 : Eish\_10, Harley\_10
- Track 59 : SassyB\_10, PopTart\_10
- Track 60 : BuzzLyseyear\_11
- Track 61 : Ogopogo\_13
- Track 62 : Maravista\_10, LilMoolah\_10
- Track 63 : Juniper1\_10
- Track 64 : Violac\_10
- Track 65 : Beakin\_11
- Track 66 : Byougenkin\_10
- Track 67 : BodEinwohner17\_10
- Track 68 : MulchExplorer\_12
- Track 69 : Florinda\_10
- Track 70 : Estave1\_10
- Track 71 : Mutaforma13\_10
- Track 72 : Frankie\_11
- Track 73 : Marker\_11
- Track 74 : LunaStella\_11, TChen\_11
- Track 75 : ThetaBob\_11
- Track 76 : Renaud18\_11
- Track 77 : Cornie\_11
- Track 78 : Toron\_11
- Track 79 : Babsiella\_12, PaintedDog\_11, QueenHazel\_12, Bluvara\_12, Xula\_11, HC\_12
- Track 80 : Brujita\_12, Island3\_12
- Track 81 : Sbash\_11
- Track 82 : Che9c\_11, Stuck\_11
- Track 83 : Kevin1\_12
- Track 84 : Andies\_12, Aggie\_12, Bosection6\_12, Fulbright\_12, Journey\_12, Scitech\_12, Gex\_12, Schnauzer\_12, Carcharodon\_12, Silvy\_12, Charlie\_12, Duplicity\_12, EGUnicorn\_12, Magsby\_12, Melville\_12, Parmesanjohn\_12, Smurph\_12, Silvafighter\_12, Xerxes\_12, Tortoise12\_12, Pipsqueaks\_12, Philonius\_12, Cubone\_11, Xeno\_12, Phloss\_12, Tessdabest\_11, Tapioca\_12, Chewbacca\_12
- Track 85 : MichelleMyBell\_12, Butters\_12
- Track 86 : Spinach\_12, Rebel\_12, Raymond7\_12, Redi\_12, Panchino\_12, PhancyPhin\_12, Shweta\_12, ShrimpFriedEgg\_12, Snekmaggedon\_12, Phrann\_12, Nenae\_12, Jamie19\_12, Purgamenstris\_12, Hanako\_12, SkinnyPete\_12, Impisi\_12, BabeRuth\_12, SpongeBob\_12

- Track 87 : Rubeelu\_12
- Track 88 : Dylan\_45, Zakhe101\_46, Ashwin\_47, Familton\_47, Winget\_47, Blessica\_47, Bora\_43, Zebo\_46, Wildflower\_46, Wogge42\_45, JangDynasty\_46, Imara\_44, SchoolBus\_46, TelAviv\_43
- Track 89 : Smooch\_48, Firecracker\_46, MadKillah\_47, Murai\_46, Schuy\_47, Krili\_45, NiebruSaylor\_45, Mori\_45, Shida\_46, Vorrps\_45
- Track 90 : Alkhayr\_46, FoulBall\_46, YoyoKar\_44, Vagabond\_46, Catdawg\_46, KingPhillip3\_45, Idergollasper\_46
- Track 91 : YungJamal\_49
- Track 92 : Ryadel\_50
- Track 93 : Corndog\_48
- Track 94 : Chubbello\_13, Fishburne\_13, Etoile\_13, Zilizebeth\_13, Necropolis\_13, Bartholomew\_13, Dynamo\_13, Venti\_13, FirstPlacePfu\_13, GreaseLightnin\_13, Phineas\_13, StevieRay\_13, Kari\_13, HUHilltop\_13, BronnyJr\_13, Vidya\_13
- Track 95 : Techage\_13, Donovan\_13, Arib1\_13, Jebeks\_13, Sonah\_13, GaloreK\_13, Phegasus\_13, Mangethe\_13, Majeke\_13
- Track 96 : Langerak\_13
- Track 97 : Bhagsy\_13, PeanutPie\_13, CactusJack\_13, Atcoo\_13, Gavriela\_13, Brusacoram\_13, KilKor\_13, Phalm\_13, Bunnies\_13, Willsammy\_13, Thespis\_13, Glaske\_13, Juniormint\_13, Ksquared\_13, StressBall\_13, Megiddo\_13, Polkaroo\_13
- Track 98 : Bogie\_12, Shipwreck\_12, Pygmy\_12
- Track 99 : Malithi\_13
- Track 100 : Jung\_13
- Track 101 : Tortellini\_12
- Track 102 : Xavia\_13, Camster\_13
- Track 103 : BigNuz\_12, Nazo\_12
- Track 104 : Phayonce\_12
- Track 105 : ThulaThula\_12
- Track 106 : Purky\_12
- Track 107 : MooMoo\_10

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

The start number called the most often in the published annotations is 25, it was called in 221 of the 499 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila\_11, Alexphander\_11, Aloeri\_11, AlpineSix\_10, ArcusAngelus\_10, Ardmore\_10, Aubs\_10, Awesomesauce\_11, Batiatus\_10, Beakin\_11, BigPhil\_11, Bipolar\_10, Blexus\_10, BlueCrab\_10, BobaPhett\_10, Bobi\_11, Boomer\_11, Brocalys\_10, Brookers\_11, Brushbloom\_11, Bubbles123\_10, Burwell21\_10, BuzzLyseyear\_11, ByChance\_10, Byougenkin\_10, Cabrinians\_10, Cerasum\_11, Che8\_10, Cheesepuff\_10, Chevrolet\_10, ChickenDinner\_11, Chuckly\_10, Clank\_10, Clifton\_10, Coco12\_11, Corium\_10, Cornucopia\_11, Crumble\_10, DLane\_10, DRBy19\_10, DaWorst\_11, DaddyRickover\_10, Daenerys\_10, Dante\_10, DeadP\_10, Deb65\_10, DirtMcgirt\_11, DoRead\_10, DocMcStuffins\_11, Donkeykong\_10, Doomphist\_10, Doomslug\_12, Dorothy\_10, DosHalletts\_11, DotProduct\_10, Doug\_10, Drago\_11, Eish\_10, EleanorGeorge\_10, EmiMonkey\_10, Emma\_10, Emmaloid\_11, Empress\_10, Enby\_11, Eradicator\_10, Fancypants\_10, Fastidio\_10, Firehouse51\_10, Flathead\_11, Florinda\_10, Frankie\_11, GUmbe\_10, Galactic\_10,

Gandalph\_10, Geralt\_10, GigiOuiOui\_10, Girafales\_11, Girr\_10, Gorge\_10, Grimmer\_11, Guppsters\_10, Hades\_10, Hamulus\_10, Harley\_10, Hegedechwinu\_11, Hlubikazi\_10, IMpilo\_10, IbOuu\_10, Inventum\_10, IrishSherpFalk\_10, JalFarm20\_11, Jant\_10, Jarcob\_10, Jennelsea\_10, Jinglebell\_10, Job42\_11, JoeyJr\_10, Juice456\_11, Juniper1\_10, Karhdo\_10, Kenuha5\_10, Kersh\_10, Kimberlium\_11, KingJulian\_10, Kingsley\_11, Koella\_10, KristaRAM\_11, Latretium\_10, Leozinho\_11, Leperchaun\_10, LilMoolah\_10, LittleShirley\_11, Lizziana\_10, Llama\_10, Llij\_10, LordVader\_12, Lorde\_11, Lucia\_11, LunaBlu\_10, LunaStella\_11, MadMen\_10, Madiba\_11, Mahavrat\_10, Mandlovu\_10, Mantra\_10, Maravista\_10, Marker\_11, Martik\_10, Mattes\_10, MilanaBonita\_11, MilleniumForce\_11, MinionDave\_11, Minnie\_10, Misha28\_11, MisterCuddles\_10, Modragons\_10, Moonbeam\_10, Mova\_11, Mozy\_11, MulchSalad\_10, Mutaforma13\_10, Mwanjiwa\_10, NewHope4\_10, Nimbo\_10, Nitzel\_11, Nivrat\_10, NormanBulbieJr\_10, Ochi17\_10, OfUltron\_10, OgoPogo\_13, OldBen\_10, OlympiaSaint\_10, Ovechkin\_10, OwlsT2W\_11, PHappiness\_10, PMC\_10, Pacc40\_10, PatoPoderoso\_10, Phalconet\_10, Phanphagia\_10, Phasih\_10, Phatniss\_10, PhesterPhotato\_10, Philus\_10, PhlipPhlop\_10, Piper2020\_11, Plumbus\_11, Poenanya\_10, Polka14\_10, Pollywog\_11, PopTart\_10, Priscilla\_10, QuickMath\_10, Quico\_11, Radiance\_10, Ramsey\_11, RedBird\_10, Renaud18\_11, Rialto\_11, RitaG\_10, Rita\_10, Rockne\_10, RockyHorror\_11, Royals2015\_10, Ruby\_10, SG4\_10, Saal\_10, Sabbb\_10, Sandalphon\_10, Sarma624\_11, Sassafras\_10, SassyB\_10, Scottish\_10, SeaLumen\_10, Seabastian\_10, Seagreen\_11, Shauna1\_10, ShiLan\_10, ShowerHandel\_10, ShroomBoi\_10, SiSi\_10, SimranZ1\_11, Slim\_11, Sparkdehlily\_10, Spartacus\_10, Spikelee\_11, Spoonbill\_10, Squirty\_11, StAnnes\_10, Stap\_11, Starcevich\_11, Strokeseat\_10, SuperGrey\_10, SwagPigglett\_10, TChen\_11, TDanisky\_10, Taj\_10, Tchotchke\_11, ThetaBob\_11, TootsiePop\_11, Tootsieroll\_11, Topiatin\_12, Toron\_11, Totinger\_11, Tweety\_10, UncleRicky\_11, VRedHorse\_10, Velveteen\_11, Veteran\_10, Violac\_10, Vivum\_10, Wachhund\_10, Wee\_10, Whatsapiecost\_10, Whouxphf\_10, WillSterrel\_10, XFactor\_10, Yorick\_10, Zerg\_10, Zizzle\_10,

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

- BodEinwohner17\_10, CaptainTrips\_11, DillTech15\_10, Enzomatic\_11, Estave1\_10, Filuzino\_10, FreddyB\_10, Fruitloop\_10, Ibhubesi\_10, James\_10, KingMidas\_10, Krakatau\_11, LastJedi\_10, Medindi\_10, Melissauren88\_10, Ms6\_10, MulchExplorer\_12, Nichirin\_10, Oksu\_11, Peridot\_12, Pippy\_10, Polo2Bam\_11,

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

- 244\_18, ABCat\_17, Adnama\_19, Aggie\_12, Alkhayr\_46, Amao\_18, AmericanBeauty\_19, Andies\_12, Argent26\_19, Arib1\_13, Ashwin\_47, Asriel\_17, Atcoo\_13, BabeRuth\_12, BaboJay\_17, Babsiella\_12, BadStone\_17, Balomoji\_17, Barbarian\_17, Bartholomew\_13, Bask21\_17, Becksu\_17, Bench\_19, Bhagsy\_13, BigBubba\_17, BigNuz\_12, BilboSwaggins\_18, Blessica\_47, Bluvara\_12, Bogg\_18, Bogie\_12, Bora\_43, Bosection6\_12, Brewer\_17, BronnyJr\_13, Bruin\_17, Brujita\_12, Brusacoram\_13, Buck\_17, Budgie\_20, BugsBunny\_15, Bunnies\_13, Butters\_12, CactusJack\_13, Cactus\_19, Camster\_13, Carcharodon\_12, Catdawg\_46, Charlie\_12, Che9c\_11, Chewbacca\_12, ChosenOne\_16, ChotaBhai\_17, Chubbello\_13, Cjw1\_17, Command613\_19, Contagion\_17, Cookies\_18, Corndog\_48, Cornie\_11, CrystalP\_18, Cubone\_11, Czyszczonek\_18, Daikon\_16, DoctorDiddles\_18, Donovan\_13, DrDrey\_18, Dumbo\_17, Duplicity\_12, Dusk\_17, Dylan\_45, Dynamo\_13, EGUnicorn\_12, Easy2Say\_18, Elite2014\_16, Elph10\_18, Emmina\_17, Etoile\_13, Eureka\_18, FairyPath\_18, Familton\_47, Filch\_18, FireRed\_17, Firecracker\_46, FirstPlacePfu\_13, Fishburne\_13, Flypotenuse\_16, FoghornLeghorn\_17, FoulBall\_46,

Fulbright\_12, Gage\_19, GaloreK\_13, Gator\_16, Gavriela\_13, Gemini\_19, Gex\_12, Glaske\_13, Glexan\_16, Goku\_18, GoldenSpark\_19, Goldilocks\_19, GooberAzure\_19, GreaseLightnin\_13, Greep\_18, HC\_12, HUHilltop\_13, HanKaySha\_18, Hanako\_12, Harella\_16, Henry\_18, Highbury\_18, Holt\_19, Hoonter\_19, Hopey\_18, HufflyPuff\_16, IHOP\_17, Icee\_17, Idergollasper\_46, Imara\_44, Impisi\_12, Inca\_17, Island3\_12, Jamie19\_12, JangDynasty\_46, JeTaime\_19, Jebeks\_13, Journey\_12, Jung\_13, Juniormint\_13, Kanye\_19, Kari\_13, Kevin1\_12, KilKor\_13, Kimchi\_19, KingPhillip3\_45, Kostya\_18, Krili\_45, Ksquared\_13, Langerak\_13, Lilac\_19, Lilizi\_19, Lilpickle\_16, MISSy\_17, MPhalcon\_17, MadKillah\_47, MadamMonkfish\_17, Magsby\_12, Majeke\_13, Malithi\_13, Manda\_18, Mangethe\_13, Marshmallow\_18, Maxxinista\_18, Megiddo\_13, Melville\_12, MichelleMyBell\_12, Mindy\_18, Miniwave\_18, Misfit\_17, Moldemort\_18, MollyToe\_18, MooMoo\_10, Mori\_45, Mosby\_17, Murai\_46, Murica\_16, Murphy\_17, Myrale\_18, Nala\_17, Nazo\_12, Necropolis\_13, NelitzaMV\_18, Nenae\_12, NiebruSaylor\_45, Nimrod\_17, NoSleep\_18, NonchalantPear\_17, OrionPax\_18, PaddyBaddy\_18, PaintedDog\_11, Palpatine\_17, Panchino\_12, Paperbeatsrock\_19, Parmesanjohn\_12, Pat3\_17, PeanutPie\_13, Petra64142\_18, Phaja\_17, Phalm\_13, PhancyPhin\_12, Pharsalus\_18, PhatBacter\_17, Phaux\_16, Phayonce\_12, Phegasus\_13, Philonius\_12, Phineas\_13, Phloss\_12, Phrann\_12, Phrux\_17, Pipsqueaks\_12, Policronamos\_17, Polkaroo\_13, Porky\_16, Ptowny\_17, Pumpkin\_18, Purgamenstris\_12, Purky\_12, Pygmy\_12, Quallification\_19, QueenHazel\_12, Rakim\_19, Raymond7\_12, Rebel\_12, Redi\_12, Rimmer\_17, RiverMonster\_17, Rubeelu\_12, Ryadel\_50, Saints25\_18, Sassay\_17, Sbash\_11, Schnauzer\_12, SchoolBus\_46, Schuy\_47, Scitech\_12, ShamWow\_18, ShereKhan\_19, Shida\_46, Shipwreck\_12, ShrimpFriedEgg\_12, Shweta\_12, Silvafighter\_12, Silvy\_12, Simpliphy\_18, SirDuracell\_17, SkinnyPete\_12, Smooch\_48, Smurph\_12, Snekmaggedon\_12, Sonah\_13, SophKB\_18, Sotrice96\_18, Spinach\_12, SpongeBob\_12, Stank\_19, Stark\_18, StellaBean\_18, StevieRay\_13, StolenFromERC\_19, StormChicken\_18, StressBall\_13, Stuck\_11, TBrady12\_19, Tapioca\_12, Tarkin\_19, TeamEdward\_18, TeardropMSU\_17, Teaspoon\_17, Techage\_13, TelAviv\_43, Terminus\_17, Tessdabest\_11, Thespis\_13, Thimble\_18, Thresher\_18, ThulaThula\_12, Tomaszewski\_17, Tortellini\_12, Tortoise12\_12, Toto\_18, Traaww1\_16, Tuco\_18, Ukulele\_17, Vagabond\_46, Venti\_13, Vidya\_13, Vorrrps\_45, Wiggin\_19, Wildflower\_46, Willez\_17, Willsammy\_13, Winget\_47, Wogge42\_45, Xandras\_19, Xavia\_13, Xeno\_12, Xerxes\_12, Xula\_11, YassJohnny\_18, Youngblood\_17, YoyoKar\_44, YungJamal\_49, Zakhe101\_46, Zebo\_46, Zilizebeth\_13, xkcd\_18,

### Summary by start number:

Start 16:

- Found in 90 of 559 ( 16.1% ) of genes in pham
- Manual Annotations of this start: 80 of 499
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alkhayr\_46 (O), Arib1\_13 (P1), Ashwin\_47 (O), Atcoo\_13 (P1), Bartholomew\_13 (P1), Bhagsy\_13 (P1), BigNuz\_12 (P4), Blessica\_47 (O), Bogie\_12 (P1), Bora\_43 (O), BronnyJr\_13 (P1), Brusacoram\_13 (P1), Bunnies\_13 (P1), CactusJack\_13 (P1), Camster\_13 (P1), Catdawg\_46 (O), Chubbello\_13 (P1), Corndog\_48 (O), Donovan\_13 (P1), Dylan\_45 (O), Dynamo\_13 (P1), Etoile\_13 (P1), Familton\_47 (O), Firecracker\_46 (O), FirstPlacePfu\_13 (P1), Fishburne\_13 (P1), FoulBall\_46 (O), GaloreK\_13 (P1), Gavriela\_13 (P1), Glaske\_13 (P1), GreaseLightnin\_13 (P1), HUHilltop\_13 (P1), Idergollasper\_46 (O), Imara\_44 (O), JangDynasty\_46 (O), Jebeks\_13 (P1), Jung\_13

(P1), Juniormint\_13 (P1), Kari\_13 (P1), KilKor\_13 (P1), KingPhillip3\_45 (O), Krili\_45 (O), Ksqared\_13 (P1), Langerak\_13 (P1), MadKillah\_47 (O), Majeke\_13 (P1), Malithi\_13 (P1), Mangethe\_13 (P1), Megiddo\_13 (P1), Mori\_45 (O), Murai\_46 (O), Nazo\_12 (P4), Necropolis\_13 (P1), NiebruSaylor\_45 (O), PeanutPie\_13 (P1), Phalm\_13 (P1), Phayonce\_12 (P5), Phegasus\_13 (P1), Phineas\_13 (P1), Polkaroo\_13 (P1), Purky\_12 (P6), Pygmy\_12 (P1), Ryadel\_50 (O), SchoolBus\_46 (O), Schuy\_47 (O), Shida\_46 (O), Shipwreck\_12 (P1), Smooch\_48 (O), Sonah\_13 (P1), StevieRay\_13 (P1), StressBall\_13 (P1), Techage\_13 (P1), TelAviv\_43 (O), Thespis\_13 (P1), ThulaThula\_12 (P5), Tortellini\_12 (P2), Vagabond\_46 (O), Venti\_13 (P1), Vidya\_13 (P1), Vorrps\_45 (O), Wildflower\_46 (O), Willsammy\_13 (P1), Winget\_47 (O), Wogge42\_45 (O), Xavia\_13 (P3), YoyoKar\_44 (O), YungJamal\_49 (O), Zakhe101\_46 (O), Zebo\_46 (O), Zilizebeth\_13 (P1),

#### Start 21:

- Found in 53 of 559 ( 9.5% ) of genes in pham
- Manual Annotations of this start: 46 of 499
- Called 96.2% of time when present
- Phage (with cluster) where this start called: Aggie\_12 (N), Andies\_12 (N), BabeRuth\_12 (N), Bosection6\_12 (N), Budgie\_20 (E), Butters\_12 (N), Carcharodon\_12 (N), Charlie\_12 (N), Chewbacca\_12 (N), Cubone\_11 (N), Duplicity\_12 (N), EGUnicorn\_12 (N), Fulbright\_12 (N), Gex\_12 (N), Hanako\_12 (N), Impisi\_12 (N), Jamie19\_12 (N), Journey\_12 (N), Kevin1\_12 (N), Magsby\_12 (N), Melville\_12 (N), MichelleMyBell\_12 (N), Nenae\_12 (N), Panchino\_12 (N), Parmesanjohn\_12 (N), PhancyPhin\_12 (N), Philonius\_12 (N), Phloss\_12 (N), Phrann\_12 (N), Pipsqueaks\_12 (N), Purgamenstris\_12 (N), Raymond7\_12 (N), Rebel\_12 (N), Redi\_12 (N), Rubeelu\_12 (N), Schnauzer\_12 (N), Scitech\_12 (N), ShrimpFriedEgg\_12 (N), Shweta\_12 (N), Silvafighter\_12 (N), Silvy\_12 (N), SkinnyPete\_12 (N), Smurph\_12 (N), Snekmaggedon\_12 (N), Spinach\_12 (N), SpongeBob\_12 (N), Tapioca\_12 (N), Tessdabest\_11 (N), Tortoise12\_12 (N), Xeno\_12 (N), Xerxes\_12 (N),

#### Start 22:

- Found in 12 of 559 ( 2.1% ) of genes in pham
- Manual Annotations of this start: 9 of 499
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Babsiella\_12 (I1), Bluvara\_12 (I), Brujita\_12 (I1), Che9c\_11 (I2), HC\_12 (I1), Island3\_12 (I1), MooMoo\_10 (singleton), PaintedDog\_11 (I1), QueenHazel\_12 (I1), Sbash\_11 (I2), Stuck\_11 (I2), Xula\_11 (I1),

#### Start 24:

- Found in 144 of 559 ( 25.8% ) of genes in pham
- Manual Annotations of this start: 128 of 499
- Called 99.3% of time when present
- Phage (with cluster) where this start called: 244\_18 (E), ABCat\_17 (E), Adnama\_19 (E), Amao\_18 (E), AmericanBeauty\_19 (E), Argent26\_19 (E), Asriel\_17 (E), BaboJay\_17 (E), BadStone\_17 (E), Balomoji\_17 (E), Barbarian\_17 (E), Bask21\_17 (E), Becksu\_17 (E), Bench\_19 (E), BigBubba\_17 (E), BilboSwaggins\_18 (E), Bogg\_18 (E), Brewer\_17 (E), Bruin\_17 (E), Buck\_17 (E), BugsBunny\_15 (E), Cactus\_19 (E), ChosenOne\_16 (E), ChotaBhai\_17 (E), Cjw1\_17 (E), Command613\_19 (E), Contagion\_17 (E), Cookies\_18 (E), CrystalP\_18 (E), Czyszczon1\_18 (E), Daikon\_16 (E), DoctorDiddles\_18 (E), DrDrey\_18 (E), Dumbo\_17 (E), Dusk\_17 (E), Easy2Say\_18 (E), Elite2014\_16 (E), Elph10\_18 (E), Emmina\_17 (E), Eureka\_18 (E), FairyPath\_18 (E), Filch\_18 (E), FireRed\_17 (E),

Flypotenuse\_16 (E), FoghornLeghorn\_17 (E), Gage\_19 (E), Gator\_16 (E), Gemini\_19 (E), Glexan\_16 (E), Goku\_18 (E), GoldenSpark\_19 (E), Goldilocks\_19 (E), GooberAzure\_19 (E), Greep\_18 (E), HanKaySha\_18 (E), Harella\_16 (E), Henry\_18 (E), Highbury\_18 (E), Holt\_19 (E), Hoonter\_19 (E), Hopey\_18 (E), HuffyPuff\_16 (E), IHOP\_17 (E), Icee\_17 (E), Inca\_17 (E), JeTaime\_19 (E), Kanye\_19 (E), Kimchi\_19 (E), Kostya\_18 (E), Lilac\_19 (E), Lilizi\_19 (E), Lilpickle\_16 (E), MISSy\_17 (E), MPhalcon\_17 (E), MadamMonkfish\_17 (E), Manda\_18 (E), Marshmallow\_18 (E), Maxxinista\_18 (E), Mindy\_18 (E), Miniwave\_18 (E), Misfit\_17 (E), Moldemort\_18 (E), MollyToe\_18 (E), Mosby\_17 (E), Murica\_16 (E), Murphy\_17 (E), Myrale\_18 (E), Nala\_17 (E), NelitzaMV\_18 (E), Nimrod\_17 (E), NoSleep\_18 (E), NonchalantPear\_17 (E), OrionPax\_18 (E), PaddyBaddy\_18 (E), Palpatine\_17 (E), Paperbeatsrock\_19 (E), Pat3\_17 (E), Petra64142\_18 (E), Phaja\_17 (E), Pharsalus\_18 (E), PhatBacter\_17 (E), Phaux\_16 (E), Phrux\_17 (E), Policronamos\_17 (E), Porky\_16 (E), Ptowny\_17 (E), Pumpkin\_18 (E), Qualification\_19 (E), Rakim\_19 (E), Rimmer\_17 (E), RiverMonster\_17 (E), Saints25\_18 (E), Sassay\_17 (E), ShamWow\_18 (E), ShereKhan\_19 (E), Simpliphy\_18 (E), SirDuracell\_17 (E), SophKB\_18 (E), Sotrice96\_18 (E), Stank\_19 (E), Stark\_18 (E), StellaBean\_18 (E), StolenFromERC\_19 (E), StormChicken\_18 (E), TBrady12\_19 (E), Tarkin\_19 (E), TeamEdward\_18 (E), TeardropMSU\_17 (E), Teaspoon\_17 (E), Terminus\_17 (E), Thimble\_18 (E), Thresher\_18 (E), Tomaszewski\_17 (E), Toto\_18 (E), Traaww1\_16 (E), Tuco\_18 (E), Ukulele\_17 (E), Wigg\_19 (E), Willez\_17 (E), Xandras\_19 (E), YassJohnny\_18 (E), Youngblood\_17 (E), xkcd\_18 (E),

Start 25:

- Found in 262 of 559 ( 46.9% ) of genes in pham
- Manual Annotations of this start: 221 of 499
- Called 91.6% of time when present
- Phage (with cluster) where this start called: Akhila\_11 (F1), Alexphander\_11 (F1), Aloeri\_11 (F1), AlpineSix\_10 (F1), ArcusAngelus\_10 (F1), Ardmore\_10 (F1), Aubs\_10 (F1), Awesomesauce\_11 (F1), Batiatus\_10 (F1), Beakin\_11 (F1), BigPhil\_11 (F1), Bipolar\_10 (F1), Blexus\_10 (F1), BlueCrab\_10 (F1), BobaPhett\_10 (F1), Bobi\_11 (F1), Boomer\_11 (F1), Brocalys\_10 (F1), Brookers\_11 (F1), Brushbloom\_11 (F1), Bubbles123\_10 (F1), Burwell21\_10 (F1), BuzzLyseyear\_11 (F1), ByChance\_10 (F1), Byougenkin\_10 (F1), Cabrinians\_10 (F1), Cerasum\_11 (F1), Che8\_10 (F1), CheesePuff\_10 (F1), Chevrolet\_10 (F1), ChickenDinner\_11 (F1), Chuckly\_10 (F1), Clank\_10 (F), Clifton\_10 (F1), Coco12\_11 (F1), Corium\_10 (F1), Cornucopia\_11 (F1), Crumble\_10 (F1), DLane\_10 (F1), DRBy19\_10 (F1), DaWorst\_11 (F1), DaddyRickover\_10 (F1), Daenerys\_10 (F1), Dante\_10 (F1), DeadP\_10 (F1), Deb65\_10 (F1), DirtMcGirt\_11 (F1), DoRead\_10 (F1), DocMcStuffins\_11 (F1), Donkeykong\_10 (F1), Doomphist\_10 (F1), Doomslug\_12 (F), Dorothy\_10 (F1), DosHalletts\_11 (F1), DotProduct\_10 (F1), Doug\_10 (F1), Drago\_11 (F1), Eish\_10 (F1), EleanorGeorge\_10 (F1), EmiMonkey\_10 (F1), Emma\_10 (F1), Emmaloid\_11 (F1), Empress\_10 (F1), Enby\_11 (F1), Eradicator\_10 (F1), Fancypants\_10 (F1), Fastidio\_10 (F1), Firehouse51\_10 (F1), Flathead\_11 (F1), Florinda\_10 (F1), Frankie\_11 (F1), GUmbie\_10 (F1), Galactic\_10 (F1), Gandolph\_10 (F1), Geralt\_10 (F1), GigiOuiOui\_10 (F1), Girafales\_11 (F1), Girr\_10 (F1), Gorge\_10 (F1), Grimmer\_11 (F1), Guppsters\_10 (F1), Hades\_10 (F1), Hamulus\_10 (F1), Harley\_10 (F1), Hegedechwinu\_11 (F1), Hlubikazi\_10 (F1), IMpilo\_10 (F1), IbOuu\_10 (F1), Inventum\_10 (F1), IrishSherpFalk\_10 (F1), JalFarm20\_11 (F1), Jant\_10 (F1), Jarcob\_10 (F1), Jennelsea\_10 (F1), Jinglebell\_10 (F1), Job42\_11 (F1), JoeyJr\_10 (F1), Juice456\_11 (F1), Juniper1\_10 (F1), Karhdo\_10 (F1), Kenuha5\_10 (F1), Kersh\_10 (F1), Kimberlium\_11 (F1), KingJulian\_10 (F1), Kingsley\_11 (F1), Koella\_10 (F1), KristaRAM\_11 (F1), Latretium\_10 (F1), Leozinho\_11 (F1), Leperchaun\_10 (F1),

LilMoolah\_10 (F1), LittleShirley\_11 (F1), Lizziana\_10 (F1), Llama\_10 (F1), Llij\_10 (F1), LordVader\_12 (F), Lorde\_11 (F1), Lucia\_11 (F1), LunaBlu\_10 (F1), LunaStella\_11 (F4), MadMen\_10 (F1), Madiba\_11 (F1), Mahavrat\_10 (F1), Mandlovu\_10 (F1), Mantra\_10 (F1), Maravista\_10 (F1), Marker\_11 (F1), Martik\_10 (F1), Mattes\_10 (F1), MilanaBonita\_11 (F1), MilleniumForce\_11 (F1), MinionDave\_11 (F1), Minnie\_10 (F1), Misha28\_11 (F1), MisterCuddles\_10 (F1), Modragons\_10 (F1), Moonbeam\_10 (F1), Mova\_11 (F1), Mozy\_11 (F1), MulchSalad\_10 (F7), Mutaforma13\_10 (F1), Mwanjiwa\_10 (F1), NewHope4\_10 (F1), Nimbo\_10 (F1), Nitzel\_11 (F1), Nivrat\_10 (F1), NormanBulbieJr\_10 (F1), Ochi17\_10 (F1), OfUltron\_10 (F1), Ogoopogo\_13 (F1), OldBen\_10 (F1), OlympiaSaint\_10 (F1), Ovechkin\_10 (F1), OwlsT2W\_11 (F1), PHappiness\_10 (F1), PMC\_10 (F1), Pacc40\_10 (F1), PatoPoderoso\_10 (F1), Phalconet\_10 (F1), Phanphagia\_10 (F1), Phasih\_10 (F1), Phatniss\_10 (F1), PhesterPhotato\_10 (F1), Philus\_10 (F1), PhilipPhlop\_10 (F1), Piper2020\_11 (F1), Plumbus\_11 (F1), Poenanya\_10 (F1), Polka14\_10 (F1), Pollywog\_11 (F1), PopTart\_10 (F1), Priscilla\_10 (F1), QuickMath\_10 (F1), Quico\_11 (F1), Radiance\_10 (F1), Ramsey\_11 (F1), RedBird\_10 (F1), Renaud18\_11 (F4), Rialto\_11 (F1), RitaG\_10 (F1), Rita\_10 (F1), Rockne\_10 (F1), RockyHorror\_11 (F1), Royals2015\_10 (F1), Ruby\_10 (F1), SG4\_10 (F1), Saal\_10 (F1), Sabbb\_10 (F1), Sandalphon\_10 (F1), Sarma624\_11 (F1), Sassafras\_10 (F1), SassyB\_10 (F1), Scottish\_10 (F1), SeaLumen\_10 (F1), Seabastian\_10 (F1), Seagreen\_11 (F1), Shauna1\_10 (F1), ShiLan\_10 (F1), ShowerHandel\_10 (F1), ShroomBoi\_10 (F1), SiSi\_10 (F1), SimranZ1\_11 (F1), Slim\_11 (F1), Sparkdehlily\_10 (F1), Spartacus\_10 (F1), Spikelee\_11 (F1), Spoonbill\_10 (F1), Squirty\_11 (F3), StAnnes\_10 (F1), Stap\_11 (F1), Starceвич\_11 (F1), Strokeseat\_10 (F1), SuperGrey\_10 (F1), SwagPigglett\_10 (F1), TChen\_11 (F4), TDanisky\_10 (F1), Taj\_10 (F1), Tchotchke\_11 (F1), ThetaBob\_11 (F4), TootsiePop\_11 (F1), Tootsieroll\_11 (F1), Topiatin\_12 (F1), Toron\_11 (F6), Totinger\_11 (F1), Tweety\_10 (F1), UncleRicky\_11 (F1), VRedHorse\_10 (F1), Velveteen\_11 (F1), Veteran\_10 (F1), Violac\_10 (F1), Vivum\_10 (F1), Wachhund\_10 (F1), Wee\_10 (F1), Whatsapiecost\_10 (F1), Whouxphf\_10 (F1), WillSterrel\_10 (F1), XFactor\_10 (F1), Yorick\_10 (F1), Zerg\_10 (F1), Zizzle\_10 (F1),

#### Start 26:

- Found in 20 of 559 ( 3.6% ) of genes in pham
- Manual Annotations of this start: 3 of 499
- Called 15.0% of time when present
- Phage (with cluster) where this start called: Cornie\_11 (F5), FreddyB\_10 (F1), Pippy\_10 (F1),

#### Start 27:

- Found in 171 of 559 ( 30.6% ) of genes in pham
- Manual Annotations of this start: 4 of 499
- Called 4.1% of time when present
- Phage (with cluster) where this start called: CaptainTrips\_11 (F1), DillTech15\_10 (F1), Enzomatic\_11 (F1), Fruitloop\_10 (F1), Krakatau\_11 (F1), Medindi\_10 (F1), Polo2Bam\_11 (F1),

#### Start 28:

- Found in 145 of 559 ( 25.9% ) of genes in pham
- Manual Annotations of this start: 2 of 499
- Called 1.4% of time when present
- Phage (with cluster) where this start called: Estave1\_10 (F1), Ibhubesi\_10 (F1),

Start 29:

- Found in 296 of 559 ( 53.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 0.3% of time when present
- Phage (with cluster) where this start called: Nichirin\_10 (F1),

Start 32:

- Found in 173 of 559 ( 30.9% ) of genes in pham
- Manual Annotations of this start: 1 of 499
- Called 0.6% of time when present
- Phage (with cluster) where this start called: BodEinwohner17\_10 (F1),

Start 36:

- Found in 250 of 559 ( 44.7% ) of genes in pham
- Manual Annotations of this start: 5 of 499
- Called 3.6% of time when present
- Phage (with cluster) where this start called: Filuzino\_10 (F1), James\_10 (F1), KingMidas\_10 (F1), LastJedi\_10 (F1), Melissauren88\_10 (F1), Ms6\_10 (F1), MulchExplorer\_12 (F1), Oksu\_11 (F1), Peridot\_12 (F1),

**Summary by clusters:**

There are 20 clusters represented in this pham: P2, F1, singleton, P1, E, P4, F6, P3, I1, F4, F7, F, O, N, I, F3, P6, I2, P5, F5,

Info for manual annotations of cluster E:

- Start number 24 was manually annotated 128 times for cluster E.

Info for manual annotations of cluster F1:

- Start number 25 was manually annotated 216 times for cluster F1.
- Start number 26 was manually annotated 2 times for cluster F1.
- Start number 27 was manually annotated 4 times for cluster F1.
- Start number 28 was manually annotated 2 times for cluster F1.
- Start number 32 was manually annotated 1 time for cluster F1.
- Start number 36 was manually annotated 5 times for cluster F1.

Info for manual annotations of cluster F3:

- Start number 25 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 25 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 26 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster I1:

- Start number 22 was manually annotated 6 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 22 was manually annotated 2 times for cluster I2.

Info for manual annotations of cluster N:

- Start number 21 was manually annotated 46 times for cluster N.

Info for manual annotations of cluster O:

- Start number 16 was manually annotated 30 times for cluster O.

Info for manual annotations of cluster P1:

- Start number 16 was manually annotated 43 times for cluster P1.

Info for manual annotations of cluster P2:

- Start number 16 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:

- Start number 16 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:

- Start number 16 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 16 was manually annotated 2 times for cluster P5.

Info for manual annotations of cluster P6:

- Start number 16 was manually annotated 1 time for cluster P6.

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

Gene: 244\_18 Start: 10172, Stop: 10576, Start Num: 24

Candidate Starts for 244\_18:

(15, 10139), (20, 10160), (Start: 24 @10172 has 128 MA's), (49, 10343), (51, 10355), (59, 10412), (75, 10481), (84, 10562), (85, 10571),

Gene: ABCat\_17 Start: 10947, Stop: 11351, Start Num: 24

Candidate Starts for ABCat\_17:

(15, 10914), (20, 10935), (Start: 24 @10947 has 128 MA's), (49, 11118), (51, 11130), (59, 11187), (75, 11256), (84, 11337), (85, 11346),

Gene: Adnama\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for Adnama\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: Aggie\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Aggie\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Akhila\_11 Start: 7745, Stop: 8152, Start Num: 25

Candidate Starts for Akhila\_11:

(9, 7667), (13, 7700), (Start: 25 @7745 has 221 MA's), (Start: 27 @7778 has 4 MA's), (29, 7784), (Start: 36 @7826 has 5 MA's), (38, 7841), (41, 7856), (44, 7874), (47, 7901), (49, 7910), (50, 7916),

(56, 7952), (58, 7964), (59, 7979), (63, 7994), (64, 8003), (66, 8009), (69, 8030), (71, 8036), (76, 8060), (77, 8063), (81, 8114),

Gene: Alexphander\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Alexphander\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (65, 7209), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: Alkhayr\_46 Start: 23287, Stop: 23739, Start Num: 16

Candidate Starts for Alkhayr\_46:

(11, 23245), (Start: 16 @23287 has 80 MA's), (Start: 28 @23380 has 2 MA's), (29, 23383), (Start: 32 @23401 has 1 MA's), (43, 23464), (48, 23506), (52, 23524), (53, 23536), (59, 23587), (60, 23590), (68, 23614), (74, 23635), (75, 23641),

Gene: Aloeri\_11 Start: 6951, Stop: 7355, Start Num: 25

Candidate Starts for Aloeri\_11:

(7, 6849), (Start: 25 @6951 has 221 MA's), (Start: 27 @6984 has 4 MA's), (Start: 28 @6987 has 2 MA's), (29, 6990), (Start: 32 @7008 has 1 MA's), (Start: 36 @7032 has 5 MA's), (38, 7047), (40, 7059), (49, 7116), (50, 7122), (58, 7170), (59, 7185), (60, 7188), (65, 7212), (75, 7263), (77, 7269), (80, 7311), (81, 7320),

Gene: AlpineSix\_10 Start: 7094, Stop: 7498, Start Num: 25

Candidate Starts for AlpineSix\_10:

(Start: 25 @7094 has 221 MA's), (29, 7133), (Start: 32 @7151 has 1 MA's), (Start: 36 @7175 has 5 MA's), (38, 7190), (40, 7202), (41, 7205), (49, 7259), (50, 7265), (58, 7313), (59, 7328), (60, 7331), (65, 7355), (75, 7406), (77, 7412), (80, 7454), (81, 7463),

Gene: Amao\_18 Start: 10152, Stop: 10556, Start Num: 24

Candidate Starts for Amao\_18:

(15, 10119), (20, 10140), (Start: 24 @10152 has 128 MA's), (49, 10323), (51, 10335), (59, 10392), (75, 10461), (84, 10542), (85, 10551),

Gene: AmericanBeauty\_19 Start: 10401, Stop: 10805, Start Num: 24

Candidate Starts for AmericanBeauty\_19:

(15, 10368), (20, 10389), (Start: 24 @10401 has 128 MA's), (49, 10572), (51, 10584), (59, 10641), (75, 10710), (84, 10791), (85, 10800),

Gene: Andies\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Andies\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: ArcusAngelus\_10 Start: 7087, Stop: 7494, Start Num: 25

Candidate Starts for ArcusAngelus\_10:

(10, 7018), (13, 7042), (Start: 25 @7087 has 221 MA's), (Start: 27 @7120 has 4 MA's), (29, 7126), (Start: 36 @7168 has 5 MA's), (38, 7183), (41, 7198), (44, 7216), (47, 7243), (49, 7252), (50, 7258), (56, 7294), (58, 7306), (59, 7321), (63, 7336), (64, 7345), (66, 7351), (69, 7372), (71, 7378), (76, 7402), (77, 7405), (81, 7456),

Gene: Ardmore\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Ardmore\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268),

(56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Argent26\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for Argent26\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: Arib1\_13 Start: 8287, Stop: 8724, Start Num: 16

Candidate Starts for Arib1\_13:

(Start: 16 @8287 has 80 MA's), (31, 8353), (59, 8545), (60, 8548), (67, 8584), (74, 8617), (82, 8692), (83, 8698),

Gene: Ashwin\_47 Start: 23285, Stop: 23737, Start Num: 16

Candidate Starts for Ashwin\_47:

(Start: 16 @23285 has 80 MA's), (Start: 28 @23378 has 2 MA's), (29, 23381), (Start: 32 @23399 has 1 MA's), (43, 23462), (48, 23504), (52, 23522), (53, 23534), (59, 23585), (60, 23588), (68, 23612), (74, 23633), (75, 23639),

Gene: Asriel\_17 Start: 9819, Stop: 10223, Start Num: 24

Candidate Starts for Asriel\_17:

(15, 9786), (20, 9807), (Start: 24 @9819 has 128 MA's), (49, 9990), (51, 10002), (59, 10059), (75, 10128), (84, 10209), (85, 10218),

Gene: Atcoo\_13 Start: 8310, Stop: 8747, Start Num: 16

Candidate Starts for Atcoo\_13:

(6, 8229), (Start: 16 @8310 has 80 MA's), (31, 8376), (59, 8568), (60, 8571), (67, 8607), (74, 8640), (82, 8715), (83, 8721),

Gene: Aubs\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Aubs\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (61, 7340), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Awesomesauce\_11 Start: 6951, Stop: 7355, Start Num: 25

Candidate Starts for Awesomesauce\_11:

(Start: 25 @6951 has 221 MA's), (Start: 27 @6984 has 4 MA's), (Start: 28 @6987 has 2 MA's), (29, 6990), (Start: 32 @7008 has 1 MA's), (Start: 36 @7032 has 5 MA's), (38, 7047), (40, 7059), (47, 7107), (49, 7116), (50, 7122), (58, 7170), (59, 7185), (75, 7263), (77, 7269), (79, 7308), (80, 7311), (81, 7320),

Gene: BabeRuth\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for BabeRuth\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: BaboJay\_17 Start: 10483, Stop: 10887, Start Num: 24

Candidate Starts for BaboJay\_17:

(15, 10450), (20, 10471), (Start: 24 @10483 has 128 MA's), (49, 10654), (51, 10666), (59, 10723), (75, 10792), (84, 10873), (85, 10882),

Gene: Babsiella\_12 Start: 8354, Stop: 8773, Start Num: 22

Candidate Starts for Babsiella\_12:

(Start: 22 @8354 has 9 MA's), (30, 8411), (33, 8423), (48, 8528), (59, 8600), (75, 8675), (78, 8696), (80, 8720),

Gene: BadStone\_17 Start: 10947, Stop: 11351, Start Num: 24

Candidate Starts for BadStone\_17:

(15, 10914), (20, 10935), (Start: 24 @10947 has 128 MA's), (49, 11118), (51, 11130), (59, 11187), (75, 11256), (84, 11337), (85, 11346),

Gene: Balomoji\_17 Start: 10681, Stop: 11085, Start Num: 24

Candidate Starts for Balomoji\_17:

(15, 10648), (20, 10669), (Start: 24 @10681 has 128 MA's), (49, 10852), (51, 10864), (59, 10921), (75, 10990), (84, 11071), (85, 11080),

Gene: Barbarian\_17 Start: 9819, Stop: 10223, Start Num: 24

Candidate Starts for Barbarian\_17:

(15, 9786), (20, 9807), (Start: 24 @9819 has 128 MA's), (49, 9990), (51, 10002), (59, 10059), (75, 10128), (84, 10209), (85, 10218),

Gene: Bartholomew\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for Bartholomew\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: Bask21\_17 Start: 9614, Stop: 10018, Start Num: 24

Candidate Starts for Bask21\_17:

(15, 9581), (20, 9602), (Start: 24 @9614 has 128 MA's), (49, 9785), (51, 9797), (59, 9854), (75, 9923), (84, 10004), (85, 10013),

Gene: Batiatus\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Batiatus\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Beakin\_11 Start: 6951, Stop: 7355, Start Num: 25

Candidate Starts for Beakin\_11:

(Start: 25 @6951 has 221 MA's), (29, 6990), (Start: 36 @7032 has 5 MA's), (38, 7047), (40, 7059), (49, 7116), (50, 7122), (58, 7170), (59, 7185), (60, 7188), (65, 7212), (75, 7263), (77, 7269), (79, 7308), (80, 7311), (81, 7320),

Gene: Becksu\_17 Start: 10591, Stop: 10995, Start Num: 24

Candidate Starts for Becksu\_17:

(15, 10558), (20, 10579), (Start: 24 @10591 has 128 MA's), (49, 10762), (51, 10774), (59, 10831), (75, 10900), (84, 10981), (85, 10990),

Gene: Bench\_19 Start: 10277, Stop: 10681, Start Num: 24

Candidate Starts for Bench\_19:

(15, 10244), (20, 10265), (Start: 24 @10277 has 128 MA's), (49, 10448), (51, 10460), (59, 10517), (75, 10586), (84, 10667), (85, 10676),

Gene: Bhagsy\_13 Start: 8313, Stop: 8750, Start Num: 16

Candidate Starts for Bhagsy\_13:

(6, 8232), (Start: 16 @8313 has 80 MA's), (31, 8379), (59, 8571), (60, 8574), (67, 8610), (74, 8643), (82, 8718), (83, 8724),

Gene: BigBubba\_17 Start: 9660, Stop: 10064, Start Num: 24

Candidate Starts for BigBubba\_17:

(15, 9627), (20, 9648), (Start: 24 @9660 has 128 MA's), (49, 9831), (51, 9843), (59, 9900), (75, 9969), (84, 10050), (85, 10059),

Gene: BigNuz\_12 Start: 8018, Stop: 8455, Start Num: 16

Candidate Starts for BigNuz\_12:

(Start: 16 @8018 has 80 MA's), (59, 8276), (67, 8315), (74, 8348), (82, 8423), (83, 8429),

Gene: BigPhil\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for BigPhil\_11:

(Start: 25 @6947 has 221 MA's), (29, 6986), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (69, 7232), (70, 7235), (75, 7259), (77, 7265), (79, 7304), (80, 7307), (81, 7316),

Gene: BilboSwaggins\_18 Start: 10948, Stop: 11352, Start Num: 24

Candidate Starts for BilboSwaggins\_18:

(15, 10915), (20, 10936), (Start: 24 @10948 has 128 MA's), (49, 11119), (51, 11131), (59, 11188), (75, 11257), (84, 11338), (85, 11347),

Gene: Bipolar\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Bipolar\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (29, 7136), (38, 7193), (41, 7208), (44, 7226), (45, 7232), (46, 7241), (47, 7253), (49, 7262), (50, 7268), (55, 7292), (58, 7316), (59, 7331), (61, 7340), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (77, 7415), (81, 7466),

Gene: Blessica\_47 Start: 23688, Stop: 24140, Start Num: 16

Candidate Starts for Blessica\_47:

(Start: 16 @23688 has 80 MA's), (Start: 28 @23781 has 2 MA's), (29, 23784), (Start: 32 @23802 has 1 MA's), (43, 23865), (48, 23907), (52, 23925), (53, 23937), (59, 23988), (60, 23991), (68, 24015), (74, 24036), (75, 24042),

Gene: Blexus\_10 Start: 7111, Stop: 7515, Start Num: 25

Candidate Starts for Blexus\_10:

(Start: 25 @7111 has 221 MA's), (29, 7150), (Start: 32 @7168 has 1 MA's), (Start: 36 @7192 has 5 MA's), (38, 7207), (40, 7219), (41, 7222), (47, 7267), (49, 7276), (50, 7282), (58, 7330), (59, 7345), (75, 7423), (77, 7429), (79, 7468), (80, 7471), (81, 7480),

Gene: BlueCrab\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for BlueCrab\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Bluvara\_12 Start: 8352, Stop: 8771, Start Num: 22

Candidate Starts for Bluvara\_12:

(Start: 22 @8352 has 9 MA's), (30, 8409), (33, 8421), (48, 8526), (59, 8598), (75, 8673), (78, 8694), (80, 8718),

Gene: BobaPhett\_10 Start: 7087, Stop: 7491, Start Num: 25

Candidate Starts for BobaPhett\_10:

(Start: 25 @7087 has 221 MA's), (29, 7126), (Start: 36 @7168 has 5 MA's), (38, 7183), (40, 7195), (49, 7252), (58, 7306), (59, 7321), (62, 7333), (65, 7348), (75, 7399), (76, 7402), (77, 7405), (80, 7447), (81, 7456),

Gene: Bobi\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Bobi\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (60, 7185), (65, 7209), (75, 7260), (77, 7266), (80, 7308), (81, 7317),

Gene: BodEinwohner17\_10 Start: 7152, Stop: 7499, Start Num: 32

Candidate Starts for BodEinwohner17\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Bogg\_18 Start: 9833, Stop: 10237, Start Num: 24

Candidate Starts for Bogg\_18:

(15, 9800), (20, 9821), (Start: 24 @9833 has 128 MA's), (49, 10004), (51, 10016), (59, 10073), (75, 10142), (84, 10223), (85, 10232),

Gene: Bogie\_12 Start: 8023, Stop: 8460, Start Num: 16

Candidate Starts for Bogie\_12:

(Start: 16 @8023 has 80 MA's), (59, 8281), (60, 8284), (74, 8353), (82, 8428), (83, 8434),

Gene: Boomer\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Boomer\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (41, 7059), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: Bora\_43 Start: 22738, Stop: 23190, Start Num: 16

Candidate Starts for Bora\_43:

(Start: 16 @22738 has 80 MA's), (Start: 28 @22831 has 2 MA's), (29, 22834), (Start: 32 @22852 has 1 MA's), (43, 22915), (48, 22957), (52, 22975), (53, 22987), (59, 23038), (60, 23041), (68, 23065), (74, 23086), (75, 23092),

Gene: Bosection6\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Bosection6\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Brewer\_17 Start: 10659, Stop: 11063, Start Num: 24

Candidate Starts for Brewer\_17:

(15, 10626), (20, 10647), (Start: 24 @10659 has 128 MA's), (49, 10830), (51, 10842), (59, 10899), (75, 10968), (84, 11049), (85, 11058),

Gene: Brocalys\_10 Start: 7084, Stop: 7488, Start Num: 25

Candidate Starts for Brocalys\_10:

(Start: 25 @7084 has 221 MA's), (Start: 26 @7087 has 3 MA's), (Start: 27 @7117 has 4 MA's), (Start: 28 @7120 has 2 MA's), (29, 7123), (Start: 32 @7141 has 1 MA's), (Start: 36 @7165 has 5 MA's), (38, 7180), (40, 7192), (47, 7240), (49, 7249), (50, 7255), (58, 7303), (59, 7318), (75, 7396), (77, 7402), (79, 7441), (80, 7444), (81, 7453),

Gene: BronnyJr\_13 Start: 8290, Stop: 8727, Start Num: 16

Candidate Starts for BronnyJr\_13:

(Start: 16 @8290 has 80 MA's), (59, 8548), (60, 8551), (67, 8587), (74, 8620), (82, 8695), (83, 8701),

Gene: Brookers\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Brookers\_11:

(Start: 25 @6947 has 221 MA's), (29, 6986), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (69, 7232), (70, 7235), (75, 7259), (77, 7265), (79, 7304), (80, 7307), (81, 7316),

Gene: Bruin\_17 Start: 10455, Stop: 10859, Start Num: 24

Candidate Starts for Bruin\_17:

(15, 10422), (20, 10443), (Start: 24 @10455 has 128 MA's), (49, 10626), (51, 10638), (59, 10695), (75, 10764), (84, 10845), (85, 10854),

Gene: Brujita\_12 Start: 8355, Stop: 8774, Start Num: 22

Candidate Starts for Brujita\_12:

(Start: 22 @8355 has 9 MA's), (30, 8412), (33, 8424), (48, 8529), (59, 8601), (60, 8604), (75, 8676), (78, 8697), (80, 8721),

Gene: Brusacoram\_13 Start: 8309, Stop: 8746, Start Num: 16

Candidate Starts for Brusacoram\_13:

(6, 8228), (Start: 16 @8309 has 80 MA's), (31, 8375), (59, 8567), (60, 8570), (67, 8606), (74, 8639), (82, 8714), (83, 8720),

Gene: Brushbloom\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Brushbloom\_11:

(7, 6845), (Start: 25 @6947 has 221 MA's), (Start: 27 @6980 has 4 MA's), (Start: 28 @6983 has 2 MA's), (29, 6986), (Start: 32 @7004 has 1 MA's), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (75, 7259), (77, 7265), (81, 7316),

Gene: Bubbles123\_10 Start: 7114, Stop: 7518, Start Num: 25

Candidate Starts for Bubbles123\_10:

(Start: 25 @7114 has 221 MA's), (29, 7153), (Start: 36 @7195 has 5 MA's), (38, 7210), (40, 7222), (41, 7225), (47, 7270), (49, 7279), (50, 7285), (58, 7333), (59, 7348), (60, 7351), (75, 7426), (77, 7432), (79, 7471), (80, 7474), (81, 7483),

Gene: Buck\_17 Start: 10904, Stop: 11308, Start Num: 24

Candidate Starts for Buck\_17:

(15, 10871), (20, 10892), (Start: 24 @10904 has 128 MA's), (49, 11075), (51, 11087), (59, 11144), (75, 11213), (84, 11294), (85, 11303),

Gene: Budgie\_20 Start: 10326, Stop: 10742, Start Num: 21

Candidate Starts for Budgie\_20:

(17, 10314), (Start: 21 @10326 has 46 MA's), (Start: 24 @10335 has 128 MA's), (49, 10509), (51, 10521), (59, 10578), (75, 10647), (84, 10728), (85, 10737),

Gene: BugsBunny\_15 Start: 10021, Stop: 10425, Start Num: 24

Candidate Starts for BugsBunny\_15:

(15, 9988), (20, 10009), (Start: 24 @10021 has 128 MA's), (49, 10192), (51, 10204), (59, 10261), (75, 10330), (84, 10411), (85, 10420),

Gene: Bunnies\_13 Start: 8322, Stop: 8759, Start Num: 16

Candidate Starts for Bunnies\_13:

(6, 8241), (Start: 16 @8322 has 80 MA's), (31, 8388), (59, 8580), (60, 8583), (67, 8619), (74, 8652), (82, 8727), (83, 8733),

Gene: Burwell21\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Burwell21\_10:

(Start: 25 @7095 has 221 MA's), (Start: 27 @7128 has 4 MA's), (Start: 28 @7131 has 2 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (69, 7380), (70, 7383), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Butters\_12 Start: 7363, Stop: 7782, Start Num: 21

Candidate Starts for Butters\_12:

(2, 7192), (Start: 21 @7363 has 46 MA's), (Start: 28 @7408 has 2 MA's), (49, 7534), (59, 7612), (71, 7666), (74, 7681), (75, 7687),

Gene: BuzzLyseyear\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for BuzzLyseyear\_11:

(Start: 25 @6947 has 221 MA's), (29, 6986), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (75, 7259), (77, 7265), (80, 7307), (81, 7316),

Gene: ByChance\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for ByChance\_10:

(Start: 25 @7097 has 221 MA's), (Start: 26 @7100 has 3 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: Byougenkin\_10 Start: 7088, Stop: 7492, Start Num: 25

Candidate Starts for Byougenkin\_10:

(Start: 25 @7088 has 221 MA's), (Start: 27 @7121 has 4 MA's), (Start: 28 @7124 has 2 MA's), (29, 7127), (Start: 32 @7145 has 1 MA's), (Start: 36 @7169 has 5 MA's), (38, 7184), (40, 7196), (41, 7199), (47, 7244), (49, 7253), (50, 7259), (58, 7307), (59, 7322), (75, 7400), (77, 7406), (79, 7445), (80, 7448), (81, 7457),

Gene: Cabrinians\_10 Start: 7087, Stop: 7491, Start Num: 25

Candidate Starts for Cabrinians\_10:

(Start: 25 @7087 has 221 MA's), (Start: 26 @7090 has 3 MA's), (Start: 27 @7120 has 4 MA's), (Start: 28 @7123 has 2 MA's), (29, 7126), (Start: 32 @7144 has 1 MA's), (Start: 36 @7168 has 5 MA's), (38, 7183), (40, 7195), (47, 7243), (49, 7252), (50, 7258), (58, 7306), (59, 7321), (75, 7399), (77, 7405), (79, 7444), (80, 7447), (81, 7456),

Gene: Cactus\_19 Start: 10160, Stop: 10564, Start Num: 24

Candidate Starts for Cactus\_19:

(15, 10127), (20, 10148), (Start: 24 @10160 has 128 MA's), (49, 10331), (51, 10343), (59, 10400), (75, 10469), (84, 10550), (85, 10559),

Gene: CactusJack\_13 Start: 8309, Stop: 8746, Start Num: 16

Candidate Starts for CactusJack\_13:

(6, 8228), (Start: 16 @8309 has 80 MA's), (31, 8375), (59, 8567), (60, 8570), (67, 8606), (74, 8639), (82, 8714), (83, 8720),

Gene: Camster\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for Camster\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: CaptainTrips\_11 Start: 7778, Stop: 8152, Start Num: 27

Candidate Starts for CaptainTrips\_11:

(9, 7667), (13, 7700), (Start: 25 @7745 has 221 MA's), (Start: 27 @7778 has 4 MA's), (29, 7784), (Start: 36 @7826 has 5 MA's), (38, 7841), (41, 7856), (44, 7874), (47, 7901), (49, 7910), (50, 7916), (56, 7952), (58, 7964), (59, 7979), (63, 7994), (64, 8003), (66, 8009), (69, 8030), (71, 8036), (76, 8060), (77, 8063), (81, 8114),

Gene: Carcharodon\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Carcharodon\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Catdawg\_46 Start: 23377, Stop: 23829, Start Num: 16

Candidate Starts for Catdawg\_46:

(11, 23335), (Start: 16 @23377 has 80 MA's), (Start: 28 @23470 has 2 MA's), (29, 23473), (Start: 32 @23491 has 1 MA's), (43, 23554), (48, 23596), (52, 23614), (53, 23626), (59, 23677), (60, 23680), (68, 23704), (74, 23725), (75, 23731),

Gene: Cerasum\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Cerasum\_11:

(Start: 25 @6947 has 221 MA's), (29, 6986), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (69, 7232), (70, 7235), (75, 7259), (77, 7265), (79, 7304), (80, 7307), (81, 7316),

Gene: Charlie\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Charlie\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Che8\_10 Start: 7099, Stop: 7503, Start Num: 25

Candidate Starts for Che8\_10:

(Start: 25 @7099 has 221 MA's), (Start: 27 @7132 has 4 MA's), (Start: 28 @7135 has 2 MA's), (29, 7138), (Start: 36 @7180 has 5 MA's), (38, 7195), (40, 7207), (49, 7264), (50, 7270), (58, 7318), (59, 7333), (75, 7411), (77, 7417), (79, 7456), (80, 7459), (81, 7468),

Gene: Che9c\_11 Start: 7971, Stop: 8387, Start Num: 22

Candidate Starts for Che9c\_11:

(19, 7965), (Start: 22 @7971 has 9 MA's), (30, 8028), (Start: 32 @8037 has 1 MA's), (33, 8040), (41, 8091), (48, 8142), (59, 8214), (66, 8244), (78, 8310), (80, 8334),

Gene: Cheesepuff\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for Cheesepuff\_10:

(Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (69, 7382), (70, 7385), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: Chevrolet\_10 Start: 7087, Stop: 7494, Start Num: 25

Candidate Starts for Chevrolet\_10:

(10, 7018), (13, 7042), (Start: 25 @7087 has 221 MA's), (Start: 27 @7120 has 4 MA's), (29, 7126), (Start: 36 @7168 has 5 MA's), (38, 7183), (41, 7198), (44, 7216), (47, 7243), (49, 7252), (50, 7258),

(56, 7294), (58, 7306), (59, 7321), (63, 7336), (64, 7345), (66, 7351), (69, 7372), (71, 7378), (76, 7402), (77, 7405), (81, 7456),

Gene: Chewbacca\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Chewbacca\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: ChickenDinner\_11 Start: 6951, Stop: 7355, Start Num: 25

Candidate Starts for ChickenDinner\_11:

(7, 6849), (Start: 25 @6951 has 221 MA's), (Start: 27 @6984 has 4 MA's), (Start: 28 @6987 has 2 MA's), (29, 6990), (Start: 32 @7008 has 1 MA's), (Start: 36 @7032 has 5 MA's), (38, 7047), (40, 7059), (49, 7116), (50, 7122), (58, 7170), (59, 7185), (60, 7188), (65, 7212), (75, 7263), (77, 7269), (80, 7311), (81, 7320),

Gene: ChosenOne\_16 Start: 9624, Stop: 10028, Start Num: 24

Candidate Starts for ChosenOne\_16:

(15, 9591), (20, 9612), (Start: 24 @9624 has 128 MA's), (49, 9795), (51, 9807), (59, 9864), (75, 9933), (84, 10014), (85, 10023),

Gene: ChotaBhai\_17 Start: 9660, Stop: 10064, Start Num: 24

Candidate Starts for ChotaBhai\_17:

(15, 9627), (20, 9648), (Start: 24 @9660 has 128 MA's), (49, 9831), (51, 9843), (59, 9900), (75, 9969), (84, 10050), (85, 10059),

Gene: Chubbello\_13 Start: 8305, Stop: 8742, Start Num: 16

Candidate Starts for Chubbello\_13:

(Start: 16 @8305 has 80 MA's), (59, 8563), (60, 8566), (67, 8602), (74, 8635), (82, 8710), (83, 8716),

Gene: Chuckly\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Chuckly\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Cjw1\_17 Start: 11174, Stop: 11578, Start Num: 24

Candidate Starts for Cjw1\_17:

(15, 11141), (20, 11162), (Start: 24 @11174 has 128 MA's), (49, 11345), (51, 11357), (59, 11414), (75, 11483), (84, 11564), (85, 11573),

Gene: Clank\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Clank\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (29, 7136), (38, 7193), (41, 7208), (44, 7226), (45, 7232), (46, 7241), (47, 7253), (49, 7262), (50, 7268), (55, 7292), (58, 7316), (59, 7331), (61, 7340), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (77, 7415), (81, 7466),

Gene: Clifton\_10 Start: 7083, Stop: 7487, Start Num: 25

Candidate Starts for Clifton\_10:

(Start: 25 @7083 has 221 MA's), (Start: 26 @7086 has 3 MA's), (Start: 27 @7116 has 4 MA's), (Start: 28 @7119 has 2 MA's), (29, 7122), (Start: 32 @7140 has 1 MA's), (Start: 36 @7164 has 5 MA's), (38, 7179), (40, 7191), (47, 7239), (49, 7248), (50, 7254), (58, 7302), (59, 7317), (75, 7395), (77, 7401), (79, 7440), (80, 7443), (81, 7452),

Gene: Coco12\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Coco12\_11:

(Start: 25 @6948 has 221 MA's), (Start: 27 @6981 has 4 MA's), (Start: 28 @6984 has 2 MA's), (29, 6987), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (69, 7233), (70, 7236), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: Command613\_19 Start: 11216, Stop: 11620, Start Num: 24

Candidate Starts for Command613\_19:

(15, 11183), (20, 11204), (Start: 24 @11216 has 128 MA's), (49, 11387), (51, 11399), (59, 11456), (75, 11525), (84, 11606), (85, 11615),

Gene: Contagion\_17 Start: 10455, Stop: 10859, Start Num: 24

Candidate Starts for Contagion\_17:

(15, 10422), (20, 10443), (Start: 24 @10455 has 128 MA's), (49, 10626), (51, 10638), (59, 10695), (75, 10764), (84, 10845), (85, 10854),

Gene: Cookies\_18 Start: 10820, Stop: 11224, Start Num: 24

Candidate Starts for Cookies\_18:

(15, 10787), (20, 10808), (Start: 24 @10820 has 128 MA's), (49, 10991), (51, 11003), (59, 11060), (75, 11129), (84, 11210), (85, 11219),

Gene: Corium\_10 Start: 7098, Stop: 7505, Start Num: 25

Candidate Starts for Corium\_10:

(9, 7020), (13, 7053), (Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (41, 7209), (44, 7227), (47, 7254), (49, 7263), (50, 7269), (56, 7305), (58, 7317), (59, 7332), (63, 7347), (64, 7356), (66, 7362), (69, 7383), (71, 7389), (76, 7413), (77, 7416), (81, 7467),

Gene: Corndog\_48 Start: 23835, Stop: 24287, Start Num: 16

Candidate Starts for Corndog\_48:

(3, 23736), (Start: 16 @23835 has 80 MA's), (Start: 28 @23928 has 2 MA's), (29, 23931), (Start: 32 @23949 has 1 MA's), (43, 24012), (48, 24054), (52, 24072), (53, 24084), (59, 24135), (60, 24138), (68, 24162), (74, 24183), (75, 24189),

Gene: Cornie\_11 Start: 7407, Stop: 7805, Start Num: 26

Candidate Starts for Cornie\_11:

(Start: 26 @7407 has 3 MA's), (Start: 28 @7440 has 2 MA's), (35, 7476), (37, 7497), (38, 7500), (39, 7503), (48, 7560), (57, 7608), (59, 7632), (74, 7701), (78, 7728),

Gene: Cornucopia\_11 Start: 6947, Stop: 7354, Start Num: 25

Candidate Starts for Cornucopia\_11:

(9, 6869), (10, 6878), (13, 6902), (Start: 25 @6947 has 221 MA's), (Start: 27 @6980 has 4 MA's), (29, 6986), (Start: 36 @7028 has 5 MA's), (38, 7043), (41, 7058), (44, 7076), (47, 7103), (49, 7112), (50, 7118), (56, 7154), (58, 7166), (59, 7181), (61, 7190), (63, 7196), (64, 7205), (66, 7211), (69, 7232), (71, 7238), (76, 7262), (77, 7265), (81, 7316),

Gene: Crumble\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for Crumble\_10:

(Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (69, 7382), (70, 7385), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: CrystalP\_18 Start: 10948, Stop: 11352, Start Num: 24

Candidate Starts for CrystalP\_18:

(15, 10915), (20, 10936), (Start: 24 @10948 has 128 MA's), (49, 11119), (51, 11131), (59, 11188), (75, 11257), (84, 11338), (85, 11347),

Gene: Cubone\_11 Start: 7367, Stop: 7786, Start Num: 21

Candidate Starts for Cubone\_11:

(Start: 21 @7367 has 46 MA's), (49, 7538), (59, 7616), (71, 7670), (74, 7685), (75, 7691),

Gene: Czyszczone1\_18 Start: 10159, Stop: 10563, Start Num: 24

Candidate Starts for Czyszczone1\_18:

(15, 10126), (20, 10147), (Start: 24 @10159 has 128 MA's), (49, 10330), (51, 10342), (59, 10399), (75, 10468), (84, 10549), (85, 10558),

Gene: DLane\_10 Start: 7098, Stop: 7505, Start Num: 25

Candidate Starts for DLane\_10:

(9, 7020), (13, 7053), (Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (41, 7209), (44, 7227), (47, 7254), (49, 7263), (50, 7269), (56, 7305), (58, 7317), (59, 7332), (63, 7347), (64, 7356), (66, 7362), (69, 7383), (71, 7389), (76, 7413), (77, 7416), (81, 7467),

Gene: DRBy19\_10 Start: 7111, Stop: 7515, Start Num: 25

Candidate Starts for DRBy19\_10:

(Start: 25 @7111 has 221 MA's), (Start: 27 @7144 has 4 MA's), (Start: 28 @7147 has 2 MA's), (29, 7150), (Start: 32 @7168 has 1 MA's), (Start: 36 @7192 has 5 MA's), (38, 7207), (40, 7219), (41, 7222), (47, 7267), (49, 7276), (50, 7282), (58, 7330), (59, 7345), (60, 7348), (75, 7423), (77, 7429), (79, 7468), (80, 7471), (81, 7480),

Gene: DaWorst\_11 Start: 6949, Stop: 7353, Start Num: 25

Candidate Starts for DaWorst\_11:

(Start: 25 @6949 has 221 MA's), (29, 6988), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (41, 7060), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (65, 7210), (75, 7261), (77, 7267), (79, 7306), (80, 7309), (81, 7318),

Gene: DaddyRickover\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for DaddyRickover\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Daenerys\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Daenerys\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Daikon\_16 Start: 10682, Stop: 11086, Start Num: 24

Candidate Starts for Daikon\_16:

(15, 10649), (20, 10670), (Start: 24 @10682 has 128 MA's), (49, 10853), (51, 10865), (59, 10922), (75, 10991), (84, 11072), (85, 11081),

Gene: Dante\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for Dante\_10:

(Start: 25 @7112 has 221 MA's), (Start: 26 @7115 has 3 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (41, 7223), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: DeadP\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for DeadP\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Deb65\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Deb65\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: DillTech15\_10 Start: 7130, Stop: 7504, Start Num: 27

Candidate Starts for DillTech15\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: DirtMcgirt\_11 Start: 6950, Stop: 7354, Start Num: 25

Candidate Starts for DirtMcgirt\_11:

(Start: 25 @6950 has 221 MA's), (Start: 27 @6983 has 4 MA's), (Start: 28 @6986 has 2 MA's), (29, 6989), (Start: 32 @7007 has 1 MA's), (Start: 36 @7031 has 5 MA's), (38, 7046), (40, 7058), (49, 7115), (50, 7121), (58, 7169), (59, 7184), (60, 7187), (65, 7211), (75, 7262), (77, 7268), (79, 7307), (80, 7310), (81, 7319),

Gene: DoRead\_10 Start: 7085, Stop: 7492, Start Num: 25

Candidate Starts for DoRead\_10:

(9, 7007), (10, 7016), (13, 7040), (Start: 25 @7085 has 221 MA's), (29, 7124), (38, 7181), (41, 7196), (44, 7214), (45, 7220), (46, 7229), (47, 7241), (49, 7250), (50, 7256), (55, 7280), (58, 7304), (59, 7319), (61, 7328), (63, 7334), (64, 7343), (66, 7349), (69, 7370), (71, 7376), (77, 7403), (81, 7454),

Gene: DocMcStuffins\_11 Start: 6951, Stop: 7355, Start Num: 25

Candidate Starts for DocMcStuffins\_11:

(7, 6849), (Start: 25 @6951 has 221 MA's), (Start: 27 @6984 has 4 MA's), (Start: 28 @6987 has 2 MA's), (29, 6990), (Start: 32 @7008 has 1 MA's), (Start: 36 @7032 has 5 MA's), (38, 7047), (40, 7059), (49, 7116), (50, 7122), (58, 7170), (59, 7185), (60, 7188), (65, 7212), (75, 7263), (77, 7269), (80, 7311), (81, 7320),

Gene: DoctorDiddles\_18 Start: 10113, Stop: 10517, Start Num: 24

Candidate Starts for DoctorDiddles\_18:

(15, 10080), (20, 10101), (Start: 24 @10113 has 128 MA's), (49, 10284), (51, 10296), (59, 10353), (75, 10422), (84, 10503), (85, 10512),

Gene: Donkeykong\_10 Start: 7114, Stop: 7518, Start Num: 25

Candidate Starts for Donkeykong\_10:

(Start: 25 @7114 has 221 MA's), (Start: 27 @7147 has 4 MA's), (29, 7153), (34, 7180), (Start: 36 @7195 has 5 MA's), (38, 7210), (40, 7222), (47, 7270), (49, 7279), (50, 7285), (58, 7333), (59, 7348), (69, 7399), (70, 7402), (75, 7426), (77, 7432), (80, 7474), (81, 7483),

Gene: Donovan\_13 Start: 8288, Stop: 8725, Start Num: 16

Candidate Starts for Donovan\_13:

(Start: 16 @8288 has 80 MA's), (31, 8354), (59, 8546), (60, 8549), (67, 8585), (74, 8618), (82, 8693), (83, 8699),

Gene: Doomphist\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Doomphist\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Doomslug\_12 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Doomslug\_12:

(7, 6845), (Start: 25 @6947 has 221 MA's), (Start: 27 @6980 has 4 MA's), (Start: 28 @6983 has 2 MA's), (29, 6986), (Start: 32 @7004 has 1 MA's), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (75, 7259), (77, 7265), (81, 7316),

Gene: Dorothy\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Dorothy\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: DosHalletts\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for DosHalletts\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (41, 7059), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: DotProduct\_10 Start: 7098, Stop: 7505, Start Num: 25

Candidate Starts for DotProduct\_10:

(9, 7020), (10, 7029), (13, 7053), (Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (41, 7209), (44, 7227), (47, 7254), (49, 7263), (50, 7269), (56, 7305), (58, 7317), (59, 7332), (61, 7341), (63, 7347), (64, 7356), (66, 7362), (69, 7383), (71, 7389), (76, 7413), (77, 7416), (81, 7467),

Gene: Doug\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for Doug\_10:

(Start: 25 @7097 has 221 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (41, 7208), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (60, 7334), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: DrDrey\_18 Start: 10900, Stop: 11304, Start Num: 24

Candidate Starts for DrDrey\_18:

(15, 10867), (20, 10888), (Start: 24 @10900 has 128 MA's), (49, 11071), (51, 11083), (59, 11140), (75, 11209), (84, 11290), (85, 11299),

Gene: Drago\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Drago\_11:

(Start: 25 @6948 has 221 MA's), (Start: 27 @6981 has 4 MA's), (Start: 28 @6984 has 2 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (60, 7185), (65, 7209), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: Dumbo\_17 Start: 9881, Stop: 10285, Start Num: 24

Candidate Starts for Dumbo\_17:

(15, 9848), (20, 9869), (Start: 24 @9881 has 128 MA's), (49, 10052), (51, 10064), (59, 10121), (75, 10190), (84, 10271), (85, 10280),

Gene: Duplicity\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Duplicity\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Dusk\_17 Start: 10607, Stop: 11011, Start Num: 24

Candidate Starts for Dusk\_17:

(15, 10574), (20, 10595), (Start: 24 @10607 has 128 MA's), (49, 10778), (51, 10790), (59, 10847), (75, 10916), (84, 10997), (85, 11006),

Gene: Dylan\_45 Start: 23090, Stop: 23542, Start Num: 16

Candidate Starts for Dylan\_45:

(Start: 16 @23090 has 80 MA's), (Start: 28 @23183 has 2 MA's), (29, 23186), (Start: 32 @23204 has 1 MA's), (43, 23267), (48, 23309), (52, 23327), (53, 23339), (59, 23390), (60, 23393), (68, 23417), (74, 23438), (75, 23444),

Gene: Dynamo\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for Dynamo\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: EGUunicorn\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for EGUunicorn\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Easy2Say\_18 Start: 11147, Stop: 11551, Start Num: 24

Candidate Starts for Easy2Say\_18:

(15, 11114), (20, 11135), (Start: 24 @11147 has 128 MA's), (49, 11318), (51, 11330), (59, 11387), (75, 11456), (84, 11537), (85, 11546),

Gene: Eish\_10 Start: 7085, Stop: 7489, Start Num: 25

Candidate Starts for Eish\_10:

(9, 7007), (Start: 25 @7085 has 221 MA's), (Start: 27 @7118 has 4 MA's), (Start: 28 @7121 has 2 MA's), (29, 7124), (Start: 36 @7166 has 5 MA's), (38, 7181), (40, 7193), (49, 7250), (50, 7256), (58, 7304), (59, 7319), (60, 7322), (65, 7346), (75, 7397), (77, 7403), (80, 7445), (81, 7454),

Gene: EleanorGeorge\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for EleanorGeorge\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Elite2014\_16 Start: 9624, Stop: 10028, Start Num: 24

Candidate Starts for Elite2014\_16:

(15, 9591), (20, 9612), (Start: 24 @9624 has 128 MA's), (49, 9795), (51, 9807), (59, 9864), (75, 9933), (84, 10014), (85, 10023),

Gene: Elph10\_18 Start: 9884, Stop: 10288, Start Num: 24

Candidate Starts for Elph10\_18:

(15, 9851), (20, 9872), (Start: 24 @9884 has 128 MA's), (49, 10055), (51, 10067), (59, 10124), (75, 10193), (84, 10274), (85, 10283),

Gene: EmiMonkey\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for EmiMonkey\_10:

(Start: 25 @7112 has 221 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: Emma\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Emma\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Emmaloid\_11 Start: 6949, Stop: 7353, Start Num: 25

Candidate Starts for Emmaloid\_11:

(Start: 25 @6949 has 221 MA's), (Start: 27 @6982 has 4 MA's), (Start: 28 @6985 has 2 MA's), (29, 6988), (Start: 32 @7006 has 1 MA's), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (47, 7105), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (75, 7261), (77, 7267), (79, 7306), (80, 7309), (81, 7318),

Gene: Emmina\_17 Start: 9729, Stop: 10133, Start Num: 24

Candidate Starts for Emmina\_17:

(15, 9696), (20, 9717), (Start: 24 @9729 has 128 MA's), (49, 9900), (51, 9912), (59, 9969), (75, 10038), (84, 10119), (85, 10128),

Gene: Empress\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Empress\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Enby\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Enby\_11:

(Start: 25 @6948 has 221 MA's), (Start: 27 @6981 has 4 MA's), (Start: 28 @6984 has 2 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (60, 7185), (65, 7209), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: Enzomatic\_11 Start: 7104, Stop: 7478, Start Num: 27

Candidate Starts for Enzomatic\_11:

(9, 6993), (13, 7026), (Start: 25 @7071 has 221 MA's), (Start: 27 @7104 has 4 MA's), (29, 7110), (Start: 36 @7152 has 5 MA's), (38, 7167), (41, 7182), (44, 7200), (47, 7227), (49, 7236), (50, 7242), (56, 7278), (58, 7290), (59, 7305), (63, 7320), (64, 7329), (66, 7335), (69, 7356), (71, 7362), (76, 7386), (77, 7389), (81, 7440),

Gene: Eradicator\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for Eradicator\_10:

(Start: 25 @7096 has 221 MA's), (Start: 26 @7099 has 3 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: Estave1\_10 Start: 7133, Stop: 7501, Start Num: 28

Candidate Starts for Estave1\_10:

(Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (41, 7208), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (60, 7334), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: Etoile\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for Etoile\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: Eureka\_18 Start: 10927, Stop: 11331, Start Num: 24

Candidate Starts for Eureka\_18:

(15, 10894), (20, 10915), (Start: 24 @10927 has 128 MA's), (49, 11098), (51, 11110), (59, 11167), (75, 11236), (84, 11317), (85, 11326),

Gene: FairyPath\_18 Start: 11145, Stop: 11549, Start Num: 24

Candidate Starts for FairyPath\_18:

(15, 11112), (20, 11133), (Start: 24 @11145 has 128 MA's), (49, 11316), (51, 11328), (59, 11385), (75, 11454), (84, 11535), (85, 11544),

Gene: Familton\_47 Start: 23381, Stop: 23833, Start Num: 16

Candidate Starts for Familton\_47:

(Start: 16 @23381 has 80 MA's), (Start: 28 @23474 has 2 MA's), (29, 23477), (Start: 32 @23495 has 1 MA's), (43, 23558), (48, 23600), (52, 23618), (53, 23630), (59, 23681), (60, 23684), (68, 23708), (74, 23729), (75, 23735),

Gene: Fancypants\_10 Start: 7099, Stop: 7503, Start Num: 25

Candidate Starts for Fancypants\_10:

(Start: 25 @7099 has 221 MA's), (29, 7138), (Start: 36 @7180 has 5 MA's), (38, 7195), (40, 7207), (49, 7264), (50, 7270), (58, 7318), (59, 7333), (60, 7336), (65, 7360), (75, 7411), (77, 7417), (80, 7459), (81, 7468),

Gene: Fastidio\_10 Start: 7098, Stop: 7502, Start Num: 25

Candidate Starts for Fastidio\_10:

(Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (Start: 28 @7134 has 2 MA's), (29, 7137), (Start: 32 @7155 has 1 MA's), (Start: 36 @7179 has 5 MA's), (38, 7194), (40, 7206), (47, 7254), (49, 7263), (50, 7269), (58, 7317), (59, 7332), (69, 7383), (70, 7386), (75, 7410), (77, 7416), (79, 7455), (80, 7458), (81, 7467),

Gene: Filch\_18 Start: 10169, Stop: 10573, Start Num: 24

Candidate Starts for Filch\_18:

(15, 10136), (20, 10157), (Start: 24 @10169 has 128 MA's), (49, 10340), (51, 10352), (59, 10409), (75, 10478), (84, 10559), (85, 10568),

Gene: Filuzino\_10 Start: 7179, Stop: 7505, Start Num: 36

Candidate Starts for Filuzino\_10:

(9, 7020), (13, 7053), (Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (41, 7209), (44, 7227), (47, 7254), (49, 7263), (50, 7269), (56, 7305), (58, 7317), (59, 7332), (63, 7347), (64, 7356), (66, 7362), (69, 7383), (71, 7389), (76, 7413), (77, 7416), (81, 7467),

Gene: FireRed\_17 Start: 10457, Stop: 10861, Start Num: 24

Candidate Starts for FireRed\_17:

(15, 10424), (20, 10445), (Start: 24 @10457 has 128 MA's), (49, 10628), (51, 10640), (59, 10697), (75, 10766), (84, 10847), (85, 10856),

Gene: Firecracker\_46 Start: 22988, Stop: 23440, Start Num: 16

Candidate Starts for Firecracker\_46:

(Start: 16 @22988 has 80 MA's), (Start: 28 @23081 has 2 MA's), (29, 23084), (30, 23093), (Start: 32 @23102 has 1 MA's), (43, 23165), (48, 23207), (52, 23225), (53, 23237), (59, 23288), (60, 23291), (68, 23315), (74, 23336), (75, 23342),

Gene: Firehouse51\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Firehouse51\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: FirstPlacePfu\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for FirstPlacePfu\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: Fishburne\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for Fishburne\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: Flathead\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Flathead\_11:

(7, 6845), (Start: 25 @6947 has 221 MA's), (Start: 27 @6980 has 4 MA's), (Start: 28 @6983 has 2 MA's), (29, 6986), (Start: 32 @7004 has 1 MA's), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (75, 7259), (77, 7265), (81, 7316),

Gene: Florinda\_10 Start: 7115, Stop: 7519, Start Num: 25

Candidate Starts for Florinda\_10:

(Start: 25 @7115 has 221 MA's), (Start: 27 @7148 has 4 MA's), (Start: 28 @7151 has 2 MA's), (29, 7154), (Start: 32 @7172 has 1 MA's), (Start: 36 @7196 has 5 MA's), (38, 7211), (40, 7223), (49, 7280), (50, 7286), (58, 7334), (59, 7349), (60, 7352), (65, 7376), (75, 7427), (77, 7433), (81, 7484),

Gene: Flypotenuse\_16 Start: 10564, Stop: 10968, Start Num: 24

Candidate Starts for Flypotenuse\_16:

(15, 10531), (20, 10552), (Start: 24 @10564 has 128 MA's), (49, 10735), (51, 10747), (59, 10804), (75, 10873), (84, 10954), (85, 10963),

Gene: FoghornLeghorn\_17 Start: 10452, Stop: 10856, Start Num: 24

Candidate Starts for FoghornLeghorn\_17:

(15, 10419), (20, 10440), (Start: 24 @10452 has 128 MA's), (49, 10623), (51, 10635), (59, 10692), (75, 10761), (84, 10842), (85, 10851),

Gene: FoulBall\_46 Start: 23375, Stop: 23827, Start Num: 16

Candidate Starts for FoulBall\_46:

(11, 23333), (Start: 16 @23375 has 80 MA's), (Start: 28 @23468 has 2 MA's), (29, 23471), (Start: 32 @23489 has 1 MA's), (43, 23552), (48, 23594), (52, 23612), (53, 23624), (59, 23675), (60, 23678), (68, 23702), (74, 23723), (75, 23729),

Gene: Frankie\_11 Start: 7141, Stop: 7545, Start Num: 25

Candidate Starts for Frankie\_11:

(Start: 25 @7141 has 221 MA's), (Start: 27 @7174 has 4 MA's), (Start: 28 @7177 has 2 MA's), (29, 7180), (Start: 32 @7198 has 1 MA's), (Start: 36 @7222 has 5 MA's), (38, 7237), (40, 7249), (41, 7252), (47, 7297), (49, 7306), (50, 7312), (58, 7360), (59, 7375), (75, 7453), (77, 7459), (80, 7501), (81, 7510),

Gene: FreddyB\_10 Start: 7099, Stop: 7500, Start Num: 26

Candidate Starts for FreddyB\_10:

(Start: 25 @7096 has 221 MA's), (Start: 26 @7099 has 3 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: Fruitloop\_10 Start: 7131, Stop: 7505, Start Num: 27

Candidate Starts for Fruitloop\_10:

(9, 7020), (13, 7053), (Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (41, 7209), (44, 7227), (47, 7254), (49, 7263), (50, 7269), (56, 7305), (58, 7317), (59, 7332), (63, 7347), (64, 7356), (66, 7362), (69, 7383), (71, 7389), (76, 7413), (77, 7416), (81, 7467),

Gene: Fulbright\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Fulbright\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: GUmbie\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for GUmbie\_10:

(Start: 25 @7112 has 221 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (65, 7373), (77, 7430), (80, 7472), (81, 7481),

Gene: Gage\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for Gage\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: Galactic\_10 Start: 7071, Stop: 7478, Start Num: 25

Candidate Starts for Galactic\_10:

(9, 6993), (13, 7026), (Start: 25 @7071 has 221 MA's), (Start: 27 @7104 has 4 MA's), (29, 7110), (Start: 36 @7152 has 5 MA's), (38, 7167), (41, 7182), (44, 7200), (47, 7227), (49, 7236), (50, 7242), (56, 7278), (58, 7290), (59, 7305), (63, 7320), (64, 7329), (66, 7335), (69, 7356), (71, 7362), (76, 7386), (77, 7389), (81, 7440),

Gene: GaloreK\_13 Start: 8294, Stop: 8731, Start Num: 16

Candidate Starts for GaloreK\_13:

(Start: 16 @8294 has 80 MA's), (31, 8360), (59, 8552), (60, 8555), (67, 8591), (74, 8624), (82, 8699), (83, 8705),

Gene: Gandolph\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for Gandolph\_10:

(Start: 25 @7112 has 221 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: Gator\_16 Start: 10563, Stop: 10967, Start Num: 24

Candidate Starts for Gator\_16:

(15, 10530), (20, 10551), (Start: 24 @10563 has 128 MA's), (49, 10734), (51, 10746), (59, 10803), (75, 10872), (84, 10953), (85, 10962),

Gene: Gavriela\_13 Start: 8309, Stop: 8746, Start Num: 16

Candidate Starts for Gavriela\_13:

(6, 8228), (Start: 16 @8309 has 80 MA's), (31, 8375), (59, 8567), (60, 8570), (67, 8606), (74, 8639), (82, 8714), (83, 8720),

Gene: Gemini\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for Gemini\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: Geralt\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Geralt\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Gex\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Gex\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: GigiOuiOui\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for GigiOuiOui\_10:

(Start: 25 @7112 has 221 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: Girafales\_11 Start: 6943, Stop: 7347, Start Num: 25

Candidate Starts for Girafales\_11:

(Start: 25 @6943 has 221 MA's), (29, 6982), (Start: 36 @7024 has 5 MA's), (38, 7039), (40, 7051), (49, 7108), (50, 7114), (58, 7162), (59, 7177), (65, 7204), (75, 7255), (77, 7261), (80, 7303), (81, 7312),

Gene: Girr\_10 Start: 7101, Stop: 7505, Start Num: 25

Candidate Starts for Girr\_10:

(Start: 25 @7101 has 221 MA's), (Start: 27 @7134 has 4 MA's), (Start: 28 @7137 has 2 MA's), (29, 7140), (Start: 36 @7182 has 5 MA's), (38, 7197), (40, 7209), (49, 7266), (50, 7272), (58, 7320), (59, 7335), (60, 7338), (65, 7362), (75, 7413), (77, 7419), (80, 7461), (81, 7470),

Gene: Glaske\_13 Start: 8309, Stop: 8746, Start Num: 16

Candidate Starts for Glaske\_13:

(6, 8228), (Start: 16 @8309 has 80 MA's), (31, 8375), (59, 8567), (60, 8570), (67, 8606), (74, 8639), (82, 8714), (83, 8720),

Gene: Glexan\_16 Start: 10564, Stop: 10968, Start Num: 24

Candidate Starts for Glexan\_16:

(15, 10531), (20, 10552), (Start: 24 @10564 has 128 MA's), (49, 10735), (51, 10747), (59, 10804), (75, 10873), (84, 10954), (85, 10963),

Gene: Goku\_18 Start: 10656, Stop: 11060, Start Num: 24

Candidate Starts for Goku\_18:

(15, 10623), (20, 10644), (Start: 24 @10656 has 128 MA's), (49, 10827), (51, 10839), (59, 10896), (75, 10965), (84, 11046), (85, 11055),

Gene: GoldenSpark\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for GoldenSpark\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: Goldilocks\_19 Start: 10358, Stop: 10762, Start Num: 24

Candidate Starts for Goldilocks\_19:

(15, 10325), (20, 10346), (Start: 24 @10358 has 128 MA's), (49, 10529), (51, 10541), (59, 10598), (75, 10667), (84, 10748), (85, 10757),

Gene: GooberAzure\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for GooberAzure\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: Gorge\_10 Start: 7084, Stop: 7488, Start Num: 25

Candidate Starts for Gorge\_10:

(Start: 25 @7084 has 221 MA's), (Start: 26 @7087 has 3 MA's), (Start: 27 @7117 has 4 MA's), (Start: 28 @7120 has 2 MA's), (29, 7123), (Start: 32 @7141 has 1 MA's), (Start: 36 @7165 has 5 MA's), (38, 7180), (40, 7192), (47, 7240), (49, 7249), (50, 7255), (58, 7303), (59, 7318), (75, 7396), (77, 7402), (79, 7441), (80, 7444), (81, 7453),

Gene: GreaseLightnin\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for GreaseLightnin\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: Greep\_18 Start: 10734, Stop: 11138, Start Num: 24

Candidate Starts for Greep\_18:

(15, 10701), (20, 10722), (Start: 24 @10734 has 128 MA's), (49, 10905), (51, 10917), (59, 10974), (75, 11043), (84, 11124), (85, 11133),

Gene: Grimmer\_11 Start: 7750, Stop: 8154, Start Num: 25

Candidate Starts for Grimmer\_11:

(Start: 25 @7750 has 221 MA's), (29, 7789), (Start: 36 @7831 has 5 MA's), (38, 7846), (40, 7858), (49, 7915), (50, 7921), (58, 7969), (59, 7984), (60, 7987), (65, 8011), (77, 8068), (80, 8110), (81, 8119),

Gene: Guppsters\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Guppsters\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (61, 7340), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: HC\_12 Start: 8354, Stop: 8773, Start Num: 22

Candidate Starts for HC\_12:

(Start: 22 @8354 has 9 MA's), (30, 8411), (33, 8423), (48, 8528), (59, 8600), (75, 8675), (78, 8696), (80, 8720),

Gene: HUHilltop\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for HUHilltop\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: Hades\_10 Start: 7098, Stop: 7502, Start Num: 25

Candidate Starts for Hades\_10:

(Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (Start: 28 @7134 has 2 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (40, 7206), (49, 7263), (50, 7269), (58, 7317), (59, 7332), (60, 7335), (65, 7359), (75, 7410), (77, 7416), (80, 7458), (81, 7467),

Gene: Hamulus\_10 Start: 7098, Stop: 7505, Start Num: 25

Candidate Starts for Hamulus\_10:

(9, 7020), (13, 7053), (Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (41, 7209), (44, 7227), (47, 7254), (49, 7263), (50, 7269), (56, 7305), (58, 7317), (59, 7332), (63, 7347), (64, 7356), (66, 7362), (69, 7383), (71, 7389), (76, 7413), (77, 7416), (81, 7467),

Gene: HanKaySha\_18 Start: 10159, Stop: 10563, Start Num: 24

Candidate Starts for HanKaySha\_18:

(15, 10126), (20, 10147), (Start: 24 @10159 has 128 MA's), (49, 10330), (51, 10342), (59, 10399), (75, 10468), (84, 10549), (85, 10558),

Gene: Hanako\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Hanako\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: Harella\_16 Start: 10564, Stop: 10968, Start Num: 24

Candidate Starts for Harella\_16:

(15, 10531), (20, 10552), (Start: 24 @10564 has 128 MA's), (49, 10735), (51, 10747), (59, 10804), (75, 10873), (84, 10954), (85, 10963),

Gene: Harley\_10 Start: 7085, Stop: 7489, Start Num: 25

Candidate Starts for Harley\_10:

(9, 7007), (Start: 25 @7085 has 221 MA's), (Start: 27 @7118 has 4 MA's), (Start: 28 @7121 has 2 MA's), (29, 7124), (Start: 36 @7166 has 5 MA's), (38, 7181), (40, 7193), (49, 7250), (50, 7256), (58, 7304), (59, 7319), (60, 7322), (65, 7346), (75, 7397), (77, 7403), (80, 7445), (81, 7454),

Gene: Hegedechwinu\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Hegedechwinu\_11:

(7, 6845), (Start: 25 @6947 has 221 MA's), (Start: 27 @6980 has 4 MA's), (Start: 28 @6983 has 2 MA's), (29, 6986), (Start: 32 @7004 has 1 MA's), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (75, 7259), (77, 7265), (81, 7316),

Gene: Henry\_18 Start: 10947, Stop: 11351, Start Num: 24

Candidate Starts for Henry\_18:

(15, 10914), (20, 10935), (Start: 24 @10947 has 128 MA's), (49, 11118), (51, 11130), (59, 11187), (75, 11256), (84, 11337), (85, 11346),

Gene: Highbury\_18 Start: 10078, Stop: 10482, Start Num: 24

Candidate Starts for Highbury\_18:

(15, 10045), (20, 10066), (Start: 24 @10078 has 128 MA's), (49, 10249), (51, 10261), (59, 10318), (75, 10387), (84, 10468), (85, 10477),

Gene: Hlubikazi\_10 Start: 7085, Stop: 7489, Start Num: 25

Candidate Starts for Hlubikazi\_10:

(Start: 25 @7085 has 221 MA's), (Start: 27 @7118 has 4 MA's), (Start: 28 @7121 has 2 MA's), (29, 7124), (Start: 32 @7142 has 1 MA's), (Start: 36 @7166 has 5 MA's), (38, 7181), (40, 7193), (49, 7250), (50, 7256), (58, 7304), (59, 7319), (65, 7346), (75, 7397), (77, 7403), (80, 7445), (81, 7454),

Gene: Holt\_19 Start: 10231, Stop: 10635, Start Num: 24

Candidate Starts for Holt\_19:

(15, 10198), (20, 10219), (Start: 24 @10231 has 128 MA's), (49, 10402), (51, 10414), (59, 10471), (75, 10540), (84, 10621), (85, 10630),

Gene: Hoonter\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for Hoonter\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: Hokey\_18 Start: 10169, Stop: 10573, Start Num: 24

Candidate Starts for Hokey\_18:

(15, 10136), (20, 10157), (Start: 24 @10169 has 128 MA's), (49, 10340), (51, 10352), (59, 10409), (75, 10478), (84, 10559), (85, 10568),

Gene: HufflyPuff\_16 Start: 10413, Stop: 10817, Start Num: 24

Candidate Starts for HufflyPuff\_16:

(15, 10380), (20, 10401), (Start: 24 @10413 has 128 MA's), (49, 10584), (51, 10596), (59, 10653), (75, 10722), (84, 10803), (85, 10812),

Gene: IHOP\_17 Start: 10607, Stop: 11011, Start Num: 24

Candidate Starts for IHOP\_17:

(15, 10574), (20, 10595), (Start: 24 @10607 has 128 MA's), (49, 10778), (51, 10790), (59, 10847), (75, 10916), (84, 10997), (85, 11006),

Gene: IMpilo\_10 Start: 7085, Stop: 7492, Start Num: 25

Candidate Starts for IMpilo\_10:

(9, 7007), (13, 7040), (Start: 25 @7085 has 221 MA's), (Start: 27 @7118 has 4 MA's), (29, 7124), (Start: 36 @7166 has 5 MA's), (38, 7181), (41, 7196), (44, 7214), (47, 7241), (49, 7250), (50, 7256), (56, 7292), (58, 7304), (59, 7319), (61, 7328), (63, 7334), (64, 7343), (66, 7349), (69, 7370), (71, 7376), (76, 7400), (77, 7403), (81, 7454),

Gene: IbOuu\_10 Start: 7094, Stop: 7498, Start Num: 25

Candidate Starts for IbOuu\_10:

(Start: 25 @7094 has 221 MA's), (29, 7133), (Start: 32 @7151 has 1 MA's), (Start: 36 @7175 has 5 MA's), (38, 7190), (40, 7202), (41, 7205), (47, 7250), (49, 7259), (50, 7265), (58, 7313), (59, 7328), (75, 7406), (77, 7412), (79, 7451), (80, 7454), (81, 7463),

Gene: Ibhubesi\_10 Start: 7121, Stop: 7489, Start Num: 28

Candidate Starts for Ibhubesi\_10:

(9, 7007), (Start: 25 @7085 has 221 MA's), (Start: 27 @7118 has 4 MA's), (Start: 28 @7121 has 2 MA's), (29, 7124), (Start: 36 @7166 has 5 MA's), (38, 7181), (40, 7193), (49, 7250), (50, 7256), (58, 7304), (59, 7319), (60, 7322), (65, 7346), (75, 7397), (77, 7403), (80, 7445), (81, 7454),

Gene: Icee\_17 Start: 10607, Stop: 11011, Start Num: 24

Candidate Starts for Icee\_17:

(15, 10574), (20, 10595), (Start: 24 @10607 has 128 MA's), (49, 10778), (51, 10790), (59, 10847), (75, 10916), (84, 10997), (85, 11006),

Gene: Idergollasper\_46 Start: 23375, Stop: 23827, Start Num: 16

Candidate Starts for Idergollasper\_46:

(11, 23333), (Start: 16 @23375 has 80 MA's), (Start: 28 @23468 has 2 MA's), (29, 23471), (Start: 32 @23489 has 1 MA's), (43, 23552), (48, 23594), (52, 23612), (53, 23624), (59, 23675), (60, 23678), (68, 23702), (74, 23723), (75, 23729),

Gene: Imara\_44 Start: 23184, Stop: 23636, Start Num: 16

Candidate Starts for Imara\_44:

(Start: 16 @23184 has 80 MA's), (Start: 28 @23277 has 2 MA's), (29, 23280), (Start: 32 @23298 has 1 MA's), (43, 23361), (48, 23403), (52, 23421), (53, 23433), (59, 23484), (60, 23487), (68, 23511), (74, 23532), (75, 23538),

Gene: Impisi\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Impisi\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: Inca\_17 Start: 9627, Stop: 10031, Start Num: 24

Candidate Starts for Inca\_17:

(15, 9594), (20, 9615), (Start: 24 @9627 has 128 MA's), (49, 9798), (51, 9810), (59, 9867), (75, 9936), (84, 10017), (85, 10026),

Gene: Inventum\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Inventum\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: IrishSherpFalk\_10 Start: 7083, Stop: 7490, Start Num: 25

Candidate Starts for IrishSherpFalk\_10:

(9, 7005), (Start: 25 @7083 has 221 MA's), (Start: 27 @7116 has 4 MA's), (29, 7122), (Start: 36 @7164 has 5 MA's), (38, 7179), (41, 7194), (44, 7212), (47, 7239), (49, 7248), (50, 7254), (56, 7290), (58, 7302), (59, 7317), (61, 7326), (63, 7332), (64, 7341), (66, 7347), (69, 7368), (71, 7374), (76, 7398), (77, 7401), (81, 7452),

Gene: Island3\_12 Start: 8355, Stop: 8774, Start Num: 22

Candidate Starts for Island3\_12:

(Start: 22 @8355 has 9 MA's), (30, 8412), (33, 8424), (48, 8529), (59, 8601), (60, 8604), (75, 8676), (78, 8697), (80, 8721),

Gene: JalFarm20\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for JalFarm20\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (41, 7059), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (60, 7185), (65,

7209), (75, 7260), (77, 7266), (80, 7308), (81, 7317),

Gene: James\_10 Start: 7168, Stop: 7491, Start Num: 36

Candidate Starts for James\_10:

(Start: 25 @7087 has 221 MA's), (29, 7126), (Start: 36 @7168 has 5 MA's), (38, 7183), (40, 7195), (49, 7252), (58, 7306), (59, 7321), (62, 7333), (65, 7348), (75, 7399), (76, 7402), (77, 7405), (80, 7447), (81, 7456),

Gene: Jamie19\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Jamie19\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: JangDynasty\_46 Start: 23470, Stop: 23922, Start Num: 16

Candidate Starts for JangDynasty\_46:

(Start: 16 @23470 has 80 MA's), (Start: 28 @23563 has 2 MA's), (29, 23566), (Start: 32 @23584 has 1 MA's), (43, 23647), (48, 23689), (52, 23707), (53, 23719), (59, 23770), (60, 23773), (68, 23797), (74, 23818), (75, 23824),

Gene: Jant\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Jant\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Jacob\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for Jacob\_10:

(Start: 25 @7096 has 221 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (69, 7381), (70, 7384), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: JeTaime\_19 Start: 11209, Stop: 11613, Start Num: 24

Candidate Starts for JeTaime\_19:

(15, 11176), (20, 11197), (Start: 24 @11209 has 128 MA's), (49, 11380), (51, 11392), (59, 11449), (75, 11518), (84, 11599), (85, 11608),

Gene: Jebeks\_13 Start: 8287, Stop: 8724, Start Num: 16

Candidate Starts for Jebeks\_13:

(Start: 16 @8287 has 80 MA's), (31, 8353), (59, 8545), (60, 8548), (67, 8584), (74, 8617), (82, 8692), (83, 8698),

Gene: Jennelsea\_10 Start: 7083, Stop: 7487, Start Num: 25

Candidate Starts for Jennelsea\_10:

(Start: 25 @7083 has 221 MA's), (Start: 26 @7086 has 3 MA's), (Start: 27 @7116 has 4 MA's), (Start: 28 @7119 has 2 MA's), (29, 7122), (Start: 32 @7140 has 1 MA's), (Start: 36 @7164 has 5 MA's), (38, 7179), (40, 7191), (47, 7239), (49, 7248), (50, 7254), (58, 7302), (59, 7317), (75, 7395), (77, 7401), (79, 7440), (80, 7443), (81, 7452),

Gene: Jinglebell\_10 Start: 7094, Stop: 7498, Start Num: 25

Candidate Starts for Jinglebell\_10:

(Start: 25 @7094 has 221 MA's), (29, 7133), (Start: 32 @7151 has 1 MA's), (Start: 36 @7175 has 5 MA's), (38, 7190), (40, 7202), (41, 7205), (49, 7259), (50, 7265), (58, 7313), (59, 7328), (60, 7331), (65, 7355), (75, 7406), (77, 7412), (80, 7454), (81, 7463),

Gene: Job42\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Job42\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: JoeyJr\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for JoeyJr\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Journey\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Journey\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Juice456\_11 Start: 6949, Stop: 7353, Start Num: 25

Candidate Starts for Juice456\_11:

(Start: 25 @6949 has 221 MA's), (29, 6988), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (41, 7060), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (65, 7210), (75, 7261), (77, 7267), (79, 7306), (80, 7309), (81, 7318),

Gene: Jung\_13 Start: 8333, Stop: 8770, Start Num: 16

Candidate Starts for Jung\_13:

(6, 8252), (Start: 16 @8333 has 80 MA's), (59, 8591), (60, 8594), (74, 8663), (82, 8738), (83, 8744),

Gene: Juniormint\_13 Start: 8326, Stop: 8763, Start Num: 16

Candidate Starts for Juniormint\_13:

(6, 8245), (Start: 16 @8326 has 80 MA's), (31, 8392), (59, 8584), (60, 8587), (67, 8623), (74, 8656), (82, 8731), (83, 8737),

Gene: Juniper1\_10 Start: 7087, Stop: 7491, Start Num: 25

Candidate Starts for Juniper1\_10:

(Start: 25 @7087 has 221 MA's), (29, 7126), (Start: 32 @7144 has 1 MA's), (Start: 36 @7168 has 5 MA's), (38, 7183), (40, 7195), (49, 7252), (50, 7258), (58, 7306), (59, 7321), (60, 7324), (65, 7348), (75, 7399), (77, 7405), (80, 7447), (81, 7456),

Gene: Kanye\_19 Start: 11397, Stop: 11801, Start Num: 24

Candidate Starts for Kanye\_19:

(15, 11364), (20, 11385), (Start: 24 @11397 has 128 MA's), (49, 11568), (51, 11580), (59, 11637), (75, 11706), (84, 11787), (85, 11796),

Gene: Karhdo\_10 Start: 7099, Stop: 7503, Start Num: 25

Candidate Starts for Karhdo\_10:

(Start: 25 @7099 has 221 MA's), (Start: 27 @7132 has 4 MA's), (Start: 28 @7135 has 2 MA's), (29, 7138), (Start: 36 @7180 has 5 MA's), (38, 7195), (40, 7207), (49, 7264), (50, 7270), (58, 7318), (59, 7333), (65, 7360), (77, 7417), (80, 7459), (81, 7468),

Gene: Kari\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for Kari\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: Kenuha5\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Kenuha5\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (29, 7136), (38, 7193), (41, 7208), (44, 7226), (45, 7232), (46, 7241), (47, 7253), (49, 7262), (50, 7268), (55, 7292), (58, 7316), (59, 7331), (61, 7340), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (77, 7415), (81, 7466),

Gene: Kersh\_10 Start: 7088, Stop: 7492, Start Num: 25

Candidate Starts for Kersh\_10:

(Start: 25 @7088 has 221 MA's), (29, 7127), (Start: 36 @7169 has 5 MA's), (38, 7184), (40, 7196), (49, 7253), (50, 7259), (58, 7307), (59, 7322), (62, 7334), (65, 7349), (75, 7400), (77, 7406), (80, 7448), (81, 7457),

Gene: Kevin1\_12 Start: 7363, Stop: 7782, Start Num: 21

Candidate Starts for Kevin1\_12:

(2, 7192), (Start: 21 @7363 has 46 MA's), (Start: 28 @7408 has 2 MA's), (49, 7534), (59, 7612), (71, 7666), (74, 7681),

Gene: KilKor\_13 Start: 8309, Stop: 8746, Start Num: 16

Candidate Starts for KilKor\_13:

(6, 8228), (Start: 16 @8309 has 80 MA's), (31, 8375), (59, 8567), (60, 8570), (67, 8606), (74, 8639), (82, 8714), (83, 8720),

Gene: Kimberlium\_11 Start: 6949, Stop: 7353, Start Num: 25

Candidate Starts for Kimberlium\_11:

(Start: 25 @6949 has 221 MA's), (29, 6988), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (41, 7060), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (65, 7210), (75, 7261), (77, 7267), (79, 7306), (80, 7309), (81, 7318),

Gene: Kimchi\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for Kimchi\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: KingJulian\_10 Start: 7098, Stop: 7505, Start Num: 25

Candidate Starts for KingJulian\_10:

(9, 7020), (13, 7053), (Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (41, 7209), (44, 7227), (47, 7254), (49, 7263), (50, 7269), (56, 7305), (58, 7317), (59, 7332), (63, 7347), (64, 7356), (66, 7362), (69, 7383), (71, 7389), (76, 7413), (77, 7416), (81, 7467),

Gene: KingMidas\_10 Start: 7176, Stop: 7499, Start Num: 36

Candidate Starts for KingMidas\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: KingPhillip3\_45 Start: 23375, Stop: 23827, Start Num: 16

Candidate Starts for KingPhillip3\_45:

(11, 23333), (Start: 16 @23375 has 80 MA's), (Start: 28 @23468 has 2 MA's), (29, 23471), (Start: 32 @23489 has 1 MA's), (43, 23552), (48, 23594), (52, 23612), (53, 23624), (59, 23675), (60, 23678), (68,

23702), (74, 23723), (75, 23729),

Gene: Kingsley\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Kingsley\_11:

(Start: 25 @6947 has 221 MA's), (29, 6986), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (69, 7232), (70, 7235), (75, 7259), (77, 7265), (79, 7304), (80, 7307), (81, 7316),

Gene: Koella\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Koella\_10:

(Start: 25 @7095 has 221 MA's), (Start: 26 @7098 has 3 MA's), (Start: 27 @7128 has 4 MA's), (Start: 28 @7131 has 2 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Kostya\_18 Start: 10947, Stop: 11351, Start Num: 24

Candidate Starts for Kostya\_18:

(15, 10914), (20, 10935), (Start: 24 @10947 has 128 MA's), (49, 11118), (51, 11130), (59, 11187), (75, 11256), (84, 11337), (85, 11346),

Gene: Krakatau\_11 Start: 7782, Stop: 8156, Start Num: 27

Candidate Starts for Krakatau\_11:

(9, 7671), (13, 7704), (Start: 25 @7749 has 221 MA's), (Start: 27 @7782 has 4 MA's), (29, 7788), (Start: 36 @7830 has 5 MA's), (38, 7845), (41, 7860), (44, 7878), (47, 7905), (49, 7914), (50, 7920), (56, 7956), (58, 7968), (59, 7983), (63, 7998), (64, 8007), (66, 8013), (69, 8034), (71, 8040), (76, 8064), (77, 8067), (81, 8118),

Gene: Krili\_45 Start: 23092, Stop: 23544, Start Num: 16

Candidate Starts for Krili\_45:

(Start: 16 @23092 has 80 MA's), (Start: 28 @23185 has 2 MA's), (29, 23188), (30, 23197), (Start: 32 @23206 has 1 MA's), (43, 23269), (48, 23311), (52, 23329), (53, 23341), (59, 23392), (60, 23395), (68, 23419), (74, 23440), (75, 23446),

Gene: KristaRAM\_11 Start: 7745, Stop: 8152, Start Num: 25

Candidate Starts for KristaRAM\_11:

(9, 7667), (13, 7700), (Start: 25 @7745 has 221 MA's), (Start: 27 @7778 has 4 MA's), (29, 7784), (Start: 36 @7826 has 5 MA's), (38, 7841), (41, 7856), (44, 7874), (47, 7901), (49, 7910), (50, 7916), (56, 7952), (58, 7964), (59, 7979), (63, 7994), (64, 8003), (66, 8009), (69, 8030), (71, 8036), (76, 8060), (77, 8063), (81, 8114),

Gene: Ksquared\_13 Start: 8322, Stop: 8759, Start Num: 16

Candidate Starts for Ksquared\_13:

(6, 8241), (Start: 16 @8322 has 80 MA's), (31, 8388), (59, 8580), (60, 8583), (67, 8619), (74, 8652), (82, 8727), (83, 8733),

Gene: Langerak\_13 Start: 8287, Stop: 8724, Start Num: 16

Candidate Starts for Langerak\_13:

(Start: 16 @8287 has 80 MA's), (31, 8353), (59, 8545), (60, 8548), (67, 8584), (74, 8617), (82, 8692), (83, 8698),

Gene: LastJedi\_10 Start: 7168, Stop: 7491, Start Num: 36

Candidate Starts for LastJedi\_10:

(Start: 25 @7087 has 221 MA's), (29, 7126), (Start: 36 @7168 has 5 MA's), (38, 7183), (40, 7195), (49, 7252), (58, 7306), (59, 7321), (62, 7333), (65, 7348), (75, 7399), (76, 7402), (77, 7405), (80, 7447), (81, 7456),

Gene: Latretium\_10 Start: 7084, Stop: 7488, Start Num: 25

Candidate Starts for Latretium\_10:

(Start: 25 @7084 has 221 MA's), (29, 7123), (Start: 36 @7165 has 5 MA's), (38, 7180), (40, 7192), (49, 7249), (50, 7255), (58, 7303), (59, 7318), (60, 7321), (65, 7345), (75, 7396), (77, 7402), (80, 7444), (81, 7453),

Gene: Leozinho\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Leozinho\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (41, 7059), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (62, 7194), (65, 7209), (75, 7260), (77, 7266), (80, 7308), (81, 7317),

Gene: Leperchaun\_10 Start: 7084, Stop: 7488, Start Num: 25

Candidate Starts for Leperchaun\_10:

(Start: 25 @7084 has 221 MA's), (29, 7123), (Start: 32 @7141 has 1 MA's), (Start: 36 @7165 has 5 MA's), (38, 7180), (40, 7192), (41, 7195), (47, 7240), (49, 7249), (50, 7255), (58, 7303), (59, 7318), (75, 7396), (77, 7402), (79, 7441), (80, 7444), (81, 7453),

Gene: LilMoolah\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for LilMoolah\_10:

(Start: 25 @7096 has 221 MA's), (Start: 26 @7099 has 3 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (69, 7381), (70, 7384), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: Lilac\_19 Start: 9905, Stop: 10309, Start Num: 24

Candidate Starts for Lilac\_19:

(15, 9872), (20, 9893), (Start: 24 @9905 has 128 MA's), (49, 10076), (51, 10088), (59, 10145), (75, 10214), (84, 10295), (85, 10304),

Gene: Lilizi\_19 Start: 10116, Stop: 10520, Start Num: 24

Candidate Starts for Lilizi\_19:

(15, 10083), (20, 10104), (Start: 24 @10116 has 128 MA's), (49, 10287), (51, 10299), (59, 10356), (75, 10425), (84, 10506), (85, 10515),

Gene: Lilpickle\_16 Start: 9624, Stop: 10028, Start Num: 24

Candidate Starts for Lilpickle\_16:

(15, 9591), (20, 9612), (Start: 24 @9624 has 128 MA's), (49, 9795), (51, 9807), (59, 9864), (75, 9933), (84, 10014), (85, 10023),

Gene: LittleShirley\_11 Start: 6949, Stop: 7353, Start Num: 25

Candidate Starts for LittleShirley\_11:

(Start: 25 @6949 has 221 MA's), (29, 6988), (Start: 32 @7006 has 1 MA's), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (41, 7060), (47, 7105), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (75, 7261), (77, 7267), (79, 7306), (80, 7309), (81, 7318),

Gene: Lizziana\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for Lizziana\_10:

(Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (69, 7382), (70, 7385), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: Llama\_10 Start: 7094, Stop: 7498, Start Num: 25

Candidate Starts for Llama\_10:

(Start: 25 @7094 has 221 MA's), (29, 7133), (Start: 32 @7151 has 1 MA's), (Start: 36 @7175 has 5 MA's), (38, 7190), (40, 7202), (41, 7205), (49, 7259), (50, 7265), (58, 7313), (59, 7328), (60, 7331), (65, 7355), (75, 7406), (77, 7412), (80, 7454), (81, 7463),

Gene: Llij\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for Llij\_10:

(Start: 25 @7112 has 221 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: LordVader\_12 Start: 6943, Stop: 7347, Start Num: 25

Candidate Starts for LordVader\_12:

(Start: 25 @6943 has 221 MA's), (Start: 27 @6976 has 4 MA's), (29, 6982), (34, 7009), (Start: 36 @7024 has 5 MA's), (38, 7039), (40, 7051), (47, 7099), (49, 7108), (50, 7114), (58, 7162), (59, 7177), (69, 7228), (70, 7231), (75, 7255), (77, 7261), (80, 7303), (81, 7312),

Gene: Lorde\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Lorde\_11:

(Start: 25 @6948 has 221 MA's), (Start: 27 @6981 has 4 MA's), (Start: 28 @6984 has 2 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (60, 7185), (65, 7209), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: Lucia\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Lucia\_11:

(Start: 25 @6948 has 221 MA's), (Start: 27 @6981 has 4 MA's), (Start: 28 @6984 has 2 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: LunaBlu\_10 Start: 7071, Stop: 7478, Start Num: 25

Candidate Starts for LunaBlu\_10:

(9, 6993), (13, 7026), (Start: 25 @7071 has 221 MA's), (Start: 27 @7104 has 4 MA's), (29, 7110), (Start: 36 @7152 has 5 MA's), (38, 7167), (41, 7182), (44, 7200), (47, 7227), (49, 7236), (50, 7242), (56, 7278), (58, 7290), (59, 7305), (63, 7320), (64, 7329), (66, 7335), (69, 7356), (71, 7362), (76, 7386), (77, 7389), (81, 7440),

Gene: LunaStella\_11 Start: 7533, Stop: 7958, Start Num: 25

Candidate Starts for LunaStella\_11:

(13, 7488), (Start: 25 @7533 has 221 MA's), (Start: 27 @7581 has 4 MA's), (Start: 28 @7584 has 2 MA's), (29, 7587), (35, 7620), (50, 7719), (59, 7782), (67, 7821), (70, 7839), (71, 7842), (72, 7848), (77, 7869), (79, 7905), (81, 7917),

Gene: MISSy\_17 Start: 10457, Stop: 10861, Start Num: 24

Candidate Starts for MISSy\_17:

(15, 10424), (20, 10445), (Start: 24 @10457 has 128 MA's), (49, 10628), (51, 10640), (59, 10697), (75, 10766), (84, 10847), (85, 10856),

Gene: MPhalcon\_17 Start: 10457, Stop: 10861, Start Num: 24

Candidate Starts for MPhalcon\_17:

(15, 10424), (20, 10445), (Start: 24 @10457 has 128 MA's), (49, 10628), (51, 10640), (59, 10697), (75, 10766), (84, 10847), (85, 10856),

Gene: MadKillah\_47 Start: 23314, Stop: 23766, Start Num: 16

Candidate Starts for MadKillah\_47:

(Start: 16 @23314 has 80 MA's), (Start: 28 @23407 has 2 MA's), (29, 23410), (30, 23419), (Start: 32 @23428 has 1 MA's), (43, 23491), (48, 23533), (52, 23551), (53, 23563), (59, 23614), (60, 23617), (68, 23641), (74, 23662), (75, 23668),

Gene: MadMen\_10 Start: 7111, Stop: 7515, Start Num: 25

Candidate Starts for MadMen\_10:

(Start: 25 @7111 has 221 MA's), (Start: 27 @7144 has 4 MA's), (Start: 28 @7147 has 2 MA's), (29, 7150), (Start: 32 @7168 has 1 MA's), (Start: 36 @7192 has 5 MA's), (38, 7207), (40, 7219), (41, 7222), (47, 7267), (49, 7276), (50, 7282), (58, 7330), (59, 7345), (60, 7348), (75, 7423), (77, 7429), (79, 7468), (80, 7471), (81, 7480),

Gene: MadamMonkfish\_17 Start: 9835, Stop: 10239, Start Num: 24

Candidate Starts for MadamMonkfish\_17:

(15, 9802), (20, 9823), (Start: 24 @9835 has 128 MA's), (49, 10006), (59, 10075), (75, 10144), (84, 10225), (85, 10234),

Gene: Madiba\_11 Start: 6946, Stop: 7350, Start Num: 25

Candidate Starts for Madiba\_11:

(Start: 25 @6946 has 221 MA's), (29, 6985), (Start: 36 @7027 has 5 MA's), (38, 7042), (40, 7054), (49, 7111), (50, 7117), (58, 7165), (59, 7180), (60, 7183), (65, 7207), (77, 7264), (80, 7306), (81, 7315),

Gene: Magsby\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Magsby\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Mahavrat\_10 Start: 7084, Stop: 7488, Start Num: 25

Candidate Starts for Mahavrat\_10:

(Start: 25 @7084 has 221 MA's), (Start: 27 @7117 has 4 MA's), (Start: 28 @7120 has 2 MA's), (29, 7123), (Start: 36 @7165 has 5 MA's), (38, 7180), (40, 7192), (49, 7249), (50, 7255), (58, 7303), (59, 7318), (75, 7396), (77, 7402), (80, 7444), (81, 7453),

Gene: Majeke\_13 Start: 8287, Stop: 8724, Start Num: 16

Candidate Starts for Majeke\_13:

(Start: 16 @8287 has 80 MA's), (31, 8353), (59, 8545), (60, 8548), (67, 8584), (74, 8617), (82, 8692), (83, 8698),

Gene: Malithi\_13 Start: 8345, Stop: 8782, Start Num: 16

Candidate Starts for Malithi\_13:

(6, 8264), (Start: 16 @8345 has 80 MA's), (59, 8603), (60, 8606), (74, 8675), (83, 8756),

Gene: Manda\_18 Start: 10917, Stop: 11321, Start Num: 24

Candidate Starts for Manda\_18:

(15, 10884), (20, 10905), (Start: 24 @10917 has 128 MA's), (49, 11088), (51, 11100), (59, 11157), (75, 11226), (84, 11307), (85, 11316),

Gene: Mandlovu\_10 Start: 7085, Stop: 7489, Start Num: 25

Candidate Starts for Mandlovu\_10:

(Start: 25 @7085 has 221 MA's), (Start: 27 @7118 has 4 MA's), (Start: 28 @7121 has 2 MA's), (29, 7124), (Start: 32 @7142 has 1 MA's), (Start: 36 @7166 has 5 MA's), (38, 7181), (40, 7193), (49, 7250), (50, 7256), (58, 7304), (59, 7319), (65, 7346), (75, 7397), (77, 7403), (80, 7445), (81, 7454),

Gene: Mangethe\_13 Start: 8287, Stop: 8724, Start Num: 16

Candidate Starts for Mangethe\_13:

(Start: 16 @8287 has 80 MA's), (31, 8353), (59, 8545), (60, 8548), (67, 8584), (74, 8617), (82, 8692), (83, 8698),

Gene: Mantra\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for Mantra\_10:

(Start: 25 @7112 has 221 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (69, 7397), (70, 7400), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: Maravista\_10 Start: 7085, Stop: 7489, Start Num: 25

Candidate Starts for Maravista\_10:

(Start: 25 @7085 has 221 MA's), (Start: 26 @7088 has 3 MA's), (Start: 27 @7118 has 4 MA's), (Start: 28 @7121 has 2 MA's), (29, 7124), (Start: 32 @7142 has 1 MA's), (Start: 36 @7166 has 5 MA's), (38, 7181), (40, 7193), (47, 7241), (49, 7250), (50, 7256), (58, 7304), (59, 7319), (69, 7370), (70, 7373), (75, 7397), (77, 7403), (79, 7442), (80, 7445), (81, 7454),

Gene: Marker\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Marker\_11:

(Start: 25 @6947 has 221 MA's), (29, 6986), (Start: 32 @7004 has 1 MA's), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (47, 7103), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (70, 7235), (75, 7259), (77, 7265), (79, 7304), (80, 7307), (81, 7316),

Gene: Marshmallow\_18 Start: 10947, Stop: 11351, Start Num: 24

Candidate Starts for Marshmallow\_18:

(15, 10914), (20, 10935), (Start: 24 @10947 has 128 MA's), (49, 11118), (51, 11130), (59, 11187), (75, 11256), (84, 11337), (85, 11346),

Gene: Martik\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for Martik\_10:

(Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (69, 7382), (70, 7385), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: Mattes\_10 Start: 7087, Stop: 7491, Start Num: 25

Candidate Starts for Mattes\_10:

(Start: 25 @7087 has 221 MA's), (29, 7126), (Start: 36 @7168 has 5 MA's), (38, 7183), (40, 7195), (49, 7252), (58, 7306), (59, 7321), (62, 7333), (65, 7348), (75, 7399), (76, 7402), (77, 7405), (80, 7447), (81, 7456),

Gene: Maxxinista\_18 Start: 9884, Stop: 10288, Start Num: 24

Candidate Starts for Maxxinista\_18:

(15, 9851), (20, 9872), (Start: 24 @9884 has 128 MA's), (49, 10055), (51, 10067), (59, 10124), (75, 10193), (84, 10274), (85, 10283),

Gene: Medindi\_10 Start: 7119, Stop: 7493, Start Num: 27

Candidate Starts for Medindi\_10:

(9, 7008), (13, 7041), (Start: 25 @7086 has 221 MA's), (Start: 27 @7119 has 4 MA's), (29, 7125), (Start: 36 @7167 has 5 MA's), (38, 7182), (41, 7197), (44, 7215), (47, 7242), (49, 7251), (50, 7257), (56, 7293), (58, 7305), (59, 7320), (63, 7335), (64, 7344), (66, 7350), (69, 7371), (71, 7377), (76, 7401), (77, 7404), (81, 7455),

Gene: Megiddo\_13 Start: 8309, Stop: 8746, Start Num: 16

Candidate Starts for Megiddo\_13:

(6, 8228), (Start: 16 @8309 has 80 MA's), (31, 8375), (59, 8567), (60, 8570), (67, 8606), (74, 8639), (82, 8714), (83, 8720),

Gene: Melissauren88\_10 Start: 7178, Stop: 7504, Start Num: 36

Candidate Starts for Melissauren88\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Melville\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Melville\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: MichelleMyBell\_12 Start: 7383, Stop: 7802, Start Num: 21

Candidate Starts for MichelleMyBell\_12:

(2, 7212), (Start: 21 @7383 has 46 MA's), (Start: 28 @7428 has 2 MA's), (49, 7554), (59, 7632), (71, 7686), (74, 7701), (75, 7707),

Gene: MilanaBonita\_11 Start: 7745, Stop: 8152, Start Num: 25

Candidate Starts for MilanaBonita\_11:

(9, 7667), (13, 7700), (Start: 25 @7745 has 221 MA's), (Start: 27 @7778 has 4 MA's), (29, 7784), (Start: 36 @7826 has 5 MA's), (38, 7841), (41, 7856), (44, 7874), (47, 7901), (49, 7910), (50, 7916), (56, 7952), (58, 7964), (59, 7979), (63, 7994), (64, 8003), (66, 8009), (69, 8030), (71, 8036), (76, 8060), (77, 8063), (81, 8114),

Gene: MilleniumForce\_11 Start: 7745, Stop: 8152, Start Num: 25

Candidate Starts for MilleniumForce\_11:

(9, 7667), (13, 7700), (Start: 25 @7745 has 221 MA's), (Start: 27 @7778 has 4 MA's), (29, 7784), (Start: 36 @7826 has 5 MA's), (38, 7841), (41, 7856), (44, 7874), (47, 7901), (49, 7910), (50, 7916), (56, 7952), (58, 7964), (59, 7979), (63, 7994), (64, 8003), (66, 8009), (69, 8030), (71, 8036), (76, 8060), (77, 8063), (81, 8114),

Gene: Mindy\_18 Start: 10726, Stop: 11130, Start Num: 24

Candidate Starts for Mindy\_18:

(15, 10693), (20, 10714), (Start: 24 @10726 has 128 MA's), (49, 10897), (51, 10909), (59, 10966), (75, 11035), (84, 11116), (85, 11125),

Gene: MinionDave\_11 Start: 7745, Stop: 8152, Start Num: 25

Candidate Starts for MinionDave\_11:

(9, 7667), (13, 7700), (Start: 25 @7745 has 221 MA's), (Start: 27 @7778 has 4 MA's), (29, 7784), (Start: 36 @7826 has 5 MA's), (38, 7841), (41, 7856), (44, 7874), (47, 7901), (49, 7910), (50, 7916), (56, 7952), (58, 7964), (59, 7979), (63, 7994), (64, 8003), (66, 8009), (69, 8030), (71, 8036), (76, 8060),

(77, 8063), (81, 8114),

Gene: Miniwave\_18 Start: 11145, Stop: 11549, Start Num: 24

Candidate Starts for Miniwave\_18:

(15, 11112), (20, 11133), (Start: 24 @11145 has 128 MA's), (49, 11316), (51, 11328), (59, 11385), (75, 11454), (84, 11535), (85, 11544),

Gene: Minnie\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for Minnie\_10:

(Start: 25 @7112 has 221 MA's), (Start: 26 @7115 has 3 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: Misfit\_17 Start: 10501, Stop: 10905, Start Num: 24

Candidate Starts for Misfit\_17:

(15, 10468), (20, 10489), (Start: 24 @10501 has 128 MA's), (49, 10672), (51, 10684), (59, 10741), (75, 10810), (84, 10891), (85, 10900),

Gene: Misha28\_11 Start: 6951, Stop: 7355, Start Num: 25

Candidate Starts for Misha28\_11:

(7, 6849), (Start: 25 @6951 has 221 MA's), (Start: 27 @6984 has 4 MA's), (Start: 28 @6987 has 2 MA's), (29, 6990), (Start: 32 @7008 has 1 MA's), (Start: 36 @7032 has 5 MA's), (38, 7047), (40, 7059), (49, 7116), (50, 7122), (58, 7170), (59, 7185), (60, 7188), (65, 7212), (75, 7263), (77, 7269), (80, 7311), (81, 7320),

Gene: MisterCuddles\_10 Start: 7101, Stop: 7505, Start Num: 25

Candidate Starts for MisterCuddles\_10:

(Start: 25 @7101 has 221 MA's), (Start: 27 @7134 has 4 MA's), (Start: 28 @7137 has 2 MA's), (29, 7140), (Start: 36 @7182 has 5 MA's), (38, 7197), (40, 7209), (49, 7266), (50, 7272), (58, 7320), (59, 7335), (60, 7338), (65, 7362), (75, 7413), (77, 7419), (80, 7461), (81, 7470),

Gene: Modragons\_10 Start: 7094, Stop: 7498, Start Num: 25

Candidate Starts for Modragons\_10:

(Start: 25 @7094 has 221 MA's), (29, 7133), (Start: 32 @7151 has 1 MA's), (Start: 36 @7175 has 5 MA's), (38, 7190), (40, 7202), (41, 7205), (49, 7259), (50, 7265), (58, 7313), (59, 7328), (60, 7331), (65, 7355), (75, 7406), (77, 7412), (80, 7454), (81, 7463),

Gene: Moldemort\_18 Start: 10159, Stop: 10563, Start Num: 24

Candidate Starts for Moldemort\_18:

(15, 10126), (20, 10147), (Start: 24 @10159 has 128 MA's), (49, 10330), (51, 10342), (59, 10399), (75, 10468), (84, 10549), (85, 10558),

Gene: MollyToe\_18 Start: 11119, Stop: 11523, Start Num: 24

Candidate Starts for MollyToe\_18:

(15, 11086), (20, 11107), (Start: 24 @11119 has 128 MA's), (49, 11290), (51, 11302), (59, 11359), (75, 11428), (84, 11509), (85, 11518),

Gene: MooMoo\_10 Start: 6653, Stop: 7069, Start Num: 22

Candidate Starts for MooMoo\_10:

(14, 6620), (18, 6644), (Start: 22 @6653 has 9 MA's), (30, 6710), (Start: 32 @6719 has 1 MA's), (33, 6722), (35, 6734), (37, 6755), (38, 6758), (42, 6779), (54, 6854), (59, 6896), (67, 6932), (76, 6974), (77, 6977), (78, 6992),

Gene: Moonbeam\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for Moonbeam\_10:

(Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: Mori\_45 Start: 22963, Stop: 23415, Start Num: 16

Candidate Starts for Mori\_45:

(Start: 16 @22963 has 80 MA's), (Start: 28 @23056 has 2 MA's), (29, 23059), (30, 23068), (Start: 32 @23077 has 1 MA's), (43, 23140), (48, 23182), (52, 23200), (53, 23212), (59, 23263), (60, 23266), (68, 23290), (74, 23311), (75, 23317),

Gene: Mosby\_17 Start: 10455, Stop: 10859, Start Num: 24

Candidate Starts for Mosby\_17:

(15, 10422), (20, 10443), (Start: 24 @10455 has 128 MA's), (49, 10626), (51, 10638), (59, 10695), (75, 10764), (84, 10845), (85, 10854),

Gene: Mova\_11 Start: 6950, Stop: 7354, Start Num: 25

Candidate Starts for Mova\_11:

(Start: 25 @6950 has 221 MA's), (29, 6989), (Start: 32 @7007 has 1 MA's), (Start: 36 @7031 has 5 MA's), (38, 7046), (40, 7058), (41, 7061), (47, 7106), (49, 7115), (50, 7121), (58, 7169), (59, 7184), (75, 7262), (77, 7268), (79, 7307), (80, 7310), (81, 7319),

Gene: Mozy\_11 Start: 6945, Stop: 7352, Start Num: 25

Candidate Starts for Mozy\_11:

(7, 6843), (9, 6867), (10, 6876), (13, 6900), (Start: 25 @6945 has 221 MA's), (Start: 27 @6978 has 4 MA's), (29, 6984), (Start: 36 @7026 has 5 MA's), (38, 7041), (41, 7056), (44, 7074), (47, 7101), (49, 7110), (50, 7116), (56, 7152), (58, 7164), (59, 7179), (63, 7194), (64, 7203), (66, 7209), (69, 7230), (71, 7236), (76, 7260), (77, 7263), (81, 7314),

Gene: Ms6\_10 Start: 7178, Stop: 7504, Start Num: 36

Candidate Starts for Ms6\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: MulchExplorer\_12 Start: 7030, Stop: 7353, Start Num: 36

Candidate Starts for MulchExplorer\_12:

(Start: 25 @6949 has 221 MA's), (29, 6988), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (41, 7060), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (65, 7210), (75, 7261), (77, 7267), (79, 7306), (80, 7309), (81, 7318),

Gene: MulchSalad\_10 Start: 7098, Stop: 7502, Start Num: 25

Candidate Starts for MulchSalad\_10:

(Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (Start: 28 @7134 has 2 MA's), (29, 7137), (Start: 32 @7155 has 1 MA's), (Start: 36 @7179 has 5 MA's), (38, 7194), (40, 7206), (47, 7254), (49, 7263), (50, 7269), (58, 7317), (59, 7332), (69, 7383), (70, 7386), (75, 7410), (77, 7416), (79, 7455), (80, 7458), (81, 7467),

Gene: Murai\_46 Start: 23153, Stop: 23605, Start Num: 16

Candidate Starts for Murai\_46:

(Start: 16 @23153 has 80 MA's), (Start: 28 @23246 has 2 MA's), (29, 23249), (30, 23258), (Start: 32 @23267 has 1 MA's), (43, 23330), (48, 23372), (52, 23390), (53, 23402), (59, 23453), (60, 23456), (68, 23480), (74, 23501), (75, 23507),

Gene: Murica\_16 Start: 10413, Stop: 10817, Start Num: 24

Candidate Starts for Murica\_16:

(15, 10380), (20, 10401), (Start: 24 @10413 has 128 MA's), (49, 10584), (51, 10596), (59, 10653), (75, 10722), (84, 10803), (85, 10812),

Gene: Murphy\_17 Start: 9876, Stop: 10280, Start Num: 24

Candidate Starts for Murphy\_17:

(15, 9843), (20, 9864), (Start: 24 @9876 has 128 MA's), (49, 10047), (51, 10059), (59, 10116), (75, 10185), (84, 10266), (85, 10275),

Gene: Mutaforma13\_10 Start: 7095, Stop: 7502, Start Num: 25

Candidate Starts for Mutaforma13\_10:

(9, 7017), (Start: 25 @7095 has 221 MA's), (29, 7134), (38, 7191), (41, 7206), (44, 7224), (46, 7239), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (63, 7344), (64, 7353), (66, 7359), (69, 7380), (71, 7386), (76, 7410), (77, 7413), (81, 7464),

Gene: Mwanjiwa\_10 Start: 7070, Stop: 7474, Start Num: 25

Candidate Starts for Mwanjiwa\_10:

(9, 6992), (Start: 25 @7070 has 221 MA's), (29, 7109), (Start: 36 @7151 has 5 MA's), (38, 7166), (40, 7178), (49, 7235), (50, 7241), (58, 7289), (59, 7304), (60, 7307), (65, 7331), (75, 7382), (77, 7388), (80, 7430), (81, 7439),

Gene: Myrale\_18 Start: 10818, Stop: 11222, Start Num: 24

Candidate Starts for Myrale\_18:

(15, 10785), (20, 10806), (Start: 24 @10818 has 128 MA's), (49, 10989), (51, 11001), (59, 11058), (75, 11127), (84, 11208), (85, 11217),

Gene: Nala\_17 Start: 10455, Stop: 10859, Start Num: 24

Candidate Starts for Nala\_17:

(15, 10422), (20, 10443), (Start: 24 @10455 has 128 MA's), (49, 10626), (51, 10638), (59, 10695), (75, 10764), (84, 10845), (85, 10854),

Gene: Nazo\_12 Start: 8018, Stop: 8455, Start Num: 16

Candidate Starts for Nazo\_12:

(Start: 16 @8018 has 80 MA's), (59, 8276), (67, 8315), (74, 8348), (82, 8423), (83, 8429),

Gene: Necropolis\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for Necropolis\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: NelitzaMV\_18 Start: 11017, Stop: 11421, Start Num: 24

Candidate Starts for NelitzaMV\_18:

(15, 10984), (20, 11005), (Start: 24 @11017 has 128 MA's), (49, 11188), (51, 11200), (59, 11257), (75, 11326), (84, 11407), (85, 11416),

Gene: Nenae\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Nenae\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: NewHope4\_10 Start: 7071, Stop: 7478, Start Num: 25

Candidate Starts for NewHope4\_10:

(9, 6993), (13, 7026), (Start: 25 @7071 has 221 MA's), (Start: 27 @7104 has 4 MA's), (29, 7110), (Start: 36 @7152 has 5 MA's), (38, 7167), (41, 7182), (44, 7200), (47, 7227), (49, 7236), (50, 7242), (56, 7278), (58, 7290), (59, 7305), (63, 7320), (64, 7329), (66, 7335), (69, 7356), (71, 7362), (76, 7386), (77, 7389), (81, 7440),

Gene: Nichirin\_10 Start: 7133, Stop: 7498, Start Num: 29

Candidate Starts for Nichirin\_10:

(Start: 25 @7094 has 221 MA's), (29, 7133), (Start: 36 @7175 has 5 MA's), (38, 7190), (40, 7202), (49, 7259), (50, 7265), (58, 7313), (59, 7328), (65, 7355), (75, 7406), (77, 7412), (80, 7454), (81, 7463),

Gene: NiebruSaylor\_45 Start: 22964, Stop: 23416, Start Num: 16

Candidate Starts for NiebruSaylor\_45:

(Start: 16 @22964 has 80 MA's), (Start: 28 @23057 has 2 MA's), (29, 23060), (30, 23069), (Start: 32 @23078 has 1 MA's), (43, 23141), (48, 23183), (52, 23201), (53, 23213), (59, 23264), (60, 23267), (68, 23291), (74, 23312), (75, 23318),

Gene: Nimbo\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Nimbo\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Nimrod\_17 Start: 10656, Stop: 11060, Start Num: 24

Candidate Starts for Nimrod\_17:

(15, 10623), (20, 10644), (Start: 24 @10656 has 128 MA's), (49, 10827), (51, 10839), (59, 10896), (75, 10965), (84, 11046), (85, 11055),

Gene: Nitzel\_11 Start: 7748, Stop: 8152, Start Num: 25

Candidate Starts for Nitzel\_11:

(Start: 25 @7748 has 221 MA's), (Start: 27 @7781 has 4 MA's), (Start: 28 @7784 has 2 MA's), (29, 7787), (Start: 32 @7805 has 1 MA's), (Start: 36 @7829 has 5 MA's), (38, 7844), (40, 7856), (47, 7904), (49, 7913), (50, 7919), (58, 7967), (59, 7982), (69, 8033), (70, 8036), (75, 8060), (77, 8066), (79, 8105), (80, 8108), (81, 8117),

Gene: Nivrat\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for Nivrat\_10:

(Start: 25 @7096 has 221 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (69, 7381), (70, 7384), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: NoSleep\_18 Start: 10156, Stop: 10560, Start Num: 24

Candidate Starts for NoSleep\_18:

(15, 10123), (20, 10144), (Start: 24 @10156 has 128 MA's), (49, 10327), (51, 10339), (59, 10396), (75, 10465), (84, 10546), (85, 10555),

Gene: NonchalantPear\_17 Start: 10109, Stop: 10513, Start Num: 24

Candidate Starts for NonchalantPear\_17:

(15, 10076), (20, 10097), (Start: 24 @10109 has 128 MA's), (49, 10280), (51, 10292), (59, 10349), (75, 10418), (84, 10499), (85, 10508),

Gene: NormanBulbieJr\_10 Start: 7083, Stop: 7487, Start Num: 25

Candidate Starts for NormanBulbieJr\_10:

(Start: 25 @7083 has 221 MA's), (Start: 26 @7086 has 3 MA's), (Start: 27 @7116 has 4 MA's), (Start: 28 @7119 has 2 MA's), (29, 7122), (Start: 32 @7140 has 1 MA's), (Start: 36 @7164 has 5 MA's), (38, 7179), (40, 7191), (47, 7239), (49, 7248), (50, 7254), (58, 7302), (59, 7317), (75, 7395), (77, 7401), (79, 7440), (80, 7443), (81, 7452),

Gene: Ochi17\_10 Start: 7094, Stop: 7498, Start Num: 25

Candidate Starts for Ochi17\_10:

(Start: 25 @7094 has 221 MA's), (29, 7133), (Start: 32 @7151 has 1 MA's), (Start: 36 @7175 has 5 MA's), (38, 7190), (40, 7202), (41, 7205), (49, 7259), (50, 7265), (58, 7313), (59, 7328), (60, 7331), (65, 7355), (75, 7406), (77, 7412), (80, 7454), (81, 7463),

Gene: OfUltron\_10 Start: 7094, Stop: 7498, Start Num: 25

Candidate Starts for OfUltron\_10:

(Start: 25 @7094 has 221 MA's), (29, 7133), (Start: 32 @7151 has 1 MA's), (Start: 36 @7175 has 5 MA's), (38, 7190), (40, 7202), (41, 7205), (49, 7259), (50, 7265), (58, 7313), (59, 7328), (60, 7331), (65, 7355), (75, 7406), (77, 7412), (80, 7454), (81, 7463),

Gene: Ogopogo\_13 Start: 7350, Stop: 7754, Start Num: 25

Candidate Starts for Ogopogo\_13:

(Start: 25 @7350 has 221 MA's), (Start: 27 @7383 has 4 MA's), (Start: 28 @7386 has 2 MA's), (29, 7389), (Start: 32 @7407 has 1 MA's), (Start: 36 @7431 has 5 MA's), (38, 7446), (40, 7458), (47, 7506), (49, 7515), (50, 7521), (58, 7569), (59, 7584), (69, 7635), (70, 7638), (75, 7662), (77, 7668), (80, 7710), (81, 7719),

Gene: Oksu\_11 Start: 7030, Stop: 7353, Start Num: 36

Candidate Starts for Oksu\_11:

(Start: 25 @6949 has 221 MA's), (29, 6988), (Start: 32 @7006 has 1 MA's), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (60, 7186), (65, 7210), (75, 7261), (77, 7267), (80, 7309), (81, 7318),

Gene: OldBen\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for OldBen\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: OlympiaSaint\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for OlympiaSaint\_10:

(Start: 25 @7096 has 221 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (69, 7381), (70, 7384), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: OrionPax\_18 Start: 10159, Stop: 10563, Start Num: 24

Candidate Starts for OrionPax\_18:

(15, 10126), (20, 10147), (Start: 24 @10159 has 128 MA's), (49, 10330), (51, 10342), (59, 10399), (75, 10468), (84, 10549), (85, 10558),

Gene: Ovechkin\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Ovechkin\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: OwlsT2W\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for OwlsT2W\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (41, 7059), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: PHappiness\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for PHappiness\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: PMC\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for PMC\_10:

(Start: 25 @7112 has 221 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: Pacc40\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Pacc40\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: PaddyBaddy\_18 Start: 10169, Stop: 10573, Start Num: 24

Candidate Starts for PaddyBaddy\_18:

(15, 10136), (20, 10157), (Start: 24 @10169 has 128 MA's), (49, 10340), (51, 10352), (59, 10409), (75, 10478), (84, 10559), (85, 10568),

Gene: PaintedDog\_11 Start: 7901, Stop: 8320, Start Num: 22

Candidate Starts for PaintedDog\_11:

(Start: 22 @7901 has 9 MA's), (30, 7958), (33, 7970), (48, 8075), (59, 8147), (75, 8222), (78, 8243), (80, 8267),

Gene: Palpatine\_17 Start: 10452, Stop: 10856, Start Num: 24

Candidate Starts for Palpatine\_17:

(15, 10419), (20, 10440), (Start: 24 @10452 has 128 MA's), (49, 10623), (51, 10635), (59, 10692), (75, 10761), (84, 10842), (85, 10851),

Gene: Panchino\_12 Start: 7364, Stop: 7783, Start Num: 21

Candidate Starts for Panchino\_12:

(2, 7193), (Start: 21 @7364 has 46 MA's), (49, 7535), (59, 7613), (71, 7667), (74, 7682), (75, 7688), (79, 7730),

Gene: Paperbeatsrock\_19 Start: 11391, Stop: 11795, Start Num: 24

Candidate Starts for Paperbeatsrock\_19:

(15, 11358), (20, 11379), (Start: 24 @11391 has 128 MA's), (49, 11562), (51, 11574), (59, 11631), (75, 11700), (84, 11781), (85, 11790),

Gene: Parmesanjohn\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Parmesanjohn\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Pat3\_17 Start: 9659, Stop: 10063, Start Num: 24

Candidate Starts for Pat3\_17:

(15, 9626), (20, 9647), (Start: 24 @9659 has 128 MA's), (49, 9830), (51, 9842), (59, 9899), (75, 9968), (84, 10049), (85, 10058),

Gene: PatoPoderoso\_10 Start: 7098, Stop: 7505, Start Num: 25

Candidate Starts for PatoPoderoso\_10:

(9, 7020), (13, 7053), (Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (41, 7209), (44, 7227), (47, 7254), (49, 7263), (50, 7269), (56, 7305), (58, 7317), (59, 7332), (63, 7347), (64, 7356), (66, 7362), (69, 7383), (71, 7389), (76, 7413), (77, 7416), (81, 7467),

Gene: PeanutPie\_13 Start: 8313, Stop: 8750, Start Num: 16

Candidate Starts for PeanutPie\_13:

(6, 8232), (Start: 16 @8313 has 80 MA's), (31, 8379), (59, 8571), (60, 8574), (67, 8610), (74, 8643), (82, 8718), (83, 8724),

Gene: Peridot\_12 Start: 7029, Stop: 7352, Start Num: 36

Candidate Starts for Peridot\_12:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (41, 7059), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: Petra64142\_18 Start: 10872, Stop: 11276, Start Num: 24

Candidate Starts for Petra64142\_18:

(15, 10839), (20, 10860), (Start: 24 @10872 has 128 MA's), (49, 11043), (51, 11055), (59, 11112), (75, 11181), (84, 11262), (85, 11271),

Gene: Phaja\_17 Start: 10607, Stop: 11011, Start Num: 24

Candidate Starts for Phaja\_17:

(15, 10574), (20, 10595), (Start: 24 @10607 has 128 MA's), (49, 10778), (51, 10790), (59, 10847), (75, 10916), (84, 10997), (85, 11006),

Gene: Phalconet\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Phalconet\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Phalm\_13 Start: 8309, Stop: 8746, Start Num: 16

Candidate Starts for Phalm\_13:

(6, 8228), (Start: 16 @8309 has 80 MA's), (31, 8375), (59, 8567), (60, 8570), (67, 8606), (74, 8639), (82, 8714), (83, 8720),

Gene: PhancyPhin\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for PhancyPhin\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: Phanphagia\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Phanphagia\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (61, 7340), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Pharsalus\_18 Start: 11191, Stop: 11595, Start Num: 24

Candidate Starts for Pharsalus\_18:

(15, 11158), (20, 11179), (Start: 24 @11191 has 128 MA's), (49, 11362), (51, 11374), (59, 11431), (75, 11500), (84, 11581), (85, 11590),

Gene: Phasih\_10 Start: 7111, Stop: 7515, Start Num: 25

Candidate Starts for Phasih\_10:

(Start: 25 @7111 has 221 MA's), (Start: 27 @7144 has 4 MA's), (Start: 28 @7147 has 2 MA's), (29, 7150), (Start: 36 @7192 has 5 MA's), (38, 7207), (40, 7219), (49, 7276), (50, 7282), (58, 7330), (59, 7345), (60, 7348), (65, 7372), (75, 7423), (77, 7429), (80, 7471), (81, 7480),

Gene: PhatBacter\_17 Start: 10457, Stop: 10861, Start Num: 24

Candidate Starts for PhatBacter\_17:

(15, 10424), (20, 10445), (Start: 24 @10457 has 128 MA's), (49, 10628), (51, 10640), (59, 10697), (75, 10766), (84, 10847), (85, 10856),

Gene: Phatniss\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Phatniss\_10:

(Start: 25 @7095 has 221 MA's), (Start: 27 @7128 has 4 MA's), (Start: 28 @7131 has 2 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Phaux\_16 Start: 10455, Stop: 10859, Start Num: 24

Candidate Starts for Phaux\_16:

(15, 10422), (20, 10443), (Start: 24 @10455 has 128 MA's), (49, 10626), (51, 10638), (59, 10695), (75, 10764), (84, 10845), (85, 10854),

Gene: Phayonce\_12 Start: 7972, Stop: 8409, Start Num: 16

Candidate Starts for Phayonce\_12:

(Start: 16 @7972 has 80 MA's), (59, 8230), (74, 8302),

Gene: Phegasus\_13 Start: 8287, Stop: 8724, Start Num: 16

Candidate Starts for Phegasus\_13:

(Start: 16 @8287 has 80 MA's), (31, 8353), (59, 8545), (60, 8548), (67, 8584), (74, 8617), (82, 8692), (83, 8698),

Gene: PhesterPhotato\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for PhesterPhotato\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Philonius\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Philonius\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Philus\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for Philus\_10:

(Start: 25 @7096 has 221 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (69, 7381), (70, 7384), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: Phineas\_13 Start: 8294, Stop: 8731, Start Num: 16

Candidate Starts for Phineas\_13:

(Start: 16 @8294 has 80 MA's), (59, 8552), (60, 8555), (67, 8591), (74, 8624), (82, 8699), (83, 8705),

Gene: PhlipPhlop\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for PhlipPhlop\_10:

(Start: 25 @7112 has 221 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: Phloss\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Phloss\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Phrann\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Phrann\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: Phrux\_17 Start: 10155, Stop: 10559, Start Num: 24

Candidate Starts for Phrux\_17:

(15, 10122), (20, 10143), (Start: 24 @10155 has 128 MA's), (49, 10326), (51, 10338), (59, 10395), (75, 10464), (84, 10545), (85, 10554),

Gene: Piper2020\_11 Start: 6950, Stop: 7354, Start Num: 25

Candidate Starts for Piper2020\_11:

(Start: 25 @6950 has 221 MA's), (Start: 27 @6983 has 4 MA's), (Start: 28 @6986 has 2 MA's), (29, 6989), (Start: 32 @7007 has 1 MA's), (Start: 36 @7031 has 5 MA's), (38, 7046), (40, 7058), (47, 7106), (49, 7115), (50, 7121), (58, 7169), (59, 7184), (75, 7262), (77, 7268), (79, 7307), (80, 7310), (81, 7319),

Gene: Pippy\_10 Start: 7086, Stop: 7487, Start Num: 26

Candidate Starts for Pippy\_10:

(Start: 25 @7083 has 221 MA's), (Start: 26 @7086 has 3 MA's), (Start: 27 @7116 has 4 MA's), (Start: 28 @7119 has 2 MA's), (29, 7122), (Start: 32 @7140 has 1 MA's), (Start: 36 @7164 has 5 MA's), (38, 7179), (40, 7191), (47, 7239), (49, 7248), (50, 7254), (58, 7302), (59, 7317), (75, 7395), (77, 7401), (79, 7440), (80, 7443), (81, 7452),

Gene: Pipsqueaks\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Pipsqueaks\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Plumbus\_11 Start: 6949, Stop: 7353, Start Num: 25

Candidate Starts for Plumbus\_11:

(Start: 25 @6949 has 221 MA's), (29, 6988), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (41, 7060), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (65, 7210), (75, 7261), (77, 7267), (79, 7306), (80, 7309), (81, 7318),

Gene: Poenanya\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Poenanya\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Policronamos\_17 Start: 10457, Stop: 10861, Start Num: 24

Candidate Starts for Policronamos\_17:

(15, 10424), (20, 10445), (Start: 24 @10457 has 128 MA's), (49, 10628), (51, 10640), (59, 10697), (75, 10766), (84, 10847), (85, 10856),

Gene: Polka14\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for Polka14\_10:

(Start: 25 @7096 has 221 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (41, 7207), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: Polkaroo\_13 Start: 8322, Stop: 8759, Start Num: 16

Candidate Starts for Polkaroo\_13:

(6, 8241), (Start: 16 @8322 has 80 MA's), (31, 8388), (59, 8580), (60, 8583), (67, 8619), (74, 8652), (82, 8727), (83, 8733),

Gene: Pollywog\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Pollywog\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (41, 7059), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: Polo2Bam\_11 Start: 7104, Stop: 7478, Start Num: 27

Candidate Starts for Polo2Bam\_11:

(9, 6993), (13, 7026), (Start: 25 @7071 has 221 MA's), (Start: 27 @7104 has 4 MA's), (29, 7110), (Start: 36 @7152 has 5 MA's), (38, 7167), (41, 7182), (44, 7200), (47, 7227), (49, 7236), (50, 7242), (56, 7278), (58, 7290), (59, 7305), (63, 7320), (64, 7329), (66, 7335), (69, 7356), (71, 7362), (76, 7386), (77, 7389), (81, 7440),

Gene: PopTart\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for PopTart\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (45, 7232), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (61, 7340), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Porky\_16 Start: 9729, Stop: 10133, Start Num: 24

Candidate Starts for Porky\_16:

(15, 9696), (20, 9717), (Start: 24 @9729 has 128 MA's), (49, 9900), (51, 9912), (59, 9969), (75, 10038), (84, 10119), (85, 10128),

Gene: Priscilla\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for Priscilla\_10:

(Start: 25 @7096 has 221 MA's), (Start: 26 @7099 has 3 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: Ptowny\_17 Start: 9796, Stop: 10200, Start Num: 24

Candidate Starts for Ptowny\_17:

(15, 9763), (20, 9784), (Start: 24 @9796 has 128 MA's), (49, 9967), (51, 9979), (59, 10036), (75, 10105), (84, 10186), (85, 10195),

Gene: Pumpkin\_18 Start: 9972, Stop: 10376, Start Num: 24

Candidate Starts for Pumpkin\_18:

(15, 9939), (20, 9960), (Start: 24 @9972 has 128 MA's), (49, 10143), (51, 10155), (59, 10212), (75, 10281), (84, 10362), (85, 10371),

Gene: Purgamenstris\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Purgamenstris\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: Purky\_12 Start: 7981, Stop: 8418, Start Num: 16

Candidate Starts for Purky\_12:

(Start: 16 @7981 has 80 MA's), (59, 8239), (67, 8278), (73, 8308),

Gene: Pygmy\_12 Start: 8023, Stop: 8460, Start Num: 16

Candidate Starts for Pygmy\_12:

(Start: 16 @8023 has 80 MA's), (59, 8281), (60, 8284), (74, 8353), (82, 8428), (83, 8434),

Gene: Quallification\_19 Start: 11154, Stop: 11558, Start Num: 24

Candidate Starts for Quallification\_19:

(15, 11121), (20, 11142), (Start: 24 @11154 has 128 MA's), (49, 11325), (51, 11337), (59, 11394), (75, 11463), (84, 11544), (85, 11553),

Gene: QueenHazel\_12 Start: 8360, Stop: 8779, Start Num: 22

Candidate Starts for QueenHazel\_12:

(Start: 22 @8360 has 9 MA's), (30, 8417), (33, 8429), (48, 8534), (59, 8606), (75, 8681), (78, 8702), (80, 8726),

Gene: QuickMath\_10 Start: 7098, Stop: 7505, Start Num: 25

Candidate Starts for QuickMath\_10:

(9, 7020), (13, 7053), (Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (41, 7209), (44, 7227), (47, 7254), (49, 7263), (50, 7269), (56, 7305), (58, 7317), (59, 7332), (63, 7347), (64, 7356), (66, 7362), (69, 7383), (71, 7389), (76, 7413), (77, 7416), (81, 7467),

Gene: Quico\_11 Start: 6943, Stop: 7347, Start Num: 25

Candidate Starts for Quico\_11:

(Start: 25 @6943 has 221 MA's), (29, 6982), (Start: 36 @7024 has 5 MA's), (38, 7039), (40, 7051), (49, 7108), (50, 7114), (58, 7162), (59, 7177), (65, 7204), (75, 7255), (77, 7261), (80, 7303), (81, 7312),

Gene: Radiance\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Radiance\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (65, 7356), (77, 7413), (80, 7455), (81, 7464),

Gene: Rakim\_19 Start: 11061, Stop: 11465, Start Num: 24

Candidate Starts for Rakim\_19:

(15, 11028), (20, 11049), (Start: 24 @11061 has 128 MA's), (49, 11232), (51, 11244), (59, 11301), (75, 11370), (84, 11451), (85, 11460),

Gene: Ramsey\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Ramsey\_11:

(7, 6845), (Start: 21 @6935 has 46 MA's), (Start: 25 @6947 has 221 MA's), (Start: 27 @6980 has 4 MA's), (Start: 28 @6983 has 2 MA's), (29, 6986), (Start: 32 @7004 has 1 MA's), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (75, 7259), (77, 7265), (79, 7304), (80, 7307), (81, 7316),

Gene: Raymond7\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Raymond7\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: Rebel\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Rebel\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: RedBird\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for RedBird\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Redi\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Redi\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: Renaud18\_11 Start: 7410, Stop: 7835, Start Num: 25

Candidate Starts for Renaud18\_11:

(3, 7290), (13, 7365), (Start: 25 @7410 has 221 MA's), (Start: 27 @7458 has 4 MA's), (Start: 28 @7461 has 2 MA's), (29, 7464), (49, 7590), (50, 7596), (59, 7659), (67, 7698), (70, 7716), (71, 7719), (72, 7725), (77, 7746), (79, 7782), (81, 7794),

Gene: Rialto\_11 Start: 6949, Stop: 7353, Start Num: 25

Candidate Starts for Rialto\_11:

(Start: 25 @6949 has 221 MA's), (Start: 27 @6982 has 4 MA's), (Start: 28 @6985 has 2 MA's), (29, 6988), (Start: 32 @7006 has 1 MA's), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (47, 7105), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (75, 7261), (77, 7267), (79, 7306), (80, 7309), (81, 7318),

Gene: Rimmer\_17 Start: 10514, Stop: 10918, Start Num: 24

Candidate Starts for Rimmer\_17:

(15, 10481), (20, 10502), (Start: 24 @10514 has 128 MA's), (49, 10685), (51, 10697), (59, 10754), (75, 10823), (84, 10904), (85, 10913),

Gene: Rita\_10 Start: 7098, Stop: 7505, Start Num: 25

Candidate Starts for Rita\_10:

(9, 7020), (10, 7029), (13, 7053), (Start: 25 @7098 has 221 MA's), (29, 7137), (38, 7194), (41, 7209), (44, 7227), (45, 7233), (46, 7242), (47, 7254), (49, 7263), (50, 7269), (55, 7293), (58, 7317), (59, 7332), (61, 7341), (63, 7347), (64, 7356), (66, 7362), (69, 7383), (71, 7389), (77, 7416), (81, 7467),

Gene: RitaG\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for RitaG\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: RiverMonster\_17 Start: 10169, Stop: 10573, Start Num: 24

Candidate Starts for RiverMonster\_17:

(15, 10136), (20, 10157), (Start: 24 @10169 has 128 MA's), (49, 10340), (51, 10352), (59, 10409), (75, 10478), (84, 10559), (85, 10568),

Gene: Rockne\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for Rockne\_10:

(Start: 25 @7112 has 221 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: RockyHorror\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for RockyHorror\_11:

(Start: 25 @6947 has 221 MA's), (Start: 27 @6980 has 4 MA's), (Start: 28 @6983 has 2 MA's), (29, 6986), (Start: 32 @7004 has 1 MA's), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (47, 7103), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (69, 7232), (70, 7235), (75, 7259), (77, 7265), (79, 7304), (80, 7307), (81, 7316),

Gene: Royals2015\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Royals2015\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Rubeelu\_12 Start: 7363, Stop: 7782, Start Num: 21

Candidate Starts for Rubeelu\_12:

(Start: 21 @7363 has 46 MA's), (Start: 28 @7408 has 2 MA's), (49, 7534), (59, 7612), (71, 7666), (74, 7681), (75, 7687),

Gene: Ruby\_10 Start: 7101, Stop: 7505, Start Num: 25

Candidate Starts for Ruby\_10:

(Start: 25 @7101 has 221 MA's), (Start: 27 @7134 has 4 MA's), (Start: 28 @7137 has 2 MA's), (29, 7140), (Start: 36 @7182 has 5 MA's), (38, 7197), (40, 7209), (49, 7266), (50, 7272), (58, 7320), (59, 7335), (60, 7338), (65, 7362), (75, 7413), (77, 7419), (80, 7461), (81, 7470),

Gene: Ryadel\_50 Start: 24437, Stop: 24880, Start Num: 16

Candidate Starts for Ryadel\_50:

(12, 24404), (Start: 16 @24437 has 80 MA's), (Start: 28 @24521 has 2 MA's), (29, 24524), (Start: 32 @24542 has 1 MA's), (43, 24605), (48, 24647), (52, 24665), (53, 24677), (59, 24728), (60, 24731), (68, 24755), (74, 24776), (75, 24782), (81, 24836),

Gene: SG4\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for SG4\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Saal\_10 Start: 7084, Stop: 7488, Start Num: 25

Candidate Starts for Saal\_10:

(Start: 25 @7084 has 221 MA's), (Start: 26 @7087 has 3 MA's), (Start: 27 @7117 has 4 MA's), (Start: 28 @7120 has 2 MA's), (29, 7123), (Start: 32 @7141 has 1 MA's), (Start: 36 @7165 has 5 MA's), (38, 7180), (40, 7192), (47, 7240), (49, 7249), (50, 7255), (58, 7303), (59, 7318), (75, 7396), (77, 7402), (79, 7441), (80, 7444), (81, 7453),

Gene: Sabbb\_10 Start: 7099, Stop: 7503, Start Num: 25

Candidate Starts for Sabbb\_10:

(Start: 25 @7099 has 221 MA's), (Start: 27 @7132 has 4 MA's), (Start: 28 @7135 has 2 MA's), (29, 7138), (Start: 36 @7180 has 5 MA's), (38, 7195), (40, 7207), (49, 7264), (50, 7270), (58, 7318), (59, 7333), (60, 7336), (65, 7360), (75, 7411), (77, 7417), (79, 7456), (80, 7459), (81, 7468),

Gene: Saints25\_18 Start: 10078, Stop: 10482, Start Num: 24

Candidate Starts for Saints25\_18:

(15, 10045), (20, 10066), (Start: 24 @10078 has 128 MA's), (49, 10249), (51, 10261), (59, 10318), (75, 10387), (84, 10468), (85, 10477),

Gene: Sandalphon\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for Sandalphon\_10:

(Start: 25 @7112 has 221 MA's), (Start: 26 @7115 has 3 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 32 @7169 has 1 MA's), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (47, 7268), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (75, 7424), (77, 7430), (79, 7469), (80, 7472), (81, 7481),

Gene: Sarma624\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Sarma624\_11:

(Start: 25 @6947 has 221 MA's), (29, 6986), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (69, 7232), (70, 7235), (75, 7259), (77, 7265), (79, 7304), (80, 7307), (81, 7316),

Gene: Sassafra\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Sassafra\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Sassay\_17 Start: 10455, Stop: 10859, Start Num: 24

Candidate Starts for Sassay\_17:

(15, 10422), (20, 10443), (Start: 24 @10455 has 128 MA's), (49, 10626), (51, 10638), (59, 10695), (75, 10764), (84, 10845), (85, 10854),

Gene: SassyB\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for SassyB\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (45, 7232), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (61, 7340), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Sbash\_11 Start: 7943, Stop: 8359, Start Num: 22

Candidate Starts for Sbash\_11:

(18, 7934), (Start: 22 @7943 has 9 MA's), (30, 8000), (Start: 32 @8009 has 1 MA's), (33, 8012), (41, 8063), (48, 8114), (59, 8186), (78, 8282), (80, 8306),

Gene: Schnauzer\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Schnauzer\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: SchoolBus\_46 Start: 23378, Stop: 23830, Start Num: 16

Candidate Starts for SchoolBus\_46:

(Start: 16 @23378 has 80 MA's), (Start: 28 @23471 has 2 MA's), (29, 23474), (Start: 32 @23492 has 1 MA's), (43, 23555), (48, 23597), (52, 23615), (53, 23627), (59, 23678), (60, 23681), (68, 23705), (74, 23726), (75, 23732),

Gene: Schuy\_47 Start: 23311, Stop: 23763, Start Num: 16

Candidate Starts for Schuy\_47:

(Start: 16 @23311 has 80 MA's), (Start: 28 @23404 has 2 MA's), (29, 23407), (30, 23416), (Start: 32 @23425 has 1 MA's), (43, 23488), (48, 23530), (52, 23548), (53, 23560), (59, 23611), (60, 23614), (68, 23638), (74, 23659), (75, 23665),

Gene: Scitech\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Scitech\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Scottish\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Scottish\_10:

(Start: 25 @7095 has 221 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (41, 7206), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: SeaLumen\_10 Start: 7071, Stop: 7478, Start Num: 25

Candidate Starts for SeaLumen\_10:

(9, 6993), (13, 7026), (Start: 25 @7071 has 221 MA's), (Start: 27 @7104 has 4 MA's), (29, 7110), (Start: 36 @7152 has 5 MA's), (38, 7167), (41, 7182), (44, 7200), (47, 7227), (49, 7236), (50, 7242), (56, 7278), (58, 7290), (59, 7305), (63, 7320), (64, 7329), (66, 7335), (69, 7356), (71, 7362), (76, 7386), (77, 7389), (81, 7440),

Gene: Seabastian\_10 Start: 7094, Stop: 7498, Start Num: 25

Candidate Starts for Seabastian\_10:

(Start: 25 @7094 has 221 MA's), (29, 7133), (Start: 32 @7151 has 1 MA's), (Start: 36 @7175 has 5 MA's), (38, 7190), (40, 7202), (41, 7205), (49, 7259), (50, 7265), (58, 7313), (59, 7328), (60, 7331), (65, 7355), (75, 7406), (77, 7412), (80, 7454), (81, 7463),

Gene: Seagreen\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Seagreen\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (60, 7185), (65, 7209), (75, 7260), (77, 7266), (80, 7308), (81,

7317),

Gene: ShamWow\_18 Start: 10948, Stop: 11352, Start Num: 24

Candidate Starts for ShamWow\_18:

(15, 10915), (20, 10936), (Start: 24 @10948 has 128 MA's), (49, 11119), (51, 11131), (59, 11188), (75, 11257), (84, 11338), (85, 11347),

Gene: Shauna1\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Shauna1\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (61, 7340), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: ShereKhan\_19 Start: 11397, Stop: 11801, Start Num: 24

Candidate Starts for ShereKhan\_19:

(15, 11364), (20, 11385), (Start: 24 @11397 has 128 MA's), (49, 11568), (51, 11580), (59, 11637), (75, 11706), (84, 11787), (85, 11796),

Gene: ShiLan\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for ShiLan\_10:

(Start: 25 @7096 has 221 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (69, 7381), (70, 7384), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: Shida\_46 Start: 23218, Stop: 23670, Start Num: 16

Candidate Starts for Shida\_46:

(Start: 16 @23218 has 80 MA's), (Start: 28 @23311 has 2 MA's), (29, 23314), (30, 23323), (Start: 32 @23332 has 1 MA's), (43, 23395), (48, 23437), (52, 23455), (53, 23467), (59, 23518), (60, 23521), (68, 23545), (74, 23566), (75, 23572),

Gene: Shipwreck\_12 Start: 8001, Stop: 8438, Start Num: 16

Candidate Starts for Shipwreck\_12:

(Start: 16 @8001 has 80 MA's), (59, 8259), (60, 8262), (74, 8331), (82, 8406), (83, 8412),

Gene: ShowerHandel\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for ShowerHandel\_10:

(23, 7088), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (69, 7382), (70, 7385), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: ShrimpFriedEgg\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for ShrimpFriedEgg\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: ShroomBoi\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for ShroomBoi\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412),

(77, 7415), (81, 7466),

Gene: Shweta\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Shweta\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: SiSi\_10 Start: 7082, Stop: 7489, Start Num: 25

Candidate Starts for SiSi\_10:

(9, 7004), (13, 7037), (Start: 25 @7082 has 221 MA's), (Start: 27 @7115 has 4 MA's), (29, 7121), (Start: 36 @7163 has 5 MA's), (38, 7178), (41, 7193), (44, 7211), (47, 7238), (49, 7247), (50, 7253), (56, 7289), (58, 7301), (59, 7316), (63, 7331), (64, 7340), (66, 7346), (69, 7367), (71, 7373), (76, 7397), (77, 7400), (81, 7451),

Gene: Silvafighter\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Silvafighter\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Silvy\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Silvy\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Simpliphy\_18 Start: 10159, Stop: 10563, Start Num: 24

Candidate Starts for Simpliphy\_18:

(15, 10126), (20, 10147), (Start: 24 @10159 has 128 MA's), (49, 10330), (51, 10342), (59, 10399), (75, 10468), (84, 10549), (85, 10558),

Gene: SimranZ1\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for SimranZ1\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (65, 7209), (75, 7260), (77, 7266), (80, 7308), (81, 7317),

Gene: SirDuracell\_17 Start: 9614, Stop: 10018, Start Num: 24

Candidate Starts for SirDuracell\_17:

(15, 9581), (20, 9602), (Start: 24 @9614 has 128 MA's), (49, 9785), (51, 9797), (59, 9854), (75, 9923), (84, 10004), (85, 10013),

Gene: SkinnyPete\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for SkinnyPete\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: Slim\_11 Start: 6949, Stop: 7353, Start Num: 25

Candidate Starts for Slim\_11:

(Start: 25 @6949 has 221 MA's), (Start: 27 @6982 has 4 MA's), (Start: 28 @6985 has 2 MA's), (29, 6988), (Start: 32 @7006 has 1 MA's), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (47, 7105), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (75, 7261), (77, 7267), (79, 7306), (80, 7309), (81, 7318),

Gene: Smooch\_48 Start: 24506, Stop: 24958, Start Num: 16

Candidate Starts for Smooch\_48:

(Start: 16 @24506 has 80 MA's), (Start: 28 @24599 has 2 MA's), (29, 24602), (30, 24611), (Start: 32 @24620 has 1 MA's), (43, 24683), (48, 24725), (52, 24743), (53, 24755), (59, 24806), (60, 24809), (68,

24833), (74, 24854), (75, 24860),

Gene: Smurph\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Smurph\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Snekmaggedon\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Snekmaggedon\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: Sonah\_13 Start: 8289, Stop: 8726, Start Num: 16

Candidate Starts for Sonah\_13:

(Start: 16 @8289 has 80 MA's), (31, 8355), (59, 8547), (60, 8550), (67, 8586), (74, 8619), (82, 8694), (83, 8700),

Gene: SophKB\_18 Start: 10947, Stop: 11351, Start Num: 24

Candidate Starts for SophKB\_18:

(15, 10914), (20, 10935), (Start: 24 @10947 has 128 MA's), (49, 11118), (51, 11130), (59, 11187), (75, 11256), (84, 11337), (85, 11346),

Gene: Sotrice96\_18 Start: 10903, Stop: 11307, Start Num: 24

Candidate Starts for Sotrice96\_18:

(15, 10870), (20, 10891), (Start: 24 @10903 has 128 MA's), (49, 11074), (51, 11086), (59, 11143), (75, 11212), (84, 11293), (85, 11302),

Gene: Sparkdehlily\_10 Start: 7111, Stop: 7515, Start Num: 25

Candidate Starts for Sparkdehlily\_10:

(Start: 25 @7111 has 221 MA's), (Start: 27 @7144 has 4 MA's), (Start: 28 @7147 has 2 MA's), (29, 7150), (Start: 32 @7168 has 1 MA's), (Start: 36 @7192 has 5 MA's), (38, 7207), (40, 7219), (41, 7222), (47, 7267), (49, 7276), (50, 7282), (58, 7330), (59, 7345), (60, 7348), (75, 7423), (77, 7429), (79, 7468), (80, 7471), (81, 7480),

Gene: Spartacus\_10 Start: 7083, Stop: 7490, Start Num: 25

Candidate Starts for Spartacus\_10:

(9, 7005), (Start: 25 @7083 has 221 MA's), (Start: 27 @7116 has 4 MA's), (29, 7122), (Start: 36 @7164 has 5 MA's), (38, 7179), (41, 7194), (44, 7212), (47, 7239), (49, 7248), (50, 7254), (56, 7290), (58, 7302), (59, 7317), (61, 7326), (63, 7332), (64, 7341), (66, 7347), (69, 7368), (71, 7374), (76, 7398), (77, 7401), (81, 7452),

Gene: Spikelee\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Spikelee\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (41, 7059), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (62, 7194), (65, 7209), (75, 7260), (77, 7266), (80, 7308), (81, 7317),

Gene: Spinach\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for Spinach\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: SpongeBob\_12 Start: 7388, Stop: 7807, Start Num: 21

Candidate Starts for SpongeBob\_12:

(2, 7217), (Start: 21 @7388 has 46 MA's), (49, 7559), (59, 7637), (71, 7691), (74, 7706), (75, 7712), (79, 7754),

Gene: Spoonbill\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for Spoonbill\_10:

(Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (60, 7334), (65, 7358), (75, 7409), (77, 7415), (80, 7457), (81, 7466),

Gene: Squirty\_11 Start: 6946, Stop: 7350, Start Num: 25

Candidate Starts for Squirty\_11:

(7, 6844), (Start: 25 @6946 has 221 MA's), (Start: 27 @6979 has 4 MA's), (Start: 28 @6982 has 2 MA's), (29, 6985), (Start: 32 @7003 has 1 MA's), (Start: 36 @7027 has 5 MA's), (38, 7042), (40, 7054), (49, 7111), (50, 7117), (58, 7165), (59, 7180), (60, 7183), (65, 7207), (75, 7258), (77, 7264), (80, 7306), (81, 7315),

Gene: StAnnes\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for StAnnes\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Stank\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for Stank\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: Stap\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Stap\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (65, 7209), (77, 7266), (80, 7308), (81, 7317),

Gene: Starcevich\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Starcevich\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (41, 7059), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: Stark\_18 Start: 10172, Stop: 10576, Start Num: 24

Candidate Starts for Stark\_18:

(15, 10139), (20, 10160), (Start: 24 @10172 has 128 MA's), (49, 10343), (51, 10355), (59, 10412), (75, 10481), (84, 10562), (85, 10571),

Gene: StellaBean\_18 Start: 10947, Stop: 11351, Start Num: 24

Candidate Starts for StellaBean\_18:

(15, 10914), (20, 10935), (Start: 24 @10947 has 128 MA's), (49, 11118), (51, 11130), (59, 11187), (75, 11256), (84, 11337), (85, 11346),

Gene: StevieRay\_13 Start: 8297, Stop: 8734, Start Num: 16

Candidate Starts for StevieRay\_13:

(Start: 16 @8297 has 80 MA's), (59, 8555), (60, 8558), (67, 8594), (74, 8627), (82, 8702), (83, 8708),

Gene: StolenFromERC\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for StolenFromERC\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: StormChicken\_18 Start: 11122, Stop: 11526, Start Num: 24

Candidate Starts for StormChicken\_18:

(15, 11089), (20, 11110), (Start: 24 @11122 has 128 MA's), (49, 11293), (51, 11305), (59, 11362), (75, 11431), (84, 11512), (85, 11521),

Gene: StressBall\_13 Start: 8309, Stop: 8746, Start Num: 16

Candidate Starts for StressBall\_13:

(6, 8228), (Start: 16 @8309 has 80 MA's), (31, 8375), (59, 8567), (60, 8570), (67, 8606), (74, 8639), (82, 8714), (83, 8720),

Gene: Strokeseat\_10 Start: 7085, Stop: 7489, Start Num: 25

Candidate Starts for Strokeseat\_10:

(Start: 25 @7085 has 221 MA's), (Start: 27 @7118 has 4 MA's), (Start: 28 @7121 has 2 MA's), (29, 7124), (Start: 32 @7142 has 1 MA's), (Start: 36 @7166 has 5 MA's), (38, 7181), (40, 7193), (49, 7250), (50, 7256), (58, 7304), (59, 7319), (65, 7346), (75, 7397), (77, 7403), (80, 7445), (81, 7454),

Gene: Stuck\_11 Start: 7961, Stop: 8377, Start Num: 22

Candidate Starts for Stuck\_11:

(19, 7955), (Start: 22 @7961 has 9 MA's), (30, 8018), (Start: 32 @8027 has 1 MA's), (33, 8030), (41, 8081), (48, 8132), (59, 8204), (66, 8234), (78, 8300), (80, 8324),

Gene: SuperGrey\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for SuperGrey\_10:

(9, 7019), (10, 7028), (13, 7052), (Start: 25 @7097 has 221 MA's), (29, 7136), (38, 7193), (41, 7208), (44, 7226), (45, 7232), (46, 7241), (47, 7253), (49, 7262), (50, 7268), (55, 7292), (58, 7316), (59, 7331), (61, 7340), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (77, 7415), (81, 7466),

Gene: SwagPiggett\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for SwagPiggett\_10:

(Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (69, 7382), (70, 7385), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: TBrady12\_19 Start: 10401, Stop: 10805, Start Num: 24

Candidate Starts for TBrady12\_19:

(15, 10368), (20, 10389), (Start: 24 @10401 has 128 MA's), (49, 10572), (51, 10584), (59, 10641), (75, 10710), (84, 10791), (85, 10800),

Gene: TChen\_11 Start: 7533, Stop: 7958, Start Num: 25

Candidate Starts for TChen\_11:

(13, 7488), (Start: 25 @7533 has 221 MA's), (Start: 27 @7581 has 4 MA's), (Start: 28 @7584 has 2 MA's), (29, 7587), (35, 7620), (50, 7719), (59, 7782), (67, 7821), (70, 7839), (71, 7842), (72, 7848), (77, 7869), (79, 7905), (81, 7917),

Gene: TDanisky\_10 Start: 7111, Stop: 7515, Start Num: 25

Candidate Starts for TDanisky\_10:

(Start: 25 @7111 has 221 MA's), (Start: 27 @7144 has 4 MA's), (Start: 28 @7147 has 2 MA's), (29, 7150), (Start: 32 @7168 has 1 MA's), (Start: 36 @7192 has 5 MA's), (38, 7207), (40, 7219), (41, 7222), (47, 7267), (49, 7276), (50, 7282), (58, 7330), (59, 7345), (60, 7348), (75, 7423), (77, 7429), (79, 7468), (80, 7471), (81, 7480),

Gene: Taj\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Taj\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Tapioca\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Tapioca\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Tarkin\_19 Start: 11400, Stop: 11804, Start Num: 24

Candidate Starts for Tarkin\_19:

(15, 11367), (20, 11388), (Start: 24 @11400 has 128 MA's), (49, 11571), (51, 11583), (59, 11640), (75, 11709), (84, 11790), (85, 11799),

Gene: Tchotchke\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Tchotchke\_11:

(Start: 25 @6948 has 221 MA's), (Start: 27 @6981 has 4 MA's), (Start: 28 @6984 has 2 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (47, 7104), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: TeamEdward\_18 Start: 11119, Stop: 11523, Start Num: 24

Candidate Starts for TeamEdward\_18:

(15, 11086), (20, 11107), (Start: 24 @11119 has 128 MA's), (49, 11290), (51, 11302), (59, 11359), (75, 11428), (84, 11509), (85, 11518),

Gene: TeardropMSU\_17 Start: 10855, Stop: 11259, Start Num: 24

Candidate Starts for TeardropMSU\_17:

(15, 10822), (20, 10843), (Start: 24 @10855 has 128 MA's), (49, 11026), (51, 11038), (59, 11095), (75, 11164), (84, 11245), (85, 11254),

Gene: Teaspoon\_17 Start: 9854, Stop: 10258, Start Num: 24

Candidate Starts for Teaspoon\_17:

(15, 9821), (20, 9842), (Start: 24 @9854 has 128 MA's), (49, 10025), (51, 10037), (59, 10094), (75, 10163), (84, 10244), (85, 10253),

Gene: Techage\_13 Start: 8290, Stop: 8727, Start Num: 16

Candidate Starts for Techage\_13:

(Start: 16 @8290 has 80 MA's), (31, 8356), (59, 8548), (60, 8551), (67, 8587), (74, 8620), (82, 8695), (83, 8701),

Gene: TelAviv\_43 Start: 23372, Stop: 23824, Start Num: 16

Candidate Starts for TelAviv\_43:

(Start: 16 @23372 has 80 MA's), (Start: 28 @23465 has 2 MA's), (29, 23468), (Start: 32 @23486 has 1 MA's), (43, 23549), (48, 23591), (52, 23609), (53, 23621), (59, 23672), (60, 23675), (68, 23699), (74, 23720), (75, 23726),

Gene: Terminus\_17 Start: 10501, Stop: 10905, Start Num: 24

Candidate Starts for Terminus\_17:

(15, 10468), (20, 10489), (Start: 24 @10501 has 128 MA's), (49, 10672), (51, 10684), (59, 10741), (75, 10810), (84, 10891), (85, 10900),

Gene: Tessdabest\_11 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Tessdabest\_11:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Thespis\_13 Start: 8309, Stop: 8746, Start Num: 16

Candidate Starts for Thespis\_13:

(6, 8228), (Start: 16 @8309 has 80 MA's), (31, 8375), (59, 8567), (60, 8570), (67, 8606), (74, 8639), (82, 8714), (83, 8720),

Gene: ThetaBob\_11 Start: 7413, Stop: 7838, Start Num: 25

Candidate Starts for ThetaBob\_11:

(3, 7293), (8, 7326), (13, 7368), (Start: 25 @7413 has 221 MA's), (Start: 27 @7461 has 4 MA's), (Start: 28 @7464 has 2 MA's), (29, 7467), (49, 7593), (50, 7599), (59, 7662), (67, 7701), (70, 7719), (71, 7722), (72, 7728), (77, 7749), (79, 7785), (81, 7797),

Gene: Thimble\_18 Start: 9904, Stop: 10308, Start Num: 24

Candidate Starts for Thimble\_18:

(15, 9871), (20, 9892), (Start: 24 @9904 has 128 MA's), (49, 10075), (51, 10087), (59, 10144), (75, 10213), (84, 10294), (85, 10303),

Gene: Thresher\_18 Start: 11162, Stop: 11566, Start Num: 24

Candidate Starts for Thresher\_18:

(15, 11129), (20, 11150), (Start: 24 @11162 has 128 MA's), (49, 11333), (51, 11345), (59, 11402), (75, 11471), (84, 11552), (85, 11561),

Gene: ThulaThula\_12 Start: 7978, Stop: 8415, Start Num: 16

Candidate Starts for ThulaThula\_12:

(1, 7558), (Start: 16 @7978 has 80 MA's), (59, 8236), (74, 8308),

Gene: Tomaszewski\_17 Start: 10548, Stop: 10952, Start Num: 24

Candidate Starts for Tomaszewski\_17:

(15, 10515), (20, 10536), (Start: 24 @10548 has 128 MA's), (49, 10719), (51, 10731), (59, 10788), (75, 10857), (84, 10938), (85, 10947),

Gene: TootsiePop\_11 Start: 6951, Stop: 7355, Start Num: 25

Candidate Starts for TootsiePop\_11:

(7, 6849), (Start: 25 @6951 has 221 MA's), (Start: 27 @6984 has 4 MA's), (Start: 28 @6987 has 2 MA's), (29, 6990), (Start: 32 @7008 has 1 MA's), (Start: 36 @7032 has 5 MA's), (38, 7047), (40, 7059), (49, 7116), (50, 7122), (58, 7170), (59, 7185), (60, 7188), (65, 7212), (75, 7263), (77, 7269), (80, 7311), (81, 7320),

Gene: Tootsieroll\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for Tootsieroll\_11:

(Start: 25 @6948 has 221 MA's), (29, 6987), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (65, 7209), (77, 7266), (80, 7308), (81, 7317),

Gene: Topiatin\_12 Start: 7747, Stop: 8154, Start Num: 25

Candidate Starts for Topiatin\_12:

(9, 7669), (10, 7678), (13, 7702), (Start: 25 @7747 has 221 MA's), (Start: 27 @7780 has 4 MA's), (29, 7786), (Start: 36 @7828 has 5 MA's), (38, 7843), (41, 7858), (44, 7876), (47, 7903), (49, 7912), (50, 7918), (56, 7954), (58, 7966), (59, 7981), (63, 7996), (64, 8005), (66, 8011), (69, 8032), (71, 8038), (76, 8062), (77, 8065), (81, 8116),

Gene: Toron\_11 Start: 7533, Stop: 7958, Start Num: 25

Candidate Starts for Toron\_11:

(4, 7419), (Start: 25 @7533 has 221 MA's), (Start: 27 @7581 has 4 MA's), (29, 7587), (30, 7596), (35, 7620), (50, 7719), (59, 7782), (67, 7821), (69, 7836), (70, 7839), (71, 7842), (72, 7848), (77, 7869), (81, 7917),

Gene: Tortellini\_12 Start: 7995, Stop: 8432, Start Num: 16

Candidate Starts for Tortellini\_12:

(6, 7914), (Start: 16 @7995 has 80 MA's), (34, 8073), (59, 8253), (67, 8292), (74, 8325),

Gene: Tortoise12\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Tortoise12\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Totinger\_11 Start: 6949, Stop: 7353, Start Num: 25

Candidate Starts for Totinger\_11:

(Start: 25 @6949 has 221 MA's), (Start: 27 @6982 has 4 MA's), (Start: 28 @6985 has 2 MA's), (29, 6988), (Start: 32 @7006 has 1 MA's), (Start: 36 @7030 has 5 MA's), (38, 7045), (40, 7057), (47, 7105), (49, 7114), (50, 7120), (58, 7168), (59, 7183), (75, 7261), (77, 7267), (79, 7306), (80, 7309), (81, 7318),

Gene: Toto\_18 Start: 10948, Stop: 11352, Start Num: 24

Candidate Starts for Toto\_18:

(15, 10915), (20, 10936), (Start: 24 @10948 has 128 MA's), (49, 11119), (51, 11131), (59, 11188), (75, 11257), (84, 11338), (85, 11347),

Gene: Traaww1\_16 Start: 10593, Stop: 10997, Start Num: 24

Candidate Starts for Traaww1\_16:

(15, 10560), (20, 10581), (Start: 24 @10593 has 128 MA's), (49, 10764), (51, 10776), (59, 10833), (75, 10902), (84, 10983), (85, 10992),

Gene: Tuco\_18 Start: 10947, Stop: 11351, Start Num: 24

Candidate Starts for Tuco\_18:

(15, 10914), (20, 10935), (Start: 24 @10947 has 128 MA's), (49, 11118), (51, 11130), (59, 11187), (75, 11256), (84, 11337), (85, 11346),

Gene: Tweety\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Tweety\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Ukulele\_17 Start: 10172, Stop: 10576, Start Num: 24

Candidate Starts for Ukulele\_17:

(15, 10139), (20, 10160), (Start: 24 @10172 has 128 MA's), (49, 10343), (51, 10355), (59, 10412), (75, 10481), (84, 10562), (85, 10571),

Gene: UncleRicky\_11 Start: 6948, Stop: 7352, Start Num: 25

Candidate Starts for UncleRicky\_11:

(Start: 25 @6948 has 221 MA's), (Start: 27 @6981 has 4 MA's), (Start: 28 @6984 has 2 MA's), (29, 6987), (Start: 32 @7005 has 1 MA's), (Start: 36 @7029 has 5 MA's), (38, 7044), (40, 7056), (49, 7113), (50, 7119), (58, 7167), (59, 7182), (60, 7185), (65, 7209), (75, 7260), (77, 7266), (79, 7305), (80, 7308), (81, 7317),

Gene: VRedHorse\_10 Start: 7097, Stop: 7501, Start Num: 25

Candidate Starts for VRedHorse\_10:

(Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (Start: 28 @7133 has 2 MA's), (29, 7136), (Start: 32 @7154 has 1 MA's), (Start: 36 @7178 has 5 MA's), (38, 7193), (40, 7205), (47, 7253), (49, 7262), (50, 7268), (58, 7316), (59, 7331), (75, 7409), (77, 7415), (79, 7454), (80, 7457), (81, 7466),

Gene: Vagabond\_46 Start: 23205, Stop: 23657, Start Num: 16

Candidate Starts for Vagabond\_46:

(11, 23163), (Start: 16 @23205 has 80 MA's), (Start: 28 @23298 has 2 MA's), (29, 23301), (Start: 32 @23319 has 1 MA's), (43, 23382), (48, 23424), (52, 23442), (53, 23454), (59, 23505), (60, 23508), (68, 23532), (74, 23553), (75, 23559),

Gene: Velveteen\_11 Start: 6947, Stop: 7351, Start Num: 25

Candidate Starts for Velveteen\_11:

(Start: 25 @6947 has 221 MA's), (29, 6986), (Start: 36 @7028 has 5 MA's), (38, 7043), (40, 7055), (49, 7112), (50, 7118), (58, 7166), (59, 7181), (60, 7184), (65, 7208), (69, 7232), (70, 7235), (75, 7259), (77, 7265), (79, 7304), (80, 7307), (81, 7316),

Gene: Venti\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for Venti\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: Veteran\_10 Start: 7112, Stop: 7516, Start Num: 25

Candidate Starts for Veteran\_10:

(Start: 25 @7112 has 221 MA's), (Start: 27 @7145 has 4 MA's), (Start: 28 @7148 has 2 MA's), (29, 7151), (Start: 36 @7193 has 5 MA's), (38, 7208), (40, 7220), (49, 7277), (50, 7283), (58, 7331), (59, 7346), (65, 7373), (77, 7430), (80, 7472), (81, 7481),

Gene: Vidya\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for Vidya\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: Violac\_10 Start: 7098, Stop: 7502, Start Num: 25

Candidate Starts for Violac\_10:

(Start: 25 @7098 has 221 MA's), (Start: 27 @7131 has 4 MA's), (Start: 28 @7134 has 2 MA's), (29, 7137), (Start: 36 @7179 has 5 MA's), (38, 7194), (40, 7206), (49, 7263), (50, 7269), (58, 7317), (59, 7332), (65, 7359), (75, 7410), (77, 7416), (79, 7455), (80, 7458), (81, 7467),

Gene: Vivum\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for Vivum\_10:

(Start: 25 @7096 has 221 MA's), (Start: 26 @7099 has 3 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: Vorrps\_45 Start: 22964, Stop: 23416, Start Num: 16

Candidate Starts for Vorrps\_45:

(Start: 16 @22964 has 80 MA's), (Start: 28 @23057 has 2 MA's), (29, 23060), (30, 23069), (Start: 32 @23078 has 1 MA's), (43, 23141), (48, 23183), (52, 23201), (53, 23213), (59, 23264), (60, 23267), (68, 23291), (74, 23312), (75, 23318),

Gene: Wachhund\_10 Start: 7088, Stop: 7492, Start Num: 25

Candidate Starts for Wachhund\_10:

(Start: 25 @7088 has 221 MA's), (29, 7127), (Start: 32 @7145 has 1 MA's), (Start: 36 @7169 has 5 MA's), (38, 7184), (40, 7196), (49, 7253), (50, 7259), (58, 7307), (59, 7322), (65, 7349), (77, 7406), (80, 7448), (81, 7457),

Gene: Wee\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Wee\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Whatsapiecost\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for Whatsapiecost\_10:

(9, 7019), (13, 7052), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Whouxphf\_10 Start: 7087, Stop: 7491, Start Num: 25

Candidate Starts for Whouxphf\_10:

(Start: 25 @7087 has 221 MA's), (Start: 27 @7120 has 4 MA's), (Start: 28 @7123 has 2 MA's), (29, 7126), (Start: 36 @7168 has 5 MA's), (38, 7183), (40, 7195), (49, 7252), (50, 7258), (58, 7306), (59, 7321), (60, 7324), (65, 7348), (75, 7399), (77, 7405), (80, 7447), (81, 7456),

Gene: Wiggin\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for Wiggin\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: Wildflower\_46 Start: 22950, Stop: 23402, Start Num: 16

Candidate Starts for Wildflower\_46:

(Start: 16 @22950 has 80 MA's), (Start: 28 @23043 has 2 MA's), (29, 23046), (Start: 32 @23064 has 1 MA's), (43, 23127), (48, 23169), (52, 23187), (53, 23199), (59, 23250), (60, 23253), (68, 23277), (74, 23298), (75, 23304),

Gene: WillSterrel\_10 Start: 7083, Stop: 7490, Start Num: 25

Candidate Starts for WillSterrel\_10:

(9, 7005), (Start: 25 @7083 has 221 MA's), (Start: 27 @7116 has 4 MA's), (29, 7122), (Start: 36 @7164 has 5 MA's), (38, 7179), (41, 7194), (44, 7212), (47, 7239), (49, 7248), (50, 7254), (56, 7290), (58, 7302), (59, 7317), (61, 7326), (63, 7332), (64, 7341), (66, 7347), (69, 7368), (71, 7374), (76, 7398), (77, 7401), (81, 7452),

Gene: Willez\_17 Start: 10455, Stop: 10859, Start Num: 24

Candidate Starts for Willez\_17:

(15, 10422), (20, 10443), (Start: 24 @10455 has 128 MA's), (49, 10626), (51, 10638), (59, 10695), (75, 10764), (84, 10845), (85, 10854),

Gene: Willsammy\_13 Start: 8312, Stop: 8749, Start Num: 16

Candidate Starts for Willsammy\_13:

(6, 8231), (Start: 16 @8312 has 80 MA's), (31, 8378), (59, 8570), (60, 8573), (67, 8609), (74, 8642), (82, 8717), (83, 8723),

Gene: Winget\_47 Start: 23644, Stop: 24096, Start Num: 16

Candidate Starts for Winget\_47:

(Start: 16 @23644 has 80 MA's), (Start: 28 @23737 has 2 MA's), (29, 23740), (Start: 32 @23758 has 1 MA's), (43, 23821), (48, 23863), (52, 23881), (53, 23893), (59, 23944), (60, 23947), (68, 23971), (74, 23992), (75, 23998),

Gene: Wogge42\_45 Start: 23283, Stop: 23735, Start Num: 16

Candidate Starts for Wogge42\_45:

(Start: 16 @23283 has 80 MA's), (Start: 28 @23376 has 2 MA's), (29, 23379), (Start: 32 @23397 has 1 MA's), (43, 23460), (48, 23502), (52, 23520), (53, 23532), (59, 23583), (60, 23586), (68, 23610), (74, 23631), (75, 23637),

Gene: XFactor\_10 Start: 7097, Stop: 7504, Start Num: 25

Candidate Starts for XFactor\_10:

(9, 7019), (13, 7052), (Start: 21 @7085 has 46 MA's), (Start: 25 @7097 has 221 MA's), (Start: 27 @7130 has 4 MA's), (29, 7136), (Start: 36 @7178 has 5 MA's), (38, 7193), (41, 7208), (44, 7226), (47, 7253), (49, 7262), (50, 7268), (56, 7304), (58, 7316), (59, 7331), (63, 7346), (64, 7355), (66, 7361), (69, 7382), (71, 7388), (76, 7412), (77, 7415), (81, 7466),

Gene: Xandras\_19 Start: 10404, Stop: 10808, Start Num: 24

Candidate Starts for Xandras\_19:

(15, 10371), (20, 10392), (Start: 24 @10404 has 128 MA's), (49, 10575), (51, 10587), (59, 10644), (75, 10713), (84, 10794), (85, 10803),

Gene: Xavia\_13 Start: 8310, Stop: 8747, Start Num: 16

Candidate Starts for Xavia\_13:

(Start: 16 @8310 has 80 MA's), (59, 8568), (60, 8571), (67, 8607), (74, 8640), (82, 8715), (83, 8721),

Gene: Xeno\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Xeno\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Xerxes\_12 Start: 7343, Stop: 7762, Start Num: 21

Candidate Starts for Xerxes\_12:

(Start: 21 @7343 has 46 MA's), (49, 7514), (59, 7592), (71, 7646), (74, 7661), (75, 7667),

Gene: Xula\_11 Start: 7989, Stop: 8408, Start Num: 22

Candidate Starts for Xula\_11:

(Start: 22 @7989 has 9 MA's), (30, 8046), (33, 8058), (48, 8163), (59, 8235), (75, 8310), (78, 8331), (80, 8355),

Gene: YassJohnny\_18 Start: 10947, Stop: 11351, Start Num: 24

Candidate Starts for YassJohnny\_18:

(15, 10914), (20, 10935), (Start: 24 @10947 has 128 MA's), (49, 11118), (51, 11130), (59, 11187), (75, 11256), (84, 11337), (85, 11346),

Gene: Yorick\_10 Start: 7095, Stop: 7499, Start Num: 25

Candidate Starts for Yorick\_10:

(Start: 25 @7095 has 221 MA's), (Start: 27 @7128 has 4 MA's), (Start: 28 @7131 has 2 MA's), (29, 7134), (Start: 32 @7152 has 1 MA's), (Start: 36 @7176 has 5 MA's), (38, 7191), (40, 7203), (47, 7251), (49, 7260), (50, 7266), (58, 7314), (59, 7329), (69, 7380), (70, 7383), (75, 7407), (77, 7413), (79, 7452), (80, 7455), (81, 7464),

Gene: Youngblood\_17 Start: 10582, Stop: 10986, Start Num: 24

Candidate Starts for Youngblood\_17:

(15, 10549), (20, 10570), (Start: 24 @10582 has 128 MA's), (49, 10753), (51, 10765), (59, 10822), (75, 10891), (84, 10972), (85, 10981),

Gene: YoyoKar\_44 Start: 22928, Stop: 23380, Start Num: 16

Candidate Starts for YoyoKar\_44:

(11, 22886), (Start: 16 @22928 has 80 MA's), (Start: 28 @23021 has 2 MA's), (29, 23024), (Start: 32 @23042 has 1 MA's), (43, 23105), (48, 23147), (52, 23165), (53, 23177), (59, 23228), (60, 23231), (68, 23255), (74, 23276), (75, 23282),

Gene: YungJamal\_49 Start: 23683, Stop: 24135, Start Num: 16

Candidate Starts for YungJamal\_49:

(5, 23593), (Start: 16 @23683 has 80 MA's), (Start: 28 @23776 has 2 MA's), (29, 23779), (Start: 32 @23797 has 1 MA's), (43, 23860), (48, 23902), (52, 23920), (53, 23932), (59, 23983), (60, 23986), (68, 24010), (74, 24031), (75, 24037),

Gene: Zakhe101\_46 Start: 23094, Stop: 23546, Start Num: 16

Candidate Starts for Zakhe101\_46:

(Start: 16 @23094 has 80 MA's), (Start: 28 @23187 has 2 MA's), (29, 23190), (Start: 32 @23208 has 1 MA's), (43, 23271), (48, 23313), (52, 23331), (53, 23343), (59, 23394), (60, 23397), (68, 23421), (74, 23442), (75, 23448),

Gene: Zebo\_46 Start: 23378, Stop: 23830, Start Num: 16

Candidate Starts for Zebo\_46:

(Start: 16 @23378 has 80 MA's), (Start: 28 @23471 has 2 MA's), (29, 23474), (Start: 32 @23492 has 1 MA's), (43, 23555), (48, 23597), (52, 23615), (53, 23627), (59, 23678), (60, 23681), (68, 23705), (74, 23726), (75, 23732),

Gene: Zerg\_10 Start: 7096, Stop: 7500, Start Num: 25

Candidate Starts for Zerg\_10:

(Start: 25 @7096 has 221 MA's), (Start: 27 @7129 has 4 MA's), (Start: 28 @7132 has 2 MA's), (29, 7135), (Start: 32 @7153 has 1 MA's), (Start: 36 @7177 has 5 MA's), (38, 7192), (40, 7204), (47, 7252), (49, 7261), (50, 7267), (58, 7315), (59, 7330), (75, 7408), (77, 7414), (79, 7453), (80, 7456), (81, 7465),

Gene: Zilizebeth\_13 Start: 8306, Stop: 8743, Start Num: 16

Candidate Starts for Zilizebeth\_13:

(Start: 16 @8306 has 80 MA's), (59, 8564), (60, 8567), (67, 8603), (74, 8636), (82, 8711), (83, 8717),

Gene: Zizzle\_10 Start: 7099, Stop: 7503, Start Num: 25

Candidate Starts for Zizzle\_10:

(Start: 25 @7099 has 221 MA's), (Start: 27 @7132 has 4 MA's), (Start: 28 @7135 has 2 MA's), (29, 7138), (Start: 32 @7156 has 1 MA's), (Start: 36 @7180 has 5 MA's), (38, 7195), (40, 7207), (47, 7255), (49, 7264), (50, 7270), (58, 7318), (59, 7333), (69, 7384), (70, 7387), (75, 7411), (77, 7417), (79, 7456), (80, 7459), (81, 7468),

Gene: xkcd\_18 Start: 10607, Stop: 11011, Start Num: 24

Candidate Starts for xkcd\_18:

(15, 10574), (20, 10595), (Start: 24 @10607 has 128 MA's), (49, 10778), (51, 10790), (59, 10847), (75, 10916), (84, 10997), (85, 11006),