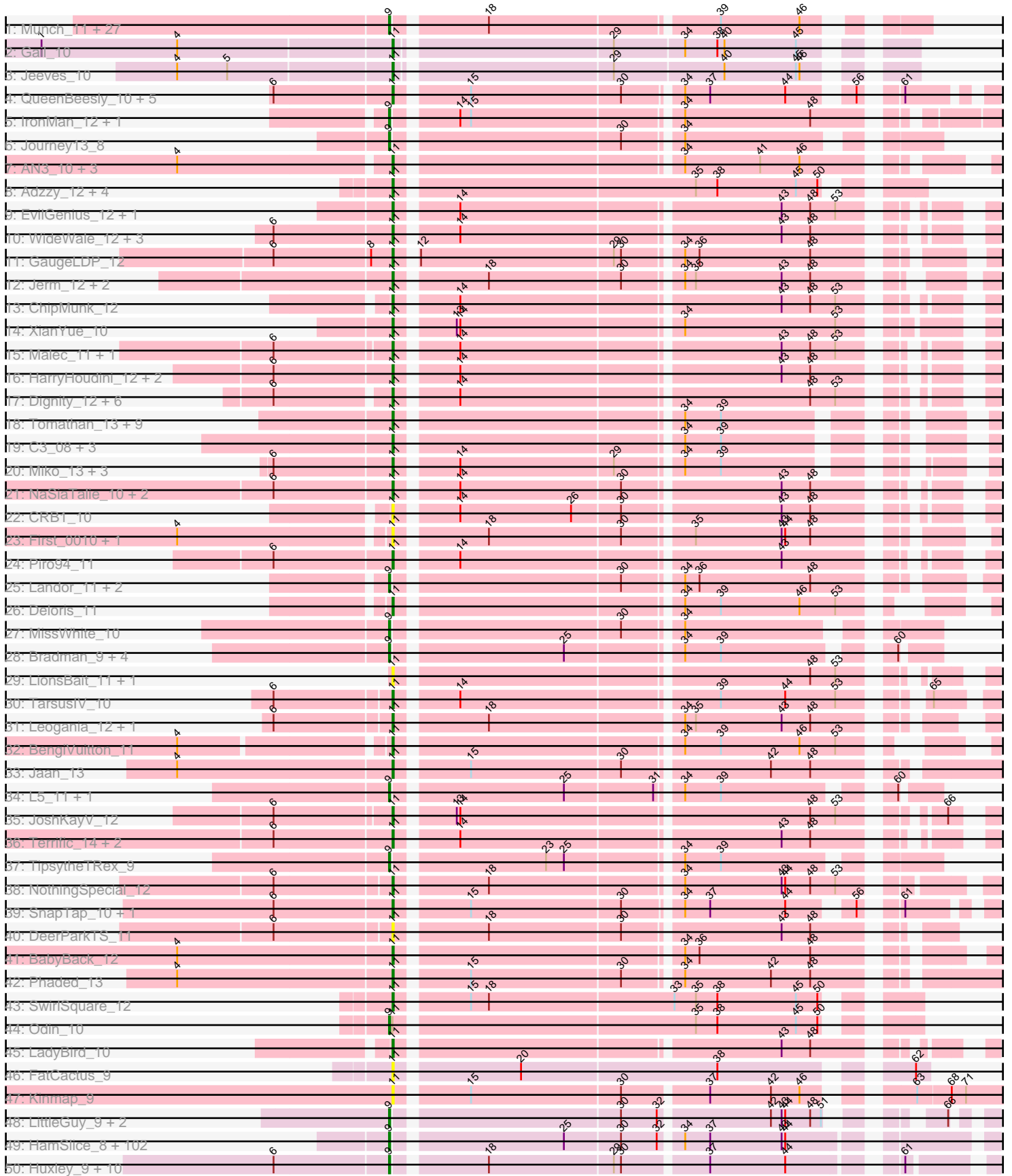
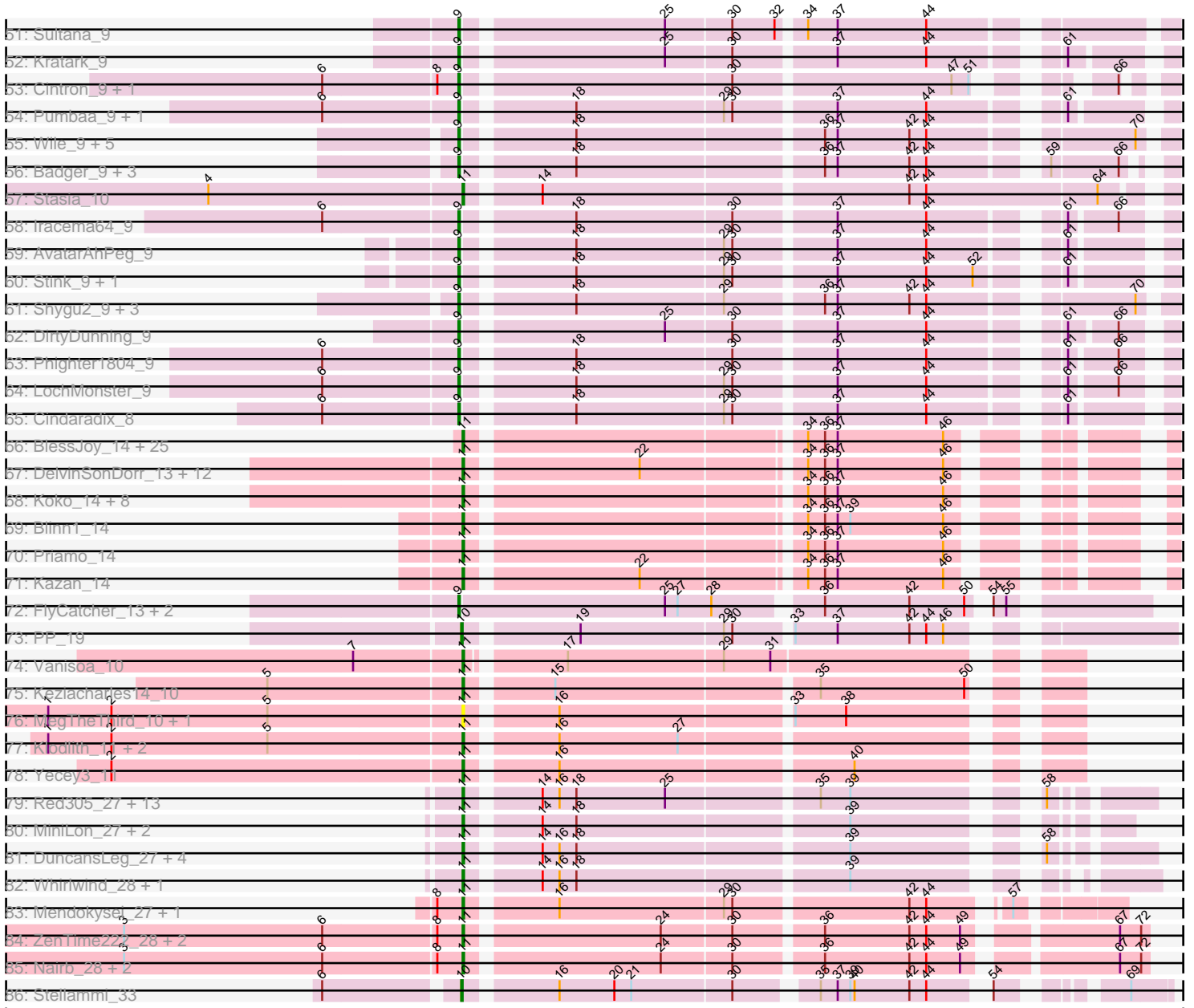


Pham 304630



Pham 304630



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 304630 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304630 has 374 members, 37 are drafts.

Phages represented in each track:

- Track 1 : Munch\_11, Aneem\_11, Wolpertinger\_10, Salz\_11, Lucivia\_11, Et2Brutus\_10, MaCh\_11, Orange\_11, Insomnia\_11, Jabith\_11, TinyTimmy\_11, Saskia\_10, Flaverint\_11, Petersenfast\_10, Fibonacci\_11, Bowtie\_11, Sham4\_11, Bachome\_11, Ebony\_11, Gilberta\_11, Timothy\_11, Joselito\_11, Mulciber\_11, Kimba\_11, Bud\_11, Mabel\_11, Hutc2\_11, Snape\_11
- Track 2 : Gail\_10
- Track 3 : Jeeves\_10
- Track 4 : QueenBeesly\_10, Georgie2\_11, SemperFi\_12, SweetiePie\_10, Power\_10, FiringLine\_10
- Track 5 : IronMan\_12, Tristan\_11
- Track 6 : Journey13\_8
- Track 7 : AN3\_10, VA6\_10, Benvolio\_10, Echild\_10
- Track 8 : Adzzy\_12, Ph8s\_12, Caraxes\_10, Che12\_12, Superchunk\_10
- Track 9 : EvilGenius\_12, KingCyrus\_12
- Track 10 : WideWale\_12, Updawg\_12, Equemioh13\_12, Gratitude\_11
- Track 11 : GaugeLDP\_12
- Track 12 : Jerm\_12, LiITurb\_12, Turbido\_12
- Track 13 : ChipMunk\_12
- Track 14 : XianYue\_10
- Track 15 : Malec\_11, Larenn\_11
- Track 16 : HarryHoudini\_12, Baehexic\_11, Drake55\_12
- Track 17 : Dignity\_12, AbbyPaige\_12, Whabigail7\_12, Buggy\_12, Smeagan\_12, Leviathan\_12, Agape74\_12
- Track 18 : Tomathan\_13, D32\_13, Travvers\_13, Kerberos\_13, D29\_11, DBQu4n\_13, StarStuff\_13, Naji\_13, Duplo\_13, Pomar16\_13
- Track 19 : C3\_08, AN9\_13, VC3\_13, ANI8\_13
- Track 20 : Miko\_13, Rachaly\_13, Lokk\_13, BobSwaget\_13
- Track 21 : NaSiaTalie\_10, Flare16\_10, Sknot\_10
- Track 22 : CRB1\_10
- Track 23 : First\_0010, 20ES\_10
- Track 24 : Piro94\_11
- Track 25 : Landor\_11, Bactobuster\_11, Pukovnik\_12
- Track 26 : Deloris\_11
- Track 27 : MissWhite\_10
- Track 28 : Bradman\_9, MajorMajor\_9, Quokka\_8, Jsquared\_9, Serenity\_9
- Track 29 : LionsBait\_11, HippoHollow\_11
- Track 30 : TarsusIV\_10

- Track 31 : Leogania\_12, BiancaTri92\_12
- Track 32 : BengiVuitton\_11
- Track 33 : Jaan\_13
- Track 34 : L5\_11, Koduck\_11
- Track 35 : JoshKayV\_12
- Track 36 : Terrific\_14, Centaur\_12, MiculUcigas\_10
- Track 37 : TipsytheTRex\_9
- Track 38 : NothingSpecial\_12
- Track 39 : SnapTap\_10, Crucio\_10
- Track 40 : DeerParkTS\_11
- Track 41 : BabyBack\_12
- Track 42 : Phaded\_13
- Track 43 : SwirlSquare\_12
- Track 44 : Odin\_10
- Track 45 : LadyBird\_10
- Track 46 : FatCactus\_9
- Track 47 : Kinmap\_9
- Track 48 : LittleGuy\_9, Nyxis\_9, Phontbonne\_9
- Track 49 : HamSlice\_8, Kampy\_9, Taquarus\_9, Lorenzo\_9, TroyPia\_9, Sabertooth\_9, CentreCat\_9, Clarenza\_9, Iceman\_9, Ruin\_9, Connomayer\_9, Florean\_9, Maxo\_9, Mazhar510\_9, Phacado\_9, Albee\_9, Eros\_9, Bombshell\_9, Maverick\_9, LittleB\_9, BellusTerra\_9, Phelipe\_9, Peaches\_9, ICleared\_9, Avle17\_9, TiroTheta9\_9, Anyong\_9, Wizard007\_9, Koreni\_8, MeeZee\_9, OKaNui\_9, KFPoly\_9, Millski\_9, JetBlade\_9, Commander\_9, Eagle\_8, Relief\_9, TygerBlood\_9, Ohfah\_9, Lunsford\_10, Gadost\_9, NorthStar\_9, Wilbur\_9, SteMason\_8, Eapen\_9, Kingmustik0402\_9, Mayonnaise\_9, Holli\_9, Pipcraft\_9, Polymorphads\_9, Melvin\_9, Palestino\_9, Medusa\_9, LeoAvram\_9, YoSam321\_9, Citius\_9, Sparxx\_9, KekoraPapaka\_8, Caelakin\_9, Arturo\_8, TinaFeyge\_9, Kyee\_9, Cocoaberry\_9, Koan\_9, Bartimeaus\_9, LappelDuVide\_9, Spino\_9, Roosevelt\_9, Funston\_9, RockieBear\_8, Dhanush\_9, Bruiser\_9, Blackmoor\_9, SenorClean\_9, Baby16\_9, Scamp\_9, PeterPeter\_9, Houdini22\_9, Nemo27\_9, BubbleTrouble\_9, Broseidon\_9, Jaykayelowell\_9, Romney\_9, Lemur\_9, Noelle\_9, Nebs\_9, NotAPhaseMom\_9, Skipitt\_9, Shaka\_9, Eris\_9, Chaph\_9, Alberto7\_10, Flux\_9, Druantia\_9, Eurydice\_9, Thanksgivukkah\_9, JoongJeon\_9, Morrow\_9, Happiness\_9, Burger\_8, Deano\_9, Wander\_9, Abdiel\_9
- Track 50 : Huxley\_9, Obama12\_9, Ulysses\_8, SheldonCooper\_9, Rosa24\_8, LHTSCC\_9, Camperdownii\_8, ChampagnePapi\_9, Tinybot\_8, Cerulean\_9, BangNhom\_8
- Track 51 : Sultana\_9
- Track 52 : Kratak\_9
- Track 53 : Cintron\_9, Kremtemulon\_9
- Track 54 : Pumbaa\_9, Mundrea\_9
- Track 55 : Wile\_9, PetiteSangsue\_9, Katalie136\_9, Perplexer\_9, Datway\_9, Backyardigan\_9
- Track 56 : Badger\_9, Cici\_9, Xena\_9, Achebe\_9
- Track 57 : Stasia\_10
- Track 58 : Iracema64\_9
- Track 59 : AvatarAhPeg\_9
- Track 60 : Stink\_9, Miramae\_9
- Track 61 : Shygu2\_9, Morpher26\_9, AbbysRanger\_9, Bumblebee11\_9
- Track 62 : DirtyDunning\_9
- Track 63 : Phighter1804\_9
- Track 64 : LochMonster\_9

- Track 65 : Cindaradix\_8
- Track 66 : BlessJoy\_14, Rifter\_14, Wiks\_14, Hammer\_14, CloudWang3\_14, VohminGhazi\_14, SmellyB\_14, Gladiator\_14, Blue7\_14, Dorothea\_14, Chartreuse\_14, DaVinci\_14, Yokurt\_14, Gruunaga\_14, Kipper29\_14, ToneTone\_13, WunderPhul\_14, Zulu\_14, Lilbunny\_14, Candra\_14, McFly\_14, Hoot\_14, Jeffabunny\_14, BennyP\_14, GreedyLawyer\_14, Zaka\_14
- Track 67 : DelvinSonDorr\_13, Cookiedough\_14, Isiphiwo\_14, SuperCallie99\_14, JewelBug\_14, Pmask\_14, Jordennis\_14, Polyphemus\_14, Neeharika16\_14, Newrala\_14, BABullseye\_14, EricB\_14, SuperAwesome\_14
- Track 68 : Koko\_14, Tucker\_14, Roksolana\_14, Helmet\_14, Artemis2UCLA\_14, Temprado\_14, Indra\_14, Hexamo\_14, Garak\_15
- Track 69 : Blinn1\_14
- Track 70 : Priamo\_14
- Track 71 : Kazan\_14
- Track 72 : FlyCatcher\_13, Sheen\_11, Toro\_12
- Track 73 : PP\_19
- Track 74 : Vanisoa\_10
- Track 75 : Keziacharles14\_10
- Track 76 : MegTheThird\_10, Celestialunch\_11
- Track 77 : Klodlith\_11, Charm\_11, DreamTeam1\_11
- Track 78 : Yecey3\_11
- Track 79 : Red305\_27, Jubie\_27, Bellis\_27, Lumos\_27, Snenia\_27, Finnry\_27, Clautastrophe\_27, TriFive\_27, Nicholas\_27, Moostard\_27, Samty\_27, Kingsolomon\_27, MsGreen\_27, Jobypre\_27
- Track 80 : MiniLon\_27, MiniMac\_27, Lolly9\_27
- Track 81 : DuncansLeg\_27, Ellson\_27, LiyuLake\_27, KirDoubleO7\_25, BourbonZero\_26
- Track 82 : Whirlwind\_28, Krypton555\_27
- Track 83 : Mendokysei\_27, Nette\_29
- Track 84 : ZenTime222\_28, Ibrahim\_28, RonRayGun\_28
- Track 85 : Nairb\_28, Bernal13\_28, Whitty\_28
- Track 86 : Stellammi\_33

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

The start number called the most often in the published annotations is 9, it was called in 179 of the 337 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbysRanger\_9, Abdiel\_9, Achebe\_9, Albee\_9, Alberto7\_10, Aneem\_11, Annyong\_9, Arturo\_8, AvatarAhPeg\_9, Avle17\_9, Baby16\_9, Bachome\_11, Backyardigan\_9, Bactobuster\_11, Badger\_9, BangNhom\_8, Bartimeaus\_9, BellusTerra\_9, Blackmoor\_9, Bombshell\_9, Bowtie\_11, Bradman\_9, Broseidon\_9, Bruiser\_9, BubbleTrouble\_9, Bud\_11, Bumblebee11\_9, Burger\_8, Caelakin\_9, Camperdownii\_8, CentreCat\_9, Cerulean\_9, ChampagnePapi\_9, Chaph\_9, Cici\_9, Cindaradix\_8, Cintron\_9, Citius\_9, Clarenza\_9, Cocoaberry\_9, Commander\_9, Connomayer\_9, Datway\_9, Deano\_9, Dhanush\_9, DirtyDunning\_9, Druantia\_9, Eagle\_8, Eapen\_9, Ebony\_11, Eris\_9, Eros\_9, Et2Brutus\_10, Eurydice\_9, Fibonacci\_11, Flaverint\_11, Florean\_9, Flux\_9, FlyCatcher\_13, Funston\_9, Gadost\_9, Gilberta\_11, HamSlice\_8, Happiness\_9, Holli\_9, Houdini22\_9, Hutc2\_11,

Huxley\_9, ICleared\_9, Iceman\_9, Insomnia\_11, Iracema64\_9, IronMan\_12, Jabith\_11, Jaykayelowell\_9, JetBlade\_9, JoongJeon\_9, Joselito\_11, Journey13\_8, Jsquared\_9, KFPoly\_9, Kamy\_9, Katalie136\_9, KekoraPapaka\_8, Kimba\_11, Kingmustik0402\_9, Koan\_9, Koduck\_11, Koreni\_8, Kratark\_9, Kremtemulon\_9, Kyee\_9, L5\_11, LHTSCC\_9, Landor\_11, LappelDuVide\_9, Lemur\_9, LeoAvram\_9, LittleB\_9, LittleGuy\_9, LochMonster\_9, Lorenzo\_9, Lucivia\_11, Lunsford\_10, MaCh\_11, Mabel\_11, MajorMajor\_9, Maverick\_9, Maxo\_9, Mayonnaise\_9, Mazhar510\_9, Medusa\_9, MeeZee\_9, Melvin\_9, Millski\_9, Miramae\_9, MissWhite\_10, Morpher26\_9, Morrow\_9, Mulciber\_11, Munch\_11, Mundrea\_9, Nebs\_9, Nemo27\_9, Noelle\_9, NorthStar\_9, NotAPhaseMom\_9, Nyxis\_9, OKaNui\_9, Obama12\_9, Odin\_10, Ohfah\_9, Orange\_11, Palestino\_9, Peaches\_9, Perplexer\_9, PeterPeter\_9, Petersenfast\_10, PetiteSangsue\_9, Phacado\_9, Phelipe\_9, Phighter1804\_9, Phontbonne\_9, Pipcraft\_9, Polymorphads\_9, Pukovnik\_12, Pumbaa\_9, Quokka\_8, Relief\_9, RockieBear\_8, Romney\_9, Roosevelt\_9, Rosa24\_8, Ruin\_9, Sabertooth\_9, Salz\_11, Saskia\_10, Scamp\_9, SenorClean\_9, Serenity\_9, Shaka\_9, Sham4\_11, Sheen\_11, SheldonCooper\_9, Shygu2\_9, Skipitt\_9, Snape\_11, Sparxx\_9, Spino\_9, SteMason\_8, Stink\_9, Sultana\_9, Taquarus\_9, Thanksgivukkah\_9, Timothy\_11, TinaFeyge\_9, TinyTimmy\_11, Tinybot\_8, TipsytheTRex\_9, TiroTheta9\_9, Toro\_12, Tristan\_11, TroyPia\_9, TygerBlood\_9, Ulysses\_8, Wander\_9, Wilbur\_9, Wile\_9, Wizard007\_9, Wolpertinger\_10, Xena\_9, YoSam321\_9,

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

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

- 20ES\_10, AN3\_10, AN9\_13, ANI8\_13, AbbyPaige\_12, Adzzy\_12, Agape74\_12, Artemis2UCLA\_14, BABullseye\_14, BabyBack\_12, Baehexic\_11, Bellis\_27, BengiVuitton\_11, BennyP\_14, Benvolio\_10, Bernal13\_28, BiancaTri92\_12, BlessJoy\_14, Blinn1\_14, Blue7\_14, BobSwaget\_13, BourbonZero\_26, Buggy\_12, C3\_08, CRB1\_10, Candra\_14, Caraxes\_10, Celestiallunch\_11, Centaur\_12, Charm\_11, Chartreuse\_14, Che12\_12, ChipMunk\_12, Clautastrophe\_27, CloudWang3\_14, Cookiedough\_14, Crucio\_10, D29\_11, D32\_13, DBQu4n\_13, DaVinci\_14, DeerParkTS\_11, Deloris\_11, DelvinSonDorr\_13, Dignity\_12, Dorothea\_14, Drake55\_12, DreamTeam1\_11, DuncansLeg\_27, Duplo\_13, Echild\_10, Ellson\_27, Equemioh13\_12, EricB\_14, EvilGenius\_12, FatCactus\_9, Finnry\_27, FiringLine\_10, First\_0010, Flare16\_10, Gail\_10, Garak\_15, GaugeLDP\_12, Georgie2\_11, Gladiator\_14, Gratitude\_11, GreedyLawyer\_14, Gruunaga\_14, Hammer\_14, HarryHoudini\_12, Helmet\_14, Hexamo\_14, HippoHollow\_11, Hoot\_14, Ibrahim\_28, Indra\_14, Isiphiwo\_14, Jaan\_13, Jeeves\_10, Jeffabunny\_14, Jerm\_12, JewelBug\_14, Jobypre\_27, Jordennis\_14, JoshKayV\_12, Jubie\_27, Kazan\_14, Kerberos\_13, Keziacharles14\_10, KingCyrus\_12, Kingsolomon\_27, Kinmap\_9, Kipper29\_14, KirDoubleO7\_25, Klodlith\_11, Koko\_14, Krypton555\_27, LadyBird\_10, Larenn\_11, Leogania\_12, Leviathan\_12, LiITurb\_12, Lilbunny\_14, LionsBait\_11, LiyuLake\_27, Lokk\_13, Lolly9\_27, Lumos\_27, Malec\_11, McFly\_14, MegTheThird\_10, Mendokysei\_27, MiculUcigas\_10, Miko\_13, MiniLon\_27, MiniMac\_27, Moostard\_27, MsGreen\_27, NaSiaTalie\_10, Nairb\_28, Naji\_13, Neeharika16\_14, Nette\_29, Newrala\_14, Nicholas\_27, NothingSpecial\_12, PP\_19, Ph8s\_12, Phaded\_13, Piro94\_11, Pmask\_14, Polyphemus\_14, Pomar16\_13, Power\_10, Priamo\_14, QueenBeesly\_10, Rachaly\_13, Red305\_27, Rifter\_14, Roksolana\_14, RonRayGun\_28, Samty\_27, SemperFi\_12, Sknot\_10, Smeagan\_12, SmellyB\_14, SnapTap\_10, Snenia\_27, StarStuff\_13, Stasia\_10, Stellammi\_33, SuperAwesome\_14, SuperCallie99\_14, Superchunk\_10, SweetiePie\_10,

SwirlSquare\_12, TarsusIV\_10, Temprado\_14, Terrific\_14, Tomathan\_13, ToneTone\_13, Travvers\_13, TriFive\_27, Tucker\_14, Turbido\_12, Updawg\_12, VA6\_10, VC3\_13, Vanisoa\_10, VohminGhazi\_14, Whabigail7\_12, Whirlwind\_28, Whitty\_28, WideWale\_12, Wiks\_14, WunderPhul\_14, XianYue\_10, Yecey3\_11, Yokurt\_14, Zaka\_14, ZenTime222\_28, Zulu\_14,

### Summary by start number:

Start 9:

- Found in 192 of 374 ( 51.3% ) of genes in pham
- Manual Annotations of this start: 179 of 337
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbysRanger\_9 (A4), Abdiel\_9 (A4), Achebe\_9 (A4), Albee\_9 (A4), Alberto7\_10 (A4), Aneem\_11 (A11), Annyong\_9 (A4), Arturo\_8 (A4), AvatarAhPeg\_9 (A4), Avle17\_9 (A4), Baby16\_9 (A4), Bachome\_11 (A11), Backyardigan\_9 (A4), Bactobuster\_11 (A2), Badger\_9 (A4), BangNhom\_8 (A4), Bartimeaus\_9 (A4), BellusTerra\_9 (A4), Blackmoor\_9 (A4), Bombshell\_9 (A4), Bowtie\_11 (A11), Bradman\_9 (A2), Broseidon\_9 (A4), Bruiser\_9 (A4), BubbleTrouble\_9 (A4), Bud\_11 (A11), Bumblebee11\_9 (A4), Burger\_8 (A4), Caelakin\_9 (A4), Camperdownii\_8 (A4), CentreCat\_9 (A4), Cerulean\_9 (A4), ChampagnePapi\_9 (A4), Chaph\_9 (A4), Cici\_9 (A4), Cindaradix\_8 (A4), Cintron\_9 (A4), Citius\_9 (A4), Clarenza\_9 (A4), Cocoaberry\_9 (A4), Commander\_9 (A4), Connomayer\_9 (A4), Datway\_9 (A4), Deano\_9 (A4), Dhanush\_9 (A4), DirtyDunning\_9 (A4), Druantia\_9 (A4), Eagle\_8 (A4), Eapen\_9 (A4), Ebony\_11 (A11), Eris\_9 (A4), Eros\_9 (A4), Et2Brutus\_10 (A11), Eurydice\_9 (A4), Fibonacci\_11 (A11), Flaverint\_11 (A11), Florean\_9 (A4), Flux\_9 (A4), FlyCatcher\_13 (A7), Funston\_9 (A4), Gadost\_9 (A4), Gilberta\_11 (A11), HamSlice\_8 (A4), Happiness\_9 (A4), Holli\_9 (A4), Houdini22\_9 (A4), Hutc2\_11 (A11), Huxley\_9 (A4), ICleared\_9 (A4), Iceman\_9 (A4), Insomnia\_11 (A11), Iracema64\_9 (A4), IronMan\_12 (A2), Jabith\_11 (A11), Jaykayelowell\_9 (A4), JetBlade\_9 (A4), JoongJeon\_9 (A4), Joselito\_11 (A11), Journey13\_8 (A2), Jsquared\_9 (A2), KFPoly\_9 (A4), Kampy\_9 (A4), Katalie136\_9 (A4), KekoraPapaka\_8 (A4), Kimba\_11 (A11), Kingmustik0402\_9 (A4), Koan\_9 (A4), Koduck\_11 (A2), Koreni\_8 (A4), Kratark\_9 (A4), Kremtemulon\_9 (A4), Kyee\_9 (A4), L5\_11 (A2), LHTSCC\_9 (A4), Landor\_11 (A2), LappelDuVide\_9 (A4), Lemur\_9 (A4), LeoAvram\_9 (A4), LittleB\_9 (A4), LittleGuy\_9 (A4), LochMonster\_9 (A4), Lorenzo\_9 (A4), Lucivia\_11 (A11), Lunsford\_10 (A4), MaCh\_11 (A11), Mabel\_11 (A11), MajorMajor\_9 (A2), Maverick\_9 (A4), Maxo\_9 (A4), Mayonnaise\_9 (A4), Mazhar510\_9 (A4), Medusa\_9 (A4), MeeZee\_9 (A4), Melvin\_9 (A4), Millski\_9 (A4), Miramae\_9 (A4), MissWhite\_10 (A2), Morpher26\_9 (A4), Morrow\_9 (A4), Mulciber\_11 (A11), Munch\_11 (A11), Mundrea\_9 (A4), Nebs\_9 (A4), Nemo27\_9 (A4), Noelle\_9 (A4), NorthStar\_9 (A4), NotAPhaseMom\_9 (A4), Nyxis\_9 (A4), OKaNui\_9 (A4), Obama12\_9 (A4), Odin\_10 (A2), Ohfah\_9 (A4), Orange\_11 (A11), Palestino\_9 (A4), Peaches\_9 (A4), Perplexer\_9 (A4), PeterPeter\_9 (A4), Petersenfast\_10 (A11), PetiteSangsue\_9 (A4), Phacado\_9 (A4), Felipe\_9 (A4), Phighter1804\_9 (A4), Phontbonne\_9 (A4), Pipcraft\_9 (A4), Polymorphads\_9 (A4), Pukovnik\_12 (A2), Pumbaa\_9 (A4), Quokka\_8 (A2), Relief\_9 (A4), RockieBear\_8 (A4), Romney\_9 (A4), Roosevelt\_9 (A4), Rosa24\_8 (A4), Ruin\_9 (A4), Sabertooth\_9 (A4), Salz\_11 (A11), Saskia\_10 (A11), Scamp\_9 (A4), SenorClean\_9 (A4), Serenity\_9 (A2), Shaka\_9 (A4), Sham4\_11 (A11), Sheen\_11 (A7), SheldonCooper\_9 (A4), Shygu2\_9 (A4), Skipitt\_9 (A4), Snape\_11 (A11), Sparxx\_9 (A4), Spino\_9 (A4), SteMason\_8 (A4), Stink\_9 (A4), Sultana\_9 (A4), Taquarus\_9 (A4), Thanksgivukkah\_9 (A4), Timothy\_11 (A11), TinaFeyge\_9 (A4), TinyTimmy\_11 (A11), Tinybot\_8 (A4), TipsytheTRex\_9 (A2), TiroTheta9\_9 (A4), Toro\_12 (A7), Tristan\_11 (A2), TroyPia\_9 (A4), TygerBlood\_9

(A4), Ulysses\_8 (A4), Wander\_9 (A4), Wilbur\_9 (A4), Wile\_9 (A4), Wizard007\_9 (A4), Wolpertinger\_10 (A11), Xena\_9 (A4), YoSam321\_9 (A4),

Start 10:

- Found in 2 of 374 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 2 of 337
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PP\_19 (A7), Stellammi\_33 (UNK),

Start 11:

- Found in 181 of 374 ( 48.4% ) of genes in pham
- Manual Annotations of this start: 156 of 337
- Called 99.4% of time when present
- Phage (with cluster) where this start called: 20ES\_10 (A2), AN3\_10 (A2), AN9\_13 (A2), AN18\_13 (A2), AbbyPaige\_12 (A2), Adzzy\_12 (A2), Agape74\_12 (A2), Artemis2UCLA\_14 (A6), BABullseye\_14 (A6), BabyBack\_12 (A2), Baehexic\_11 (A2), Bellis\_27 (L3), BengiVuitton\_11 (A2), BennyP\_14 (A6), Benvolio\_10 (A2), Bernal13\_28 (T), BiancaTri92\_12 (A2), BlessJoy\_14 (A6), Blinn1\_14 (A6), Blue7\_14 (A6), BobSwaget\_13 (A2), BourbonZero\_26 (L3), Buggy\_12 (A2), C3\_08 (A2), CRB1\_10 (A2), Candra\_14 (A6), Caraxes\_10 (A2), Celestialunch\_11 (A9), Centaur\_12 (A2), Charm\_11 (A9), Chartreuse\_14 (A6), Che12\_12 (A2), ChipMunk\_12 (A2), Clautastrophe\_27 (L3), CloudWang3\_14 (A6), Cookiedough\_14 (A6), Crucio\_10 (A2), D29\_11 (A2), D32\_13 (A2), DBQu4n\_13 (A2), DaVinci\_14 (A6), DeerParkTS\_11 (A2), Deloris\_11 (A2), DelvinSonDorr\_13 (A6), Dignity\_12 (A2), Dorothea\_14 (A6), Drake55\_12 (A2), DreamTeam1\_11 (A9), DuncansLeg\_27 (L3), Duplo\_13 (A2), Echild\_10 (A2), Ellson\_27 (L3), Equemioh13\_12 (A2), EricB\_14 (A6), EvilGenius\_12 (A2), FatCactus\_9 (A20), Finnry\_27 (L3), FiringLine\_10 (A2), First\_0010 (A2), Flare16\_10 (A2), Gail\_10 (A14), Garak\_15 (A6), GaugeLDP\_12 (A2), Georgie2\_11 (A2), Gladiator\_14 (A6), Gratitude\_11 (A2), GreedyLawyer\_14 (A6), Gruunaga\_14 (A6), Hammer\_14 (A6), HarryHoudini\_12 (A2), Helmet\_14 (A6), Hexamo\_14 (A6), HippoHollow\_11 (A2), Hoot\_14 (A6), Ibrahim\_28 (T), Indra\_14 (A6), Isiphiwo\_14 (A6), Jaan\_13 (A2), Jeeves\_10 (A14), Jeffabunny\_14 (A6), Jerm\_12 (A2), JewelBug\_14 (A6), Jobypre\_27 (L3), Jordennis\_14 (A6), JoshKayV\_12 (A2), Jubie\_27 (L3), Kazan\_14 (A6), Kerberos\_13 (A2), Keziacharles14\_10 (A9), KingCyrus\_12 (A2), Kingsolomon\_27 (L3), Kinmap\_9 (A21), Kipper29\_14 (A6), KirDoubleO7\_25 (L3), Klodlith\_11 (A9), Koko\_14 (A6), Krypton555\_27 (L3), LadyBird\_10 (A2), Larenn\_11 (A2), Leogania\_12 (A2), Leviathan\_12 (A2), LilTurb\_12 (A2), Lilbunny\_14 (A6), LionsBait\_11 (A2), LiyuLake\_27 (L3), Lokk\_13 (A2), Lolly9\_27 (L3), Lumos\_27 (L3), Malec\_11 (A2), McFly\_14 (A6), MegTheThird\_10 (A9), Mendokysei\_27 (T), MiculUcigas\_10 (A2), Miko\_13 (A2), MiniLon\_27 (L3), MiniMac\_27 (L3), Moostard\_27 (L3), MsGreen\_27 (L3), NaSiaTalie\_10 (A2), Nairb\_28 (T), Naji\_13 (A2), Neeharika16\_14 (A6), Nette\_29 (T), Newrala\_14 (A6), Nicholas\_27 (L3), NothingSpecial\_12 (A2), Ph8s\_12 (A2), Phaded\_13 (A2), Piro94\_11 (A2), Pmask\_14 (A6), Polyphemus\_14 (A6), Pomar16\_13 (A2), Power\_10 (A2), Priamo\_14 (A6), QueenBeesly\_10 (A2), Rachaly\_13 (A2), Red305\_27 (L3), Rifter\_14 (A6), Roksolana\_14 (A6), RonRayGun\_28 (T), Samty\_27 (L3), SemperFi\_12 (A2), Sknot\_10 (A2), Smeagan\_12 (A2), SmellyB\_14 (A6), SnapTap\_10 (A2), Snenia\_27 (L3), StarStuff\_13 (A2), Stasia\_10 (A4), SuperAwesome\_14 (A6), SuperCallie99\_14 (A6), Superchunk\_10 (A2), SweetiePie\_10 (A2), SwirlSquare\_12 (A2), TarsusIV\_10 (A2), Temprado\_14 (A6), Terrific\_14 (A2), Tomathan\_13 (A2), ToneTone\_13 (A6), Travvers\_13 (A2), TriFive\_27 (L3), Tucker\_14 (A6), Turbido\_12 (A2), Updawg\_12 (A2), VA6\_10 (A2), VC3\_13 (A2), Vanisoa\_10 (A9), VohminGhazi\_14 (A6), Whabigail7\_12 (A2),

Whirlwind\_28 (L3), Whitty\_28 (T), WideWale\_12 (A2), Wiks\_14 (A6), WunderPhul\_14 (A6), XianYue\_10 (A2), Yecey3\_11 (A9), Yokurt\_14 (A6), Zaka\_14 (A6), ZenTime222\_28 (T), Zulu\_14 (A6),

### **Summary by clusters:**

There are 12 clusters represented in this pham: A20, A21, A11, A14, T, A2, L3, A7, A6, A9, UNK, A4,

Info for manual annotations of cluster A11:

- Start number 9 was manually annotated 24 times for cluster A11.

Info for manual annotations of cluster A14:

- Start number 11 was manually annotated 2 times for cluster A14.

Info for manual annotations of cluster A2:

- Start number 9 was manually annotated 13 times for cluster A2.
- Start number 11 was manually annotated 74 times for cluster A2.

Info for manual annotations of cluster A4:

- Start number 9 was manually annotated 141 times for cluster A4.
- Start number 11 was manually annotated 1 time for cluster A4.

Info for manual annotations of cluster A6:

- Start number 11 was manually annotated 48 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 9 was manually annotated 1 time for cluster A7.
- Start number 10 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A9:

- Start number 11 was manually annotated 5 times for cluster A9.

Info for manual annotations of cluster L3:

- Start number 11 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster T:

- Start number 11 was manually annotated 7 times for cluster T.

Info for manual annotations of cluster UNK:

- Start number 10 was manually annotated 1 time for cluster UNK.

### **Gene Information:**

Gene: 20ES\_10 Start: 5985, Stop: 6446, Start Num: 11

Candidate Starts for 20ES\_10:

(4, 5817), (Start: 11 @5985 has 156 MA's), (18, 6054), (30, 6162), (35, 6213), (43, 6285), (44, 6288), (48, 6309),

Gene: AN3\_10 Start: 5970, Stop: 6431, Start Num: 11  
Candidate Starts for AN3\_10:  
(4, 5799), (Start: 11 @5970 has 156 MA's), (34, 6189), (41, 6252), (46, 6285),

Gene: AN9\_13 Start: 6174, Stop: 6599, Start Num: 11  
Candidate Starts for AN9\_13:  
(Start: 11 @6174 has 156 MA's), (34, 6393), (39, 6423),

Gene: ANI8\_13 Start: 6174, Stop: 6599, Start Num: 11  
Candidate Starts for ANI8\_13:  
(Start: 11 @6174 has 156 MA's), (34, 6393), (39, 6423),

Gene: AbbyPaige\_12 Start: 6436, Stop: 6876, Start Num: 11  
Candidate Starts for AbbyPaige\_12:  
(6, 6349), (Start: 11 @6436 has 156 MA's), (14, 6481), (48, 6760), (53, 6781),

Gene: AbbysRanger\_9 Start: 5429, Stop: 5890, Start Num: 9  
Candidate Starts for AbbysRanger\_9:  
(Start: 9 @5429 has 179 MA's), (18, 5498), (29, 5600), (36, 5663), (37, 5672), (42, 5723), (44, 5735),  
(70, 5858),

Gene: Abdiel\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Abdiel\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Achebe\_9 Start: 5429, Stop: 5878, Start Num: 9  
Candidate Starts for Achebe\_9:  
(Start: 9 @5429 has 179 MA's), (18, 5498), (36, 5663), (37, 5672), (42, 5723), (44, 5735), (59, 5801),  
(66, 5846),

Gene: Adzzy\_12 Start: 5846, Stop: 6244, Start Num: 11  
Candidate Starts for Adzzy\_12:  
(Start: 11 @5846 has 156 MA's), (35, 6086), (38, 6104), (45, 6170), (50, 6188),

Gene: Agape74\_12 Start: 6436, Stop: 6876, Start Num: 11  
Candidate Starts for Agape74\_12:  
(6, 6349), (Start: 11 @6436 has 156 MA's), (14, 6481), (48, 6760), (53, 6781),

Gene: Albee\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Albee\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Alberto7\_10 Start: 5725, Stop: 6186, Start Num: 9  
Candidate Starts for Alberto7\_10:  
(Start: 9 @5725 has 179 MA's), (25, 5857), (30, 5902), (32, 5932), (34, 5947), (37, 5968), (43, 6028),  
(44, 6031),

Gene: Aneem\_11 Start: 7621, Stop: 8007, Start Num: 9  
Candidate Starts for Aneem\_11:  
(Start: 9 @7621 has 179 MA's), (18, 7690), (39, 7870), (46, 7936),

Gene: Annyong\_9 Start: 5421, Stop: 5882, Start Num: 9

Candidate Starts for Annyong\_9:

(Start: 9 @5421 has 179 MA's), (25, 5553), (30, 5598), (32, 5628), (34, 5643), (37, 5664), (43, 5724), (44, 5727),

Gene: Artemis2UCLA\_14 Start: 6948, Stop: 7379, Start Num: 11

Candidate Starts for Artemis2UCLA\_14:

(Start: 11 @6948 has 156 MA's), (34, 7167), (36, 7179), (37, 7188), (46, 7263),

Gene: Arturo\_8 Start: 5531, Stop: 5992, Start Num: 9

Candidate Starts for Arturo\_8:

(Start: 9 @5531 has 179 MA's), (25, 5663), (30, 5708), (32, 5738), (34, 5753), (37, 5774), (43, 5834), (44, 5837),

Gene: AvatarAhPeg\_9 Start: 5393, Stop: 5845, Start Num: 9

Candidate Starts for AvatarAhPeg\_9:

(Start: 9 @5393 has 179 MA's), (18, 5462), (29, 5564), (30, 5570), (37, 5636), (44, 5699), (61, 5774),

Gene: Avle17\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Avle17\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: BABullseye\_14 Start: 7065, Stop: 7499, Start Num: 11

Candidate Starts for BABullseye\_14:

(Start: 11 @7065 has 156 MA's), (22, 7179), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Baby16\_9 Start: 5429, Stop: 5890, Start Num: 9

Candidate Starts for Baby16\_9:

(Start: 9 @5429 has 179 MA's), (25, 5561), (30, 5606), (32, 5636), (34, 5651), (37, 5672), (43, 5732), (44, 5735),

Gene: BabyBack\_12 Start: 7641, Stop: 8111, Start Num: 11

Candidate Starts for BabyBack\_12:

(4, 7464), (Start: 11 @7641 has 156 MA's), (34, 7860), (36, 7872), (48, 7965),

Gene: Bachome\_11 Start: 7618, Stop: 8004, Start Num: 9

Candidate Starts for Bachome\_11:

(Start: 9 @7618 has 179 MA's), (18, 7687), (39, 7867), (46, 7933),

Gene: Backyardigan\_9 Start: 5429, Stop: 5890, Start Num: 9

Candidate Starts for Backyardigan\_9:

(Start: 9 @5429 has 179 MA's), (18, 5498), (36, 5663), (37, 5672), (42, 5723), (44, 5735), (70, 5858),

Gene: Bactobuster\_11 Start: 7711, Stop: 8190, Start Num: 9

Candidate Starts for Bactobuster\_11:

(Start: 9 @7711 has 179 MA's), (30, 7888), (34, 7930), (36, 7942), (48, 8035),

Gene: Badger\_9 Start: 5430, Stop: 5879, Start Num: 9

Candidate Starts for Badger\_9:

(Start: 9 @5430 has 179 MA's), (18, 5499), (36, 5664), (37, 5673), (42, 5724), (44, 5736), (59, 5802), (66, 5847),

Gene: Baehexic\_11 Start: 6510, Stop: 6947, Start Num: 11  
Candidate Starts for Baehexic\_11:  
(6, 6414), (Start: 11 @6510 has 156 MA's), (14, 6555), (43, 6810), (48, 6834),

Gene: BangNhom\_8 Start: 5406, Stop: 5858, Start Num: 9  
Candidate Starts for BangNhom\_8:  
(6, 5313), (Start: 9 @5406 has 179 MA's), (18, 5475), (29, 5577), (30, 5583), (37, 5649), (44, 5712),  
(61, 5787),

Gene: Bartimeaus\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Bartimeaus\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Bellis\_27 Start: 26437, Stop: 26853, Start Num: 11  
Candidate Starts for Bellis\_27:  
(Start: 11 @26437 has 156 MA's), (14, 26482), (16, 26494), (18, 26506), (25, 26569), (35, 26668), (39,  
26689), (58, 26794),

Gene: BellusTerra\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for BellusTerra\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: BengiVuitton\_11 Start: 6419, Stop: 6868, Start Num: 11  
Candidate Starts for BengiVuitton\_11:  
(4, 6257), (Start: 11 @6419 has 156 MA's), (34, 6638), (39, 6668), (46, 6734), (53, 6764),

Gene: BennyP\_14 Start: 7065, Stop: 7496, Start Num: 11  
Candidate Starts for BennyP\_14:  
(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Benvolio\_10 Start: 6083, Stop: 6544, Start Num: 11  
Candidate Starts for Benvolio\_10:  
(4, 5912), (Start: 11 @6083 has 156 MA's), (34, 6302), (41, 6365), (46, 6398),

Gene: Bernal13\_28 Start: 25159, Stop: 25599, Start Num: 11  
Candidate Starts for Bernal13\_28:  
(3, 24922), (6, 25063), (8, 25141), (Start: 11 @25159 has 156 MA's), (24, 25288), (30, 25336), (36,  
25393), (42, 25453), (44, 25465), (49, 25489), (67, 25579), (72, 25594),

Gene: BiancaTri92\_12 Start: 7749, Stop: 8213, Start Num: 11  
Candidate Starts for BiancaTri92\_12:  
(6, 7656), (Start: 11 @7749 has 156 MA's), (18, 7818), (34, 7971), (35, 7980), (43, 8052), (48, 8076),

Gene: Blackmoor\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Blackmoor\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: BlessJoy\_14 Start: 7046, Stop: 7477, Start Num: 11  
Candidate Starts for BlessJoy\_14:  
(Start: 11 @7046 has 156 MA's), (34, 7265), (36, 7277), (37, 7286), (46, 7361),

Gene: Blinn1\_14 Start: 7098, Stop: 7529, Start Num: 11

Candidate Starts for Blinn1\_14:

(Start: 11 @7098 has 156 MA's), (34, 7317), (36, 7329), (37, 7338), (39, 7347), (46, 7413),

Gene: Blue7\_14 Start: 7039, Stop: 7470, Start Num: 11

Candidate Starts for Blue7\_14:

(Start: 11 @7039 has 156 MA's), (34, 7258), (36, 7270), (37, 7279), (46, 7354),

Gene: BobSwaget\_13 Start: 7689, Stop: 8114, Start Num: 11

Candidate Starts for BobSwaget\_13:

(6, 7596), (Start: 11 @7689 has 156 MA's), (14, 7734), (29, 7860), (34, 7908), (39, 7938),

Gene: Bombshell\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Bombshell\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: BourbonZero\_26 Start: 26394, Stop: 26810, Start Num: 11

Candidate Starts for BourbonZero\_26:

(Start: 11 @26394 has 156 MA's), (14, 26439), (16, 26451), (18, 26463), (39, 26646), (58, 26751),

Gene: Bowtie\_11 Start: 7621, Stop: 8007, Start Num: 9

Candidate Starts for Bowtie\_11:

(Start: 9 @7621 has 179 MA's), (18, 7690), (39, 7870), (46, 7936),

Gene: Bradman\_9 Start: 5207, Stop: 5602, Start Num: 9

Candidate Starts for Bradman\_9:

(Start: 9 @5207 has 179 MA's), (25, 5339), (34, 5426), (39, 5456), (60, 5573),

Gene: Broseidon\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Broseidon\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Bruiser\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Bruiser\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: BubbleTrouble\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for BubbleTrouble\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Bud\_11 Start: 7627, Stop: 8013, Start Num: 9

Candidate Starts for Bud\_11:

(Start: 9 @7627 has 179 MA's), (18, 7696), (39, 7876), (46, 7942),

Gene: Buggy\_12 Start: 6435, Stop: 6875, Start Num: 11

Candidate Starts for Buggy\_12:

(6, 6348), (Start: 11 @6435 has 156 MA's), (14, 6480), (48, 6759), (53, 6780),

Gene: Bumblebee11\_9 Start: 5429, Stop: 5890, Start Num: 9  
Candidate Starts for Bumblebee11\_9:  
(Start: 9 @5429 has 179 MA's), (18, 5498), (29, 5600), (36, 5663), (37, 5672), (42, 5723), (44, 5735),  
(70, 5858),

Gene: Burger\_8 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Burger\_8:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: C3\_08 Start: 6174, Stop: 6599, Start Num: 11  
Candidate Starts for C3\_08:  
(Start: 11 @6174 has 156 MA's), (34, 6393), (39, 6423),

Gene: CRB1\_10 Start: 5971, Stop: 6411, Start Num: 11  
Candidate Starts for CRB1\_10:  
(Start: 11 @5971 has 156 MA's), (14, 6016), (26, 6109), (30, 6148), (43, 6271), (48, 6295),

Gene: Caelakin\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Caelakin\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Camperdownii\_8 Start: 5046, Stop: 5498, Start Num: 9  
Candidate Starts for Camperdownii\_8:  
(6, 4953), (Start: 9 @5046 has 179 MA's), (18, 5115), (29, 5217), (30, 5223), (37, 5289), (44, 5352),  
(61, 5427),

Gene: Candra\_14 Start: 7098, Stop: 7529, Start Num: 11  
Candidate Starts for Candra\_14:  
(Start: 11 @7098 has 156 MA's), (34, 7317), (36, 7329), (37, 7338), (46, 7413),

Gene: Caraxes\_10 Start: 5746, Stop: 6141, Start Num: 11  
Candidate Starts for Caraxes\_10:  
(Start: 11 @5746 has 156 MA's), (35, 5986), (38, 6004), (45, 6070), (50, 6088),

Gene: Celestiallunch\_11 Start: 5831, Stop: 6214, Start Num: 11  
Candidate Starts for Celestiallunch\_11:  
(1, 5540), (2, 5585), (5, 5696), (Start: 11 @5831 has 156 MA's), (16, 5888), (33, 6044), (38, 6080),

Gene: Centaur\_12 Start: 6489, Stop: 6926, Start Num: 11  
Candidate Starts for Centaur\_12:  
(6, 6393), (Start: 11 @6489 has 156 MA's), (14, 6534), (43, 6789), (48, 6813),

Gene: CentreCat\_9 Start: 5421, Stop: 5882, Start Num: 9  
Candidate Starts for CentreCat\_9:  
(Start: 9 @5421 has 179 MA's), (25, 5553), (30, 5598), (32, 5628), (34, 5643), (37, 5664), (43, 5724),  
(44, 5727),

Gene: Cerulean\_9 Start: 5407, Stop: 5859, Start Num: 9  
Candidate Starts for Cerulean\_9:  
(6, 5314), (Start: 9 @5407 has 179 MA's), (18, 5476), (29, 5578), (30, 5584), (37, 5650), (44, 5713),  
(61, 5788),

Gene: ChampagnePapi\_9 Start: 5406, Stop: 5858, Start Num: 9

Candidate Starts for ChampagnePapi\_9:

(6, 5313), (Start: 9 @5406 has 179 MA's), (18, 5475), (29, 5577), (30, 5583), (37, 5649), (44, 5712), (61, 5787),

Gene: Chaph\_9 Start: 5429, Stop: 5890, Start Num: 9

Candidate Starts for Chaph\_9:

(Start: 9 @5429 has 179 MA's), (25, 5561), (30, 5606), (32, 5636), (34, 5651), (37, 5672), (43, 5732), (44, 5735),

Gene: Charm\_11 Start: 5913, Stop: 6296, Start Num: 11

Candidate Starts for Charm\_11:

(1, 5622), (2, 5667), (5, 5778), (Start: 11 @5913 has 156 MA's), (16, 5970), (27, 6054),

Gene: Chartreuse\_14 Start: 7012, Stop: 7443, Start Num: 11

Candidate Starts for Chartreuse\_14:

(Start: 11 @7012 has 156 MA's), (34, 7231), (36, 7243), (37, 7252), (46, 7327),

Gene: Che12\_12 Start: 5840, Stop: 6238, Start Num: 11

Candidate Starts for Che12\_12:

(Start: 11 @5840 has 156 MA's), (35, 6080), (38, 6098), (45, 6164), (50, 6182),

Gene: ChipMunk\_12 Start: 6373, Stop: 6813, Start Num: 11

Candidate Starts for ChipMunk\_12:

(Start: 11 @6373 has 156 MA's), (14, 6418), (43, 6673), (48, 6697), (53, 6718),

Gene: Cici\_9 Start: 5429, Stop: 5878, Start Num: 9

Candidate Starts for Cici\_9:

(Start: 9 @5429 has 179 MA's), (18, 5498), (36, 5663), (37, 5672), (42, 5723), (44, 5735), (59, 5801), (66, 5846),

Gene: Cindaradix\_8 Start: 5135, Stop: 5587, Start Num: 9

Candidate Starts for Cindaradix\_8:

(6, 5042), (Start: 9 @5135 has 179 MA's), (18, 5204), (29, 5306), (30, 5312), (37, 5378), (44, 5441), (61, 5516),

Gene: Cintron\_9 Start: 5501, Stop: 5926, Start Num: 9

Candidate Starts for Cintron\_9:

(6, 5408), (8, 5486), (Start: 9 @5501 has 179 MA's), (30, 5678), (47, 5825), (51, 5837), (66, 5891),

Gene: Citius\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Citius\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Clarenza\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Clarenza\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Clautastrophe\_27 Start: 26434, Stop: 26850, Start Num: 11

Candidate Starts for Clautastrophe\_27:

(Start: 11 @26434 has 156 MA's), (14, 26479), (16, 26491), (18, 26503), (25, 26566), (35, 26665), (39, 26686), (58, 26791),

Gene: CloudWang3\_14 Start: 7043, Stop: 7474, Start Num: 11

Candidate Starts for CloudWang3\_14:

(Start: 11 @7043 has 156 MA's), (34, 7262), (36, 7274), (37, 7283), (46, 7358),

Gene: Cocoaberry\_9 Start: 5424, Stop: 5885, Start Num: 9

Candidate Starts for Cocoaberry\_9:

(Start: 9 @5424 has 179 MA's), (25, 5556), (30, 5601), (32, 5631), (34, 5646), (37, 5667), (43, 5727), (44, 5730),

Gene: Commander\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Commander\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Connomayer\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Connomayer\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Cookiedough\_14 Start: 7065, Stop: 7499, Start Num: 11

Candidate Starts for Cookiedough\_14:

(Start: 11 @7065 has 156 MA's), (22, 7179), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Crucio\_10 Start: 5938, Stop: 6375, Start Num: 11

Candidate Starts for Crucio\_10:

(6, 5842), (Start: 11 @5938 has 156 MA's), (15, 5992), (30, 6115), (34, 6157), (37, 6178), (44, 6241), (56, 6283), (61, 6304),

Gene: D29\_11 Start: 6175, Stop: 6600, Start Num: 11

Candidate Starts for D29\_11:

(Start: 11 @6175 has 156 MA's), (34, 6394), (39, 6424),

Gene: D32\_13 Start: 6175, Stop: 6600, Start Num: 11

Candidate Starts for D32\_13:

(Start: 11 @6175 has 156 MA's), (34, 6394), (39, 6424),

Gene: DBQu4n\_13 Start: 6175, Stop: 6600, Start Num: 11

Candidate Starts for DBQu4n\_13:

(Start: 11 @6175 has 156 MA's), (34, 6394), (39, 6424),

Gene: DaVinci\_14 Start: 7066, Stop: 7497, Start Num: 11

Candidate Starts for DaVinci\_14:

(Start: 11 @7066 has 156 MA's), (34, 7285), (36, 7297), (37, 7306), (46, 7381),

Gene: Datway\_9 Start: 5429, Stop: 5890, Start Num: 9

Candidate Starts for Datway\_9:

(Start: 9 @5429 has 179 MA's), (18, 5498), (36, 5663), (37, 5672), (42, 5723), (44, 5735), (70, 5858),

Gene: Deano\_9 Start: 5426, Stop: 5887, Start Num: 9

Candidate Starts for Deano\_9:

(Start: 9 @5426 has 179 MA's), (25, 5558), (30, 5603), (32, 5633), (34, 5648), (37, 5669), (43, 5729), (44, 5732),

Gene: DeerParkTS\_11 Start: 6039, Stop: 6452, Start Num: 11

Candidate Starts for DeerParkTS\_11:

(6, 5946), (Start: 11 @6039 has 156 MA's), (18, 6108), (30, 6216), (43, 6339), (48, 6363),

Gene: Deloris\_11 Start: 6419, Stop: 6868, Start Num: 11

Candidate Starts for Deloris\_11:

(Start: 11 @6419 has 156 MA's), (34, 6638), (39, 6668), (46, 6734), (53, 6764),

Gene: DelvinSonDorr\_13 Start: 7066, Stop: 7500, Start Num: 11

Candidate Starts for DelvinSonDorr\_13:

(Start: 11 @7066 has 156 MA's), (22, 7180), (34, 7285), (36, 7297), (37, 7306), (46, 7381),

Gene: Dhanush\_9 Start: 5423, Stop: 5884, Start Num: 9

Candidate Starts for Dhanush\_9:

(Start: 9 @5423 has 179 MA's), (25, 5555), (30, 5600), (32, 5630), (34, 5645), (37, 5666), (43, 5726), (44, 5729),

Gene: Dignity\_12 Start: 6380, Stop: 6820, Start Num: 11

Candidate Starts for Dignity\_12:

(6, 6293), (Start: 11 @6380 has 156 MA's), (14, 6425), (48, 6704), (53, 6725),

Gene: DirtyDunning\_9 Start: 5425, Stop: 5877, Start Num: 9

Candidate Starts for DirtyDunning\_9:

(Start: 9 @5425 has 179 MA's), (25, 5557), (30, 5602), (37, 5668), (44, 5731), (61, 5806), (66, 5836),

Gene: Dorothea\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for Dorothea\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Drake55\_12 Start: 6506, Stop: 6943, Start Num: 11

Candidate Starts for Drake55\_12:

(6, 6410), (Start: 11 @6506 has 156 MA's), (14, 6551), (43, 6806), (48, 6830),

Gene: DreamTeam1\_11 Start: 5913, Stop: 6296, Start Num: 11

Candidate Starts for DreamTeam1\_11:

(1, 5622), (2, 5667), (5, 5778), (Start: 11 @5913 has 156 MA's), (16, 5970), (27, 6054),

Gene: Druantia\_9 Start: 5421, Stop: 5882, Start Num: 9

Candidate Starts for Druantia\_9:

(Start: 9 @5421 has 179 MA's), (25, 5553), (30, 5598), (32, 5628), (34, 5643), (37, 5664), (43, 5724), (44, 5727),

Gene: DuncansLeg\_27 Start: 26417, Stop: 26833, Start Num: 11

Candidate Starts for DuncansLeg\_27:

(Start: 11 @26417 has 156 MA's), (14, 26462), (16, 26474), (18, 26486), (39, 26669), (58, 26774),

Gene: Duplo\_13 Start: 6216, Stop: 6641, Start Num: 11

Candidate Starts for Duplo\_13:

(Start: 11 @6216 has 156 MA's), (34, 6435), (39, 6465),

Gene: Eagle\_8 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Eagle\_8:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Eapen\_9 Start: 5422, Stop: 5883, Start Num: 9  
Candidate Starts for Eapen\_9:  
(Start: 9 @5422 has 179 MA's), (25, 5554), (30, 5599), (32, 5629), (34, 5644), (37, 5665), (43, 5725),  
(44, 5728),

Gene: Ebony\_11 Start: 7679, Stop: 8065, Start Num: 9  
Candidate Starts for Ebony\_11:  
(Start: 9 @7679 has 179 MA's), (18, 7748), (39, 7928), (46, 7994),

Gene: Echild\_10 Start: 6083, Stop: 6544, Start Num: 11  
Candidate Starts for Echild\_10:  
(4, 5912), (Start: 11 @6083 has 156 MA's), (34, 6302), (41, 6365), (46, 6398),

Gene: Ellson\_27 Start: 26404, Stop: 26820, Start Num: 11  
Candidate Starts for Ellson\_27:  
(Start: 11 @26404 has 156 MA's), (14, 26449), (16, 26461), (18, 26473), (39, 26656), (58, 26761),

Gene: Equemioh13\_12 Start: 6492, Stop: 6929, Start Num: 11  
Candidate Starts for Equemioh13\_12:  
(6, 6396), (Start: 11 @6492 has 156 MA's), (14, 6537), (43, 6792), (48, 6816),

Gene: EricB\_14 Start: 7066, Stop: 7500, Start Num: 11  
Candidate Starts for EricB\_14:  
(Start: 11 @7066 has 156 MA's), (22, 7180), (34, 7285), (36, 7297), (37, 7306), (46, 7381),

Gene: Eris\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Eris\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Eros\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Eros\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Et2Brutus\_10 Start: 7624, Stop: 8010, Start Num: 9  
Candidate Starts for Et2Brutus\_10:  
(Start: 9 @7624 has 179 MA's), (18, 7693), (39, 7873), (46, 7939),

Gene: Eurydice\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Eurydice\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: EvilGenius\_12 Start: 6384, Stop: 6953, Start Num: 11  
Candidate Starts for EvilGenius\_12:  
(Start: 11 @6384 has 156 MA's), (14, 6429), (43, 6684), (48, 6708), (53, 6729),

Gene: FatCactus\_9 Start: 5172, Stop: 5573, Start Num: 11  
Candidate Starts for FatCactus\_9:  
(Start: 11 @5172 has 156 MA's), (20, 5268), (38, 5430), (62, 5562),

Gene: Fibonacci\_11 Start: 7624, Stop: 8010, Start Num: 9  
Candidate Starts for Fibonacci\_11:  
(Start: 9 @7624 has 179 MA's), (18, 7693), (39, 7873), (46, 7939),

Gene: Finnry\_27 Start: 26438, Stop: 26854, Start Num: 11  
Candidate Starts for Finnry\_27:  
(Start: 11 @26438 has 156 MA's), (14, 26483), (16, 26495), (18, 26507), (25, 26570), (35, 26669), (39, 26690), (58, 26795),

Gene: FiringLine\_10 Start: 5938, Stop: 6375, Start Num: 11  
Candidate Starts for FiringLine\_10:  
(6, 5842), (Start: 11 @5938 has 156 MA's), (15, 5992), (30, 6115), (34, 6157), (37, 6178), (44, 6241), (56, 6283), (61, 6304),

Gene: First\_0010 Start: 5985, Stop: 6446, Start Num: 11  
Candidate Starts for First\_0010:  
(4, 5817), (Start: 11 @5985 has 156 MA's), (18, 6054), (30, 6162), (35, 6213), (43, 6285), (44, 6288), (48, 6309),

Gene: Flare16\_10 Start: 6050, Stop: 6487, Start Num: 11  
Candidate Starts for Flare16\_10:  
(6, 5954), (Start: 11 @6050 has 156 MA's), (14, 6095), (30, 6227), (43, 6350), (48, 6374),

Gene: Flaverint\_11 Start: 7621, Stop: 8007, Start Num: 9  
Candidate Starts for Flaverint\_11:  
(Start: 9 @7621 has 179 MA's), (18, 7690), (39, 7870), (46, 7936),

Gene: Florean\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Florean\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Flux\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Flux\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: FlyCatcher\_13 Start: 7094, Stop: 7537, Start Num: 9  
Candidate Starts for FlyCatcher\_13:  
(Start: 9 @7094 has 179 MA's), (25, 7238), (27, 7247), (28, 7271), (36, 7337), (42, 7397), (50, 7436), (54, 7442), (55, 7451),

Gene: Funston\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Funston\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Gadost\_9 Start: 5424, Stop: 5885, Start Num: 9  
Candidate Starts for Gadost\_9:

(Start: 9 @5424 has 179 MA's), (25, 5556), (30, 5601), (32, 5631), (34, 5646), (37, 5667), (43, 5727), (44, 5730),

Gene: Gail\_10 Start: 6144, Stop: 6530, Start Num: 11

Candidate Starts for Gail\_10:

(1, 5856), (4, 5970), (Start: 11 @6144 has 156 MA's), (29, 6312), (34, 6369), (38, 6396), (40, 6402), (45, 6462),

Gene: Garak\_15 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for Garak\_15:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: GaugeLDP\_12 Start: 7318, Stop: 7788, Start Num: 11

Candidate Starts for GaugeLDP\_12:

(6, 7225), (8, 7303), (Start: 11 @7318 has 156 MA's), (12, 7330), (29, 7489), (30, 7495), (34, 7537), (36, 7549), (48, 7642),

Gene: Georgie2\_11 Start: 5939, Stop: 6376, Start Num: 11

Candidate Starts for Georgie2\_11:

(6, 5843), (Start: 11 @5939 has 156 MA's), (15, 5993), (30, 6116), (34, 6158), (37, 6179), (44, 6242), (56, 6284), (61, 6305),

Gene: Gilberta\_11 Start: 7618, Stop: 8004, Start Num: 9

Candidate Starts for Gilberta\_11:

(Start: 9 @7618 has 179 MA's), (18, 7687), (39, 7867), (46, 7933),

Gene: Gladiator\_14 Start: 7039, Stop: 7470, Start Num: 11

Candidate Starts for Gladiator\_14:

(Start: 11 @7039 has 156 MA's), (34, 7258), (36, 7270), (37, 7279), (46, 7354),

Gene: Gratitude\_11 Start: 6492, Stop: 6929, Start Num: 11

Candidate Starts for Gratitude\_11:

(6, 6396), (Start: 11 @6492 has 156 MA's), (14, 6537), (43, 6792), (48, 6816),

Gene: GreedyLawyer\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for GreedyLawyer\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Gruunaga\_14 Start: 7039, Stop: 7470, Start Num: 11

Candidate Starts for Gruunaga\_14:

(Start: 11 @7039 has 156 MA's), (34, 7258), (36, 7270), (37, 7279), (46, 7354),

Gene: HamSlice\_8 Start: 5421, Stop: 5882, Start Num: 9

Candidate Starts for HamSlice\_8:

(Start: 9 @5421 has 179 MA's), (25, 5553), (30, 5598), (32, 5628), (34, 5643), (37, 5664), (43, 5724), (44, 5727),

Gene: Hammer\_14 Start: 7039, Stop: 7470, Start Num: 11

Candidate Starts for Hammer\_14:

(Start: 11 @7039 has 156 MA's), (34, 7258), (36, 7270), (37, 7279), (46, 7354),

Gene: Happiness\_9 Start: 5425, Stop: 5886, Start Num: 9

Candidate Starts for Happiness\_9:

(Start: 9 @5425 has 179 MA's), (25, 5557), (30, 5602), (32, 5632), (34, 5647), (37, 5668), (43, 5728), (44, 5731),

Gene: HarryHoudini\_12 Start: 6506, Stop: 6943, Start Num: 11

Candidate Starts for HarryHoudini\_12:

(6, 6410), (Start: 11 @6506 has 156 MA's), (14, 6551), (43, 6806), (48, 6830),

Gene: Helmet\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for Helmet\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Hexamo\_14 Start: 7020, Stop: 7451, Start Num: 11

Candidate Starts for Hexamo\_14:

(Start: 11 @7020 has 156 MA's), (34, 7239), (36, 7251), (37, 7260), (46, 7335),

Gene: HippoHollow\_11 Start: 7759, Stop: 8196, Start Num: 11

Candidate Starts for HippoHollow\_11:

(Start: 11 @7759 has 156 MA's), (48, 8083), (53, 8104),

Gene: Holli\_9 Start: 5213, Stop: 5674, Start Num: 9

Candidate Starts for Holli\_9:

(Start: 9 @5213 has 179 MA's), (25, 5345), (30, 5390), (32, 5420), (34, 5435), (37, 5456), (43, 5516), (44, 5519),

Gene: Hoot\_14 Start: 7044, Stop: 7475, Start Num: 11

Candidate Starts for Hoot\_14:

(Start: 11 @7044 has 156 MA's), (34, 7263), (36, 7275), (37, 7284), (46, 7359),

Gene: Houdini22\_9 Start: 5424, Stop: 5885, Start Num: 9

Candidate Starts for Houdini22\_9:

(Start: 9 @5424 has 179 MA's), (25, 5556), (30, 5601), (32, 5631), (34, 5646), (37, 5667), (43, 5727), (44, 5730),

Gene: Hutc2\_11 Start: 7624, Stop: 8010, Start Num: 9

Candidate Starts for Hutc2\_11:

(Start: 9 @7624 has 179 MA's), (18, 7693), (39, 7873), (46, 7939),

Gene: Huxley\_9 Start: 5493, Stop: 5945, Start Num: 9

Candidate Starts for Huxley\_9:

(6, 5400), (Start: 9 @5493 has 179 MA's), (18, 5562), (29, 5664), (30, 5670), (37, 5736), (44, 5799), (61, 5874),

Gene: ICleared\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for ICleared\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Ibrahim\_28 Start: 25159, Stop: 25599, Start Num: 11

Candidate Starts for Ibrahim\_28:

(3, 24922), (6, 25063), (8, 25141), (Start: 11 @25159 has 156 MA's), (24, 25288), (30, 25336), (36, 25393), (42, 25453), (44, 25465), (49, 25489), (67, 25579), (72, 25594),

Gene: Iceman\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Iceman\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Indra\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for Indra\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Insomnia\_11 Start: 7673, Stop: 8059, Start Num: 9

Candidate Starts for Insomnia\_11:

(Start: 9 @7673 has 179 MA's), (18, 7742), (39, 7922), (46, 7988),

Gene: Iracema64\_9 Start: 5406, Stop: 5858, Start Num: 9

Candidate Starts for Iracema64\_9:

(6, 5313), (Start: 9 @5406 has 179 MA's), (18, 5475), (30, 5583), (37, 5649), (44, 5712), (61, 5787), (66, 5817),

Gene: IronMan\_12 Start: 7666, Stop: 8154, Start Num: 9

Candidate Starts for IronMan\_12:

(Start: 9 @7666 has 179 MA's), (14, 7711), (15, 7720), (34, 7885), (48, 7990),

Gene: Isiphiwo\_14 Start: 7065, Stop: 7499, Start Num: 11

Candidate Starts for Isiphiwo\_14:

(Start: 11 @7065 has 156 MA's), (22, 7179), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Jaan\_13 Start: 8050, Stop: 8544, Start Num: 11

Candidate Starts for Jaan\_13:

(4, 7873), (Start: 11 @8050 has 156 MA's), (15, 8104), (30, 8227), (42, 8341), (48, 8374),

Gene: Jabith\_11 Start: 7673, Stop: 8059, Start Num: 9

Candidate Starts for Jabith\_11:

(Start: 9 @7673 has 179 MA's), (18, 7742), (39, 7922), (46, 7988),

Gene: Jaykayelowell\_9 Start: 5419, Stop: 5880, Start Num: 9

Candidate Starts for Jaykayelowell\_9:

(Start: 9 @5419 has 179 MA's), (25, 5551), (30, 5596), (32, 5626), (34, 5641), (37, 5662), (43, 5722), (44, 5725),

Gene: Jeeves\_10 Start: 6157, Stop: 6543, Start Num: 11

Candidate Starts for Jeeves\_10:

(4, 5983), (5, 6025), (Start: 11 @6157 has 156 MA's), (29, 6325), (40, 6415), (45, 6475), (46, 6478),

Gene: Jeffabunny\_14 Start: 7068, Stop: 7499, Start Num: 11

Candidate Starts for Jeffabunny\_14:

(Start: 11 @7068 has 156 MA's), (34, 7287), (36, 7299), (37, 7308), (46, 7383),

Gene: Jerm\_12 Start: 6372, Stop: 6836, Start Num: 11

Candidate Starts for Jerm\_12:

(Start: 11 @6372 has 156 MA's), (18, 6441), (30, 6549), (34, 6591), (35, 6600), (43, 6672), (48, 6696),

Gene: JetBlade\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for JetBlade\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: JewelBug\_14 Start: 7066, Stop: 7497, Start Num: 11

Candidate Starts for JewelBug\_14:

(Start: 11 @7066 has 156 MA's), (22, 7180), (34, 7285), (36, 7297), (37, 7306), (46, 7381),

Gene: Jobypre\_27 Start: 26434, Stop: 26850, Start Num: 11

Candidate Starts for Jobypre\_27:

(Start: 11 @26434 has 156 MA's), (14, 26479), (16, 26491), (18, 26503), (25, 26566), (35, 26665), (39, 26686), (58, 26791),

Gene: JoongJeon\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for JoongJeon\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Jordennis\_14 Start: 7065, Stop: 7499, Start Num: 11

Candidate Starts for Jordennis\_14:

(Start: 11 @7065 has 156 MA's), (22, 7179), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Joselito\_11 Start: 7621, Stop: 8007, Start Num: 9

Candidate Starts for Joselito\_11:

(Start: 9 @7621 has 179 MA's), (18, 7690), (39, 7870), (46, 7936),

Gene: JoshKayV\_12 Start: 6385, Stop: 6825, Start Num: 11

Candidate Starts for JoshKayV\_12:

(6, 6295), (Start: 11 @6385 has 156 MA's), (13, 6427), (14, 6430), (48, 6709), (53, 6730), (66, 6790),

Gene: Journey13\_8 Start: 5230, Stop: 5628, Start Num: 9

Candidate Starts for Journey13\_8:

(Start: 9 @5230 has 179 MA's), (30, 5407), (34, 5449),

Gene: Jsquared\_9 Start: 5161, Stop: 5556, Start Num: 9

Candidate Starts for Jsquared\_9:

(Start: 9 @5161 has 179 MA's), (25, 5293), (34, 5380), (39, 5410), (60, 5527),

Gene: Jubie\_27 Start: 26435, Stop: 26851, Start Num: 11

Candidate Starts for Jubie\_27:

(Start: 11 @26435 has 156 MA's), (14, 26480), (16, 26492), (18, 26504), (25, 26567), (35, 26666), (39, 26687), (58, 26792),

Gene: KFPoly\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for KFPoly\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Kampy\_9 Start: 5421, Stop: 5882, Start Num: 9

Candidate Starts for Kampy\_9:

(Start: 9 @5421 has 179 MA's), (25, 5553), (30, 5598), (32, 5628), (34, 5643), (37, 5664), (43, 5724), (44, 5727),

Gene: Katalie136\_9 Start: 5429, Stop: 5890, Start Num: 9

Candidate Starts for Katalie136\_9:

(Start: 9 @5429 has 179 MA's), (18, 5498), (36, 5663), (37, 5672), (42, 5723), (44, 5735), (70, 5858),

Gene: Kazan\_14 Start: 7071, Stop: 7502, Start Num: 11

Candidate Starts for Kazan\_14:

(Start: 11 @7071 has 156 MA's), (22, 7185), (34, 7290), (36, 7302), (37, 7311), (46, 7386),

Gene: KekoraPapaka\_8 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for KekoraPapaka\_8:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Kerberos\_13 Start: 6175, Stop: 6600, Start Num: 11

Candidate Starts for Kerberos\_13:

(Start: 11 @6175 has 156 MA's), (34, 6394), (39, 6424),

Gene: Keziacharles14\_10 Start: 5897, Stop: 6280, Start Num: 11

Candidate Starts for Keziacharles14\_10:

(5, 5762), (Start: 11 @5897 has 156 MA's), (15, 5951), (35, 6128), (50, 6230),

Gene: Kimba\_11 Start: 7673, Stop: 8059, Start Num: 9

Candidate Starts for Kimba\_11:

(Start: 9 @7673 has 179 MA's), (18, 7742), (39, 7922), (46, 7988),

Gene: KingCyrus\_12 Start: 6373, Stop: 6813, Start Num: 11

Candidate Starts for KingCyrus\_12:

(Start: 11 @6373 has 156 MA's), (14, 6418), (43, 6673), (48, 6697), (53, 6718),

Gene: Kingmustik0402\_9 Start: 5412, Stop: 5873, Start Num: 9

Candidate Starts for Kingmustik0402\_9:

(Start: 9 @5412 has 179 MA's), (25, 5544), (30, 5589), (32, 5619), (34, 5634), (37, 5655), (43, 5715), (44, 5718),

Gene: Kingsolomon\_27 Start: 26434, Stop: 26850, Start Num: 11

Candidate Starts for Kingsolomon\_27:

(Start: 11 @26434 has 156 MA's), (14, 26479), (16, 26491), (18, 26503), (25, 26566), (35, 26665), (39, 26686), (58, 26791),

Gene: Kinmap\_9 Start: 5941, Stop: 6426, Start Num: 11

Candidate Starts for Kinmap\_9:

(Start: 11 @5941 has 156 MA's), (15, 5995), (30, 6118), (37, 6184), (42, 6235), (46, 6259), (63, 6322), (68, 6349), (71, 6361),

Gene: Kipper29\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for Kipper29\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: KirDoubleO7\_25 Start: 26426, Stop: 26842, Start Num: 11

Candidate Starts for KirDoubleO7\_25:

(Start: 11 @26426 has 156 MA's), (14, 26471), (16, 26483), (18, 26495), (39, 26678), (58, 26783),

Gene: Klodlith\_11 Start: 5913, Stop: 6296, Start Num: 11

Candidate Starts for Klodlith\_11:

(1, 5622), (2, 5667), (5, 5778), (Start: 11 @5913 has 156 MA's), (16, 5970), (27, 6054),

Gene: Koan\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Koan\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Koduck\_11 Start: 5448, Stop: 5843, Start Num: 9

Candidate Starts for Koduck\_11:

(Start: 9 @5448 has 179 MA's), (25, 5580), (31, 5652), (34, 5667), (39, 5697), (60, 5814),

Gene: Koko\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for Koko\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Koreni\_8 Start: 5069, Stop: 5530, Start Num: 9

Candidate Starts for Koreni\_8:

(Start: 9 @5069 has 179 MA's), (25, 5201), (30, 5246), (32, 5276), (34, 5291), (37, 5312), (43, 5372), (44, 5375),

Gene: Kratark\_9 Start: 5424, Stop: 5876, Start Num: 9

Candidate Starts for Kratark\_9:

(Start: 9 @5424 has 179 MA's), (25, 5556), (30, 5601), (37, 5667), (44, 5730), (61, 5805),

Gene: Kremtemulon\_9 Start: 5501, Stop: 5926, Start Num: 9

Candidate Starts for Kremtemulon\_9:

(6, 5408), (8, 5486), (Start: 9 @5501 has 179 MA's), (30, 5678), (47, 5825), (51, 5837), (66, 5891),

Gene: Krypton555\_27 Start: 26338, Stop: 26751, Start Num: 11

Candidate Starts for Krypton555\_27:

(Start: 11 @26338 has 156 MA's), (14, 26383), (16, 26395), (18, 26407), (39, 26590),

Gene: Kyee\_9 Start: 5421, Stop: 5882, Start Num: 9

Candidate Starts for Kyee\_9:

(Start: 9 @5421 has 179 MA's), (25, 5553), (30, 5598), (32, 5628), (34, 5643), (37, 5664), (43, 5724), (44, 5727),

Gene: L5\_11 Start: 5456, Stop: 5851, Start Num: 9

Candidate Starts for L5\_11:

(Start: 9 @5456 has 179 MA's), (25, 5588), (31, 5660), (34, 5675), (39, 5705), (60, 5822),

Gene: LHTSCC\_9 Start: 5406, Stop: 5858, Start Num: 9

Candidate Starts for LHTSCC\_9:

(6, 5313), (Start: 9 @5406 has 179 MA's), (18, 5475), (29, 5577), (30, 5583), (37, 5649), (44, 5712), (61, 5787),

Gene: LadyBird\_10 Start: 5973, Stop: 6413, Start Num: 11

Candidate Starts for LadyBird\_10:

(Start: 11 @5973 has 156 MA's), (43, 6273), (48, 6297),

Gene: Landor\_11 Start: 7717, Stop: 8196, Start Num: 9

Candidate Starts for Landor\_11:

(Start: 9 @7717 has 179 MA's), (30, 7894), (34, 7936), (36, 7948), (48, 8041),

Gene: LappelDuVide\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for LappelDuVide\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Larenn\_11 Start: 6290, Stop: 6727, Start Num: 11

Candidate Starts for Larenn\_11:

(6, 6197), (Start: 11 @6290 has 156 MA's), (14, 6335), (43, 6590), (48, 6614), (53, 6635),

Gene: Lemur\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Lemur\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: LeoAvram\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for LeoAvram\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Leogania\_12 Start: 8106, Stop: 8570, Start Num: 11

Candidate Starts for Leogania\_12:

(6, 8013), (Start: 11 @8106 has 156 MA's), (18, 8175), (34, 8328), (35, 8337), (43, 8409), (48, 8433),

Gene: Leviathan\_12 Start: 6428, Stop: 6868, Start Num: 11

Candidate Starts for Leviathan\_12:

(6, 6341), (Start: 11 @6428 has 156 MA's), (14, 6473), (48, 6752), (53, 6773),

Gene: LilTurb\_12 Start: 6431, Stop: 6895, Start Num: 11

Candidate Starts for LilTurb\_12:

(Start: 11 @6431 has 156 MA's), (18, 6500), (30, 6608), (34, 6650), (35, 6659), (43, 6731), (48, 6755),

Gene: Lilbunny\_14 Start: 7046, Stop: 7477, Start Num: 11

Candidate Starts for Lilbunny\_14:

(Start: 11 @7046 has 156 MA's), (34, 7265), (36, 7277), (37, 7286), (46, 7361),

Gene: LionsBait\_11 Start: 7753, Stop: 8190, Start Num: 11

Candidate Starts for LionsBait\_11:

(Start: 11 @7753 has 156 MA's), (48, 8077), (53, 8098),

Gene: LittleB\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for LittleB\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: LittleGuy\_9 Start: 5399, Stop: 5824, Start Num: 9

Candidate Starts for LittleGuy\_9:

(Start: 9 @5399 has 179 MA's), (30, 5576), (32, 5606), (42, 5693), (43, 5702), (44, 5705), (48, 5726), (51, 5735), (66, 5789),

Gene: LiyuLake\_27 Start: 26396, Stop: 26812, Start Num: 11

Candidate Starts for LiyuLake\_27:

(Start: 11 @26396 has 156 MA's), (14, 26441), (16, 26453), (18, 26465), (39, 26648), (58, 26753),

Gene: LochMonster\_9 Start: 5404, Stop: 5856, Start Num: 9

Candidate Starts for LochMonster\_9:

(6, 5311), (Start: 9 @5404 has 179 MA's), (18, 5473), (29, 5575), (30, 5581), (37, 5647), (44, 5710), (61, 5785), (66, 5815),

Gene: Lokk\_13 Start: 7712, Stop: 8134, Start Num: 11

Candidate Starts for Lokk\_13:

(6, 7619), (Start: 11 @7712 has 156 MA's), (14, 7757), (29, 7883), (34, 7931), (39, 7961),

Gene: Lolly9\_27 Start: 26216, Stop: 26617, Start Num: 11

Candidate Starts for Lolly9\_27:

(Start: 11 @26216 has 156 MA's), (14, 26261), (18, 26285), (39, 26468),

Gene: Lorenzo\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Lorenzo\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Lucivia\_11 Start: 7670, Stop: 8056, Start Num: 9

Candidate Starts for Lucivia\_11:

(Start: 9 @7670 has 179 MA's), (18, 7739), (39, 7919), (46, 7985),

Gene: Lumos\_27 Start: 26431, Stop: 26847, Start Num: 11

Candidate Starts for Lumos\_27:

(Start: 11 @26431 has 156 MA's), (14, 26476), (16, 26488), (18, 26500), (25, 26563), (35, 26662), (39, 26683), (58, 26788),

Gene: Lunsford\_10 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Lunsford\_10:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: MaCh\_11 Start: 7618, Stop: 8004, Start Num: 9

Candidate Starts for MaCh\_11:

(Start: 9 @7618 has 179 MA's), (18, 7687), (39, 7867), (46, 7933),

Gene: Mabel\_11 Start: 7685, Stop: 8071, Start Num: 9

Candidate Starts for Mabel\_11:

(Start: 9 @7685 has 179 MA's), (18, 7754), (39, 7934), (46, 8000),

Gene: MajorMajor\_9 Start: 5207, Stop: 5602, Start Num: 9

Candidate Starts for MajorMajor\_9:

(Start: 9 @5207 has 179 MA's), (25, 5339), (34, 5426), (39, 5456), (60, 5573),

Gene: Malec\_11 Start: 6295, Stop: 6732, Start Num: 11

Candidate Starts for Malec\_11:

(6, 6202), (Start: 11 @6295 has 156 MA's), (14, 6340), (43, 6595), (48, 6619), (53, 6640),

Gene: Maverick\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Maverick\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Maxo\_9 Start: 5421, Stop: 5882, Start Num: 9

Candidate Starts for Maxo\_9:

(Start: 9 @5421 has 179 MA's), (25, 5553), (30, 5598), (32, 5628), (34, 5643), (37, 5664), (43, 5724), (44, 5727),

Gene: Mayonnaise\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Mayonnaise\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Mazhar510\_9 Start: 5421, Stop: 5882, Start Num: 9

Candidate Starts for Mazhar510\_9:

(Start: 9 @5421 has 179 MA's), (25, 5553), (30, 5598), (32, 5628), (34, 5643), (37, 5664), (43, 5724), (44, 5727),

Gene: McFly\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for McFly\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Medusa\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Medusa\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: MeeZee\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for MeeZee\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: MegTheThird\_10 Start: 5831, Stop: 6214, Start Num: 11

Candidate Starts for MegTheThird\_10:

(1, 5540), (2, 5585), (5, 5696), (Start: 11 @5831 has 156 MA's), (16, 5888), (33, 6044), (38, 6080),

Gene: Melvin\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Melvin\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Mendokysei\_27 Start: 24965, Stop: 25378, Start Num: 11

Candidate Starts for Mendokysei\_27:

(8, 24947), (Start: 11 @24965 has 156 MA's), (16, 25022), (29, 25136), (30, 25142), (42, 25259), (44, 25271), (57, 25313),

Gene: MiculUcigas\_10 Start: 6050, Stop: 6487, Start Num: 11

Candidate Starts for MiculUcigas\_10:

(6, 5954), (Start: 11 @6050 has 156 MA's), (14, 6095), (43, 6350), (48, 6374),

Gene: Miko\_13 Start: 7681, Stop: 8103, Start Num: 11

Candidate Starts for Miko\_13:

(6, 7588), (Start: 11 @7681 has 156 MA's), (14, 7726), (29, 7852), (34, 7900), (39, 7930),

Gene: Millski\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Millski\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: MiniLon\_27 Start: 26216, Stop: 26617, Start Num: 11

Candidate Starts for MiniLon\_27:

(Start: 11 @26216 has 156 MA's), (14, 26261), (18, 26285), (39, 26468),

Gene: MiniMac\_27 Start: 26217, Stop: 26618, Start Num: 11

Candidate Starts for MiniMac\_27:

(Start: 11 @26217 has 156 MA's), (14, 26262), (18, 26286), (39, 26469),

Gene: Miramae\_9 Start: 5393, Stop: 5845, Start Num: 9

Candidate Starts for Miramae\_9:

(Start: 9 @5393 has 179 MA's), (18, 5462), (29, 5564), (30, 5570), (37, 5636), (44, 5699), (52, 5732), (61, 5774),

Gene: MissWhite\_10 Start: 5274, Stop: 5672, Start Num: 9

Candidate Starts for MissWhite\_10:

(Start: 9 @5274 has 179 MA's), (30, 5451), (34, 5493),

Gene: Moostard\_27 Start: 26437, Stop: 26853, Start Num: 11

Candidate Starts for Moostard\_27:

(Start: 11 @26437 has 156 MA's), (14, 26482), (16, 26494), (18, 26506), (25, 26569), (35, 26668), (39, 26689), (58, 26794),

Gene: Morpher26\_9 Start: 5429, Stop: 5890, Start Num: 9

Candidate Starts for Morpher26\_9:

(Start: 9 @5429 has 179 MA's), (18, 5498), (29, 5600), (36, 5663), (37, 5672), (42, 5723), (44, 5735), (70, 5858),

Gene: Morrow\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Morrow\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: MsGreen\_27 Start: 26434, Stop: 26850, Start Num: 11

Candidate Starts for MsGreen\_27:

(Start: 11 @26434 has 156 MA's), (14, 26479), (16, 26491), (18, 26503), (25, 26566), (35, 26665), (39, 26686), (58, 26791),

Gene: Mulciber\_11 Start: 7624, Stop: 8007, Start Num: 9

Candidate Starts for Mulciber\_11:

(Start: 9 @7624 has 179 MA's), (18, 7693), (39, 7873), (46, 7939),

Gene: Munch\_11 Start: 7621, Stop: 8007, Start Num: 9

Candidate Starts for Munch\_11:

(Start: 9 @7621 has 179 MA's), (18, 7690), (39, 7870), (46, 7936),

Gene: Mundrea\_9 Start: 5391, Stop: 5843, Start Num: 9

Candidate Starts for Mundrea\_9:

(6, 5298), (Start: 9 @5391 has 179 MA's), (18, 5460), (29, 5562), (30, 5568), (37, 5634), (44, 5697), (61, 5772),

Gene: NaSiaTalie\_10 Start: 6047, Stop: 6484, Start Num: 11

Candidate Starts for NaSiaTalie\_10:

(6, 5951), (Start: 11 @6047 has 156 MA's), (14, 6092), (30, 6224), (43, 6347), (48, 6371),

Gene: Nairb\_28 Start: 25159, Stop: 25599, Start Num: 11

Candidate Starts for Nairb\_28:

(3, 24922), (6, 25063), (8, 25141), (Start: 11 @25159 has 156 MA's), (24, 25288), (30, 25336), (36, 25393), (42, 25453), (44, 25465), (49, 25489), (67, 25579), (72, 25594),

Gene: Naji\_13 Start: 6175, Stop: 6600, Start Num: 11

Candidate Starts for Naji\_13:

(Start: 11 @6175 has 156 MA's), (34, 6394), (39, 6424),

Gene: Nebs\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Nebs\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Neeharika16\_14 Start: 7065, Stop: 7499, Start Num: 11

Candidate Starts for Neeharika16\_14:

(Start: 11 @7065 has 156 MA's), (22, 7179), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Nemo27\_9 Start: 5419, Stop: 5880, Start Num: 9

Candidate Starts for Nemo27\_9:

(Start: 9 @5419 has 179 MA's), (25, 5551), (30, 5596), (32, 5626), (34, 5641), (37, 5662), (43, 5722), (44, 5725),

Gene: Nette\_29 Start: 24974, Stop: 25387, Start Num: 11

Candidate Starts for Nette\_29:

(8, 24956), (Start: 11 @24974 has 156 MA's), (16, 25031), (29, 25145), (30, 25151), (42, 25268), (44, 25280), (57, 25322),

Gene: Newrala\_14 Start: 7065, Stop: 7499, Start Num: 11

Candidate Starts for Newrala\_14:

(Start: 11 @7065 has 156 MA's), (22, 7179), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Nicholas\_27 Start: 26434, Stop: 26850, Start Num: 11

Candidate Starts for Nicholas\_27:

(Start: 11 @26434 has 156 MA's), (14, 26479), (16, 26491), (18, 26503), (25, 26566), (35, 26665), (39, 26686), (58, 26791),

Gene: Noelle\_9 Start: 5486, Stop: 5947, Start Num: 9

Candidate Starts for Noelle\_9:

(Start: 9 @5486 has 179 MA's), (25, 5618), (30, 5663), (32, 5693), (34, 5708), (37, 5729), (43, 5789), (44, 5792),

Gene: NorthStar\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for NorthStar\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: NotAPhaseMom\_9 Start: 5424, Stop: 5885, Start Num: 9

Candidate Starts for NotAPhaseMom\_9:

(Start: 9 @5424 has 179 MA's), (25, 5556), (30, 5601), (32, 5631), (34, 5646), (37, 5667), (43, 5727), (44, 5730),

Gene: NothingSpecial\_12 Start: 7983, Stop: 8459, Start Num: 11

Candidate Starts for NothingSpecial\_12:

(6, 7890), (Start: 11 @7983 has 156 MA's), (18, 8052), (34, 8202), (43, 8283), (44, 8286), (48, 8307), (53, 8328),

Gene: Nyxis\_9 Start: 5402, Stop: 5827, Start Num: 9

Candidate Starts for Nyxis\_9:

(Start: 9 @5402 has 179 MA's), (30, 5579), (32, 5609), (42, 5696), (43, 5705), (44, 5708), (48, 5729), (51, 5738), (66, 5792),

Gene: OKaNui\_9 Start: 5185, Stop: 5646, Start Num: 9

Candidate Starts for OKaNui\_9:

(Start: 9 @5185 has 179 MA's), (25, 5317), (30, 5362), (32, 5392), (34, 5407), (37, 5428), (43, 5488), (44, 5491),

Gene: Obama12\_9 Start: 5408, Stop: 5860, Start Num: 9

Candidate Starts for Obama12\_9:

(6, 5315), (Start: 9 @5408 has 179 MA's), (18, 5477), (29, 5579), (30, 5585), (37, 5651), (44, 5714), (61, 5789),

Gene: Odin\_10 Start: 5885, Stop: 6283, Start Num: 9

Candidate Starts for Odin\_10:

(Start: 9 @5885 has 179 MA's), (Start: 11 @5888 has 156 MA's), (35, 6128), (38, 6146), (45, 6212), (50, 6230),

Gene: Ohfah\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Ohfah\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Orange\_11 Start: 7621, Stop: 8007, Start Num: 9

Candidate Starts for Orange\_11:

(Start: 9 @7621 has 179 MA's), (18, 7690), (39, 7870), (46, 7936),

Gene: PP\_19 Start: 11239, Stop: 11685, Start Num: 10

Candidate Starts for PP\_19:

(Start: 10 @11239 has 2 MA's), (19, 11311), (29, 11410), (30, 11416), (33, 11452), (37, 11482), (42, 11533), (44, 11545), (46, 11557),

Gene: Palestino\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Palestino\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Peaches\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Peaches\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Perplexer\_9 Start: 5423, Stop: 5884, Start Num: 9  
Candidate Starts for Perplexer\_9:  
(Start: 9 @5423 has 179 MA's), (18, 5492), (36, 5657), (37, 5666), (42, 5717), (44, 5729), (70, 5852),

Gene: PeterPeter\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for PeterPeter\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Petersenfast\_10 Start: 7624, Stop: 8010, Start Num: 9  
Candidate Starts for Petersenfast\_10:  
(Start: 9 @7624 has 179 MA's), (18, 7693), (39, 7873), (46, 7939),

Gene: PetiteSangsue\_9 Start: 5429, Stop: 5890, Start Num: 9  
Candidate Starts for PetiteSangsue\_9:  
(Start: 9 @5429 has 179 MA's), (18, 5498), (36, 5663), (37, 5672), (42, 5723), (44, 5735), (70, 5858),

Gene: Ph8s\_12 Start: 5847, Stop: 6245, Start Num: 11  
Candidate Starts for Ph8s\_12:  
(Start: 11 @5847 has 156 MA's), (35, 6087), (38, 6105), (45, 6171), (50, 6189),

Gene: Phacado\_9 Start: 5419, Stop: 5880, Start Num: 9  
Candidate Starts for Phacado\_9:  
(Start: 9 @5419 has 179 MA's), (25, 5551), (30, 5596), (32, 5626), (34, 5641), (37, 5662), (43, 5722),  
(44, 5725),

Gene: Phaded\_13 Start: 8049, Stop: 8543, Start Num: 11  
Candidate Starts for Phaded\_13:  
(4, 7872), (Start: 11 @8049 has 156 MA's), (15, 8103), (30, 8226), (34, 8268), (42, 8340), (48, 8373),

Gene: Phelipe\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Phelipe\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Phighter1804\_9 Start: 5405, Stop: 5857, Start Num: 9  
Candidate Starts for Phighter1804\_9:  
(6, 5312), (Start: 9 @5405 has 179 MA's), (18, 5474), (30, 5582), (37, 5648), (44, 5711), (61, 5786),  
(66, 5816),

Gene: Phontbonne\_9 Start: 5400, Stop: 5825, Start Num: 9  
Candidate Starts for Phontbonne\_9:  
(Start: 9 @5400 has 179 MA's), (30, 5577), (32, 5607), (42, 5694), (43, 5703), (44, 5706), (48, 5727),  
(51, 5736), (66, 5790),

Gene: Pipcraft\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for Pipcraft\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Piro94\_11 Start: 6507, Stop: 6944, Start Num: 11  
Candidate Starts for Piro94\_11:  
(6, 6411), (Start: 11 @6507 has 156 MA's), (14, 6552), (43, 6807),

Gene: Pmask\_14 Start: 7065, Stop: 7499, Start Num: 11

Candidate Starts for Pmask\_14:

(Start: 11 @7065 has 156 MA's), (22, 7179), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Polymorphads\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Polymorphads\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Polyphemus\_14 Start: 7067, Stop: 7501, Start Num: 11

Candidate Starts for Polyphemus\_14:

(Start: 11 @7067 has 156 MA's), (22, 7181), (34, 7286), (36, 7298), (37, 7307), (46, 7382),

Gene: Pomar16\_13 Start: 6216, Stop: 6641, Start Num: 11

Candidate Starts for Pomar16\_13:

(Start: 11 @6216 has 156 MA's), (34, 6435), (39, 6465),

Gene: Power\_10 Start: 5938, Stop: 6375, Start Num: 11

Candidate Starts for Power\_10:

(6, 5842), (Start: 11 @5938 has 156 MA's), (15, 5992), (30, 6115), (34, 6157), (37, 6178), (44, 6241), (56, 6283), (61, 6304),

Gene: Priamo\_14 Start: 7083, Stop: 7514, Start Num: 11

Candidate Starts for Priamo\_14:

(Start: 11 @7083 has 156 MA's), (34, 7302), (36, 7314), (37, 7323), (46, 7398),

Gene: Pukovnik\_12 Start: 7625, Stop: 8104, Start Num: 9

Candidate Starts for Pukovnik\_12:

(Start: 9 @7625 has 179 MA's), (30, 7802), (34, 7844), (36, 7856), (48, 7949),

Gene: Pumbaa\_9 Start: 5404, Stop: 5856, Start Num: 9

Candidate Starts for Pumbaa\_9:

(6, 5311), (Start: 9 @5404 has 179 MA's), (18, 5473), (29, 5575), (30, 5581), (37, 5647), (44, 5710), (61, 5785),

Gene: QueenBeesly\_10 Start: 5938, Stop: 6375, Start Num: 11

Candidate Starts for QueenBeesly\_10:

(6, 5842), (Start: 11 @5938 has 156 MA's), (15, 5992), (30, 6115), (34, 6157), (37, 6178), (44, 6241), (56, 6283), (61, 6304),

Gene: Quokka\_8 Start: 5207, Stop: 5602, Start Num: 9

Candidate Starts for Quokka\_8:

(Start: 9 @5207 has 179 MA's), (25, 5339), (34, 5426), (39, 5456), (60, 5573),

Gene: Rachaly\_13 Start: 7710, Stop: 8132, Start Num: 11

Candidate Starts for Rachaly\_13:

(6, 7617), (Start: 11 @7710 has 156 MA's), (14, 7755), (29, 7881), (34, 7929), (39, 7959),

Gene: Red305\_27 Start: 26434, Stop: 26850, Start Num: 11

Candidate Starts for Red305\_27:

(Start: 11 @26434 has 156 MA's), (14, 26479), (16, 26491), (18, 26503), (25, 26566), (35, 26665), (39, 26686), (58, 26791),

Gene: Relief\_9 Start: 5421, Stop: 5882, Start Num: 9

Candidate Starts for Relief\_9:

(Start: 9 @5421 has 179 MA's), (25, 5553), (30, 5598), (32, 5628), (34, 5643), (37, 5664), (43, 5724), (44, 5727),

Gene: Rifter\_14 Start: 7038, Stop: 7469, Start Num: 11

Candidate Starts for Rifter\_14:

(Start: 11 @7038 has 156 MA's), (34, 7257), (36, 7269), (37, 7278), (46, 7353),

Gene: RockieBear\_8 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for RockieBear\_8:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Roksolana\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for Roksolana\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Romney\_9 Start: 5419, Stop: 5880, Start Num: 9

Candidate Starts for Romney\_9:

(Start: 9 @5419 has 179 MA's), (25, 5551), (30, 5596), (32, 5626), (34, 5641), (37, 5662), (43, 5722), (44, 5725),

Gene: RonRayGun\_28 Start: 25159, Stop: 25599, Start Num: 11

Candidate Starts for RonRayGun\_28:

(3, 24922), (6, 25063), (8, 25141), (Start: 11 @25159 has 156 MA's), (24, 25288), (30, 25336), (36, 25393), (42, 25453), (44, 25465), (49, 25489), (67, 25579), (72, 25594),

Gene: Roosevelt\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Roosevelt\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Rosa24\_8 Start: 5404, Stop: 5856, Start Num: 9

Candidate Starts for Rosa24\_8:

(6, 5311), (Start: 9 @5404 has 179 MA's), (18, 5473), (29, 5575), (30, 5581), (37, 5647), (44, 5710), (61, 5785),

Gene: Ruin\_9 Start: 5419, Stop: 5880, Start Num: 9

Candidate Starts for Ruin\_9:

(Start: 9 @5419 has 179 MA's), (25, 5551), (30, 5596), (32, 5626), (34, 5641), (37, 5662), (43, 5722), (44, 5725),

Gene: Sabertooth\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Sabertooth\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Salz\_11 Start: 7621, Stop: 8004, Start Num: 9

Candidate Starts for Salz\_11:

(Start: 9 @7621 has 179 MA's), (18, 7690), (39, 7870), (46, 7936),

Gene: Samty\_27 Start: 26437, Stop: 26853, Start Num: 11

Candidate Starts for Samty\_27:

(Start: 11 @26437 has 156 MA's), (14, 26482), (16, 26494), (18, 26506), (25, 26569), (35, 26668), (39, 26689), (58, 26794),

Gene: Saskia\_10 Start: 7624, Stop: 8007, Start Num: 9

Candidate Starts for Saskia\_10:

(Start: 9 @7624 has 179 MA's), (18, 7693), (39, 7873), (46, 7939),

Gene: Scamp\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Scamp\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: SemperFi\_12 Start: 6366, Stop: 6803, Start Num: 11

Candidate Starts for SemperFi\_12:

(6, 6270), (Start: 11 @6366 has 156 MA's), (15, 6420), (30, 6543), (34, 6585), (37, 6606), (44, 6669), (56, 6711), (61, 6732),

Gene: SenorClean\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for SenorClean\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Serenity\_9 Start: 5207, Stop: 5602, Start Num: 9

Candidate Starts for Serenity\_9:

(Start: 9 @5207 has 179 MA's), (25, 5339), (34, 5426), (39, 5456), (60, 5573),

Gene: Shaka\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Shaka\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Sham4\_11 Start: 7624, Stop: 8010, Start Num: 9

Candidate Starts for Sham4\_11:

(Start: 9 @7624 has 179 MA's), (18, 7693), (39, 7873), (46, 7939),

Gene: Sheen\_11 Start: 7152, Stop: 7595, Start Num: 9

Candidate Starts for Sheen\_11:

(Start: 9 @7152 has 179 MA's), (25, 7296), (27, 7305), (28, 7329), (36, 7395), (42, 7455), (50, 7494), (54, 7500), (55, 7509),

Gene: SheldonCooper\_9 Start: 5407, Stop: 5859, Start Num: 9

Candidate Starts for SheldonCooper\_9:

(6, 5314), (Start: 9 @5407 has 179 MA's), (18, 5476), (29, 5578), (30, 5584), (37, 5650), (44, 5713), (61, 5788),

Gene: Shygu2\_9 Start: 5423, Stop: 5884, Start Num: 9

Candidate Starts for Shygu2\_9:

(Start: 9 @5423 has 179 MA's), (18, 5492), (29, 5594), (36, 5657), (37, 5666), (42, 5717), (44, 5729), (70, 5852),

Gene: Skipitt\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Skipitt\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Sknot\_10 Start: 6050, Stop: 6487, Start Num: 11

Candidate Starts for Sknot\_10:

(6, 5954), (Start: 11 @6050 has 156 MA's), (14, 6095), (30, 6227), (43, 6350), (48, 6374),

Gene: Smeagan\_12 Start: 6431, Stop: 6871, Start Num: 11

Candidate Starts for Smeagan\_12:

(6, 6344), (Start: 11 @6431 has 156 MA's), (14, 6476), (48, 6755), (53, 6776),

Gene: SmellyB\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for SmellyB\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: SnapTap\_10 Start: 5938, Stop: 6375, Start Num: 11

Candidate Starts for SnapTap\_10:

(6, 5842), (Start: 11 @5938 has 156 MA's), (15, 5992), (30, 6115), (34, 6157), (37, 6178), (44, 6241), (56, 6283), (61, 6304),

Gene: Snape\_11 Start: 7627, Stop: 8010, Start Num: 9

Candidate Starts for Snape\_11:

(Start: 9 @7627 has 179 MA's), (18, 7696), (39, 7876), (46, 7942),

Gene: Snenia\_27 Start: 26435, Stop: 26851, Start Num: 11

Candidate Starts for Snenia\_27:

(Start: 11 @26435 has 156 MA's), (14, 26480), (16, 26492), (18, 26504), (25, 26567), (35, 26666), (39, 26687), (58, 26792),

Gene: Sparxx\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Sparxx\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Spino\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Spino\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: StarStuff\_13 Start: 6175, Stop: 6600, Start Num: 11

Candidate Starts for StarStuff\_13:

(Start: 11 @6175 has 156 MA's), (34, 6394), (39, 6424),

Gene: Stasia\_10 Start: 5853, Stop: 6326, Start Num: 11

Candidate Starts for Stasia\_10:

(4, 5676), (Start: 11 @5853 has 156 MA's), (14, 5898), (42, 6147), (44, 6159), (64, 6276),

Gene: SteMason\_8 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for SteMason\_8:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Stellammi\_33 Start: 27589, Stop: 28008, Start Num: 10

Candidate Starts for Stellammi\_33:

(6, 27502), (Start: 10 @27589 has 2 MA's), (16, 27646), (20, 27685), (21, 27697), (30, 27766), (35, 27814), (37, 27826), (39, 27835), (40, 27838), (42, 27877), (44, 27889), (54, 27919), (69, 27982),

Gene: Stink\_9 Start: 5394, Stop: 5846, Start Num: 9

Candidate Starts for Stink\_9:

(Start: 9 @5394 has 179 MA's), (18, 5463), (29, 5565), (30, 5571), (37, 5637), (44, 5700), (52, 5733), (61, 5775),

Gene: Sultana\_9 Start: 5421, Stop: 5882, Start Num: 9

Candidate Starts for Sultana\_9:

(Start: 9 @5421 has 179 MA's), (25, 5553), (30, 5598), (32, 5628), (34, 5643), (37, 5664), (44, 5727),

Gene: SuperAwesome\_14 Start: 7065, Stop: 7499, Start Num: 11

Candidate Starts for SuperAwesome\_14:

(Start: 11 @7065 has 156 MA's), (22, 7179), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: SuperCallie99\_14 Start: 7066, Stop: 7500, Start Num: 11

Candidate Starts for SuperCallie99\_14:

(Start: 11 @7066 has 156 MA's), (22, 7180), (34, 7285), (36, 7297), (37, 7306), (46, 7381),

Gene: Superchunk\_10 Start: 5746, Stop: 6141, Start Num: 11

Candidate Starts for Superchunk\_10:

(Start: 11 @5746 has 156 MA's), (35, 5986), (38, 6004), (45, 6070), (50, 6088),

Gene: SweetiePie\_10 Start: 5938, Stop: 6375, Start Num: 11

Candidate Starts for SweetiePie\_10:

(6, 5842), (Start: 11 @5938 has 156 MA's), (15, 5992), (30, 6115), (34, 6157), (37, 6178), (44, 6241), (56, 6283), (61, 6304),

Gene: SwirlSquare\_12 Start: 5878, Stop: 6273, Start Num: 11

Candidate Starts for SwirlSquare\_12:

(Start: 11 @5878 has 156 MA's), (15, 5932), (18, 5947), (33, 6100), (35, 6118), (38, 6136), (45, 6202), (50, 6220),

Gene: Taquarus\_9 Start: 5423, Stop: 5884, Start Num: 9

Candidate Starts for Taquarus\_9:

(Start: 9 @5423 has 179 MA's), (25, 5555), (30, 5600), (32, 5630), (34, 5645), (37, 5666), (43, 5726), (44, 5729),

Gene: TarsusIV\_10 Start: 5976, Stop: 6443, Start Num: 11

Candidate Starts for TarsusIV\_10:

(6, 5883), (Start: 11 @5976 has 156 MA's), (14, 6021), (39, 6225), (44, 6279), (53, 6321), (65, 6369),

Gene: Temprado\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for Temprado\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Terrific\_14 Start: 6504, Stop: 6941, Start Num: 11

Candidate Starts for Terrific\_14:

(6, 6408), (Start: 11 @6504 has 156 MA's), (14, 6549), (43, 6804), (48, 6828),

Gene: Thanksgivukkah\_9 Start: 5425, Stop: 5886, Start Num: 9  
Candidate Starts for Thanksgivukkah\_9:  
(Start: 9 @5425 has 179 MA's), (25, 5557), (30, 5602), (32, 5632), (34, 5647), (37, 5668), (43, 5728),  
(44, 5731),

Gene: Timothy\_11 Start: 7621, Stop: 8007, Start Num: 9  
Candidate Starts for Timothy\_11:  
(Start: 9 @7621 has 179 MA's), (18, 7690), (39, 7870), (46, 7936),

Gene: TinaFeyge\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for TinaFeyge\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: TinyTimmy\_11 Start: 7673, Stop: 8059, Start Num: 9  
Candidate Starts for TinyTimmy\_11:  
(Start: 9 @7673 has 179 MA's), (18, 7742), (39, 7922), (46, 7988),

Gene: Tinybot\_8 Start: 5409, Stop: 5861, Start Num: 9  
Candidate Starts for Tinybot\_8:  
(6, 5316), (Start: 9 @5409 has 179 MA's), (18, 5478), (29, 5580), (30, 5586), (37, 5652), (44, 5715),  
(61, 5790),

Gene: TopsytheTRex\_9 Start: 5160, Stop: 5561, Start Num: 9  
Candidate Starts for TopsytheTRex\_9:  
(Start: 9 @5160 has 179 MA's), (23, 5277), (25, 5292), (34, 5379), (39, 5409),

Gene: TiroTheta9\_9 Start: 5420, Stop: 5881, Start Num: 9  
Candidate Starts for TiroTheta9\_9:  
(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723),  
(44, 5726),

Gene: Tomathan\_13 Start: 6175, Stop: 6600, Start Num: 11  
Candidate Starts for Tomathan\_13:  
(Start: 11 @6175 has 156 MA's), (34, 6394), (39, 6424),

Gene: ToneTone\_13 Start: 6978, Stop: 7409, Start Num: 11  
Candidate Starts for ToneTone\_13:  
(Start: 11 @6978 has 156 MA's), (34, 7197), (36, 7209), (37, 7218), (46, 7293),

Gene: Toro\_12 Start: 7094, Stop: 7537, Start Num: 9  
Candidate Starts for Toro\_12:  
(Start: 9 @7094 has 179 MA's), (25, 7238), (27, 7247), (28, 7271), (36, 7337), (42, 7397), (50, 7436),  
(54, 7442), (55, 7451),

Gene: Travvers\_13 Start: 6175, Stop: 6600, Start Num: 11  
Candidate Starts for Travvers\_13:  
(Start: 11 @6175 has 156 MA's), (34, 6394), (39, 6424),

Gene: TriFive\_27 Start: 26434, Stop: 26850, Start Num: 11  
Candidate Starts for TriFive\_27:  
(Start: 11 @26434 has 156 MA's), (14, 26479), (16, 26491), (18, 26503), (25, 26566), (35, 26665), (39,  
26686), (58, 26791),

Gene: Tristan\_11 Start: 7718, Stop: 8206, Start Num: 9

Candidate Starts for Tristan\_11:

(Start: 9 @7718 has 179 MA's), (14, 7763), (15, 7772), (34, 7937), (48, 8042),

Gene: TroyPia\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for TroyPia\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Tucker\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for Tucker\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Turbido\_12 Start: 6434, Stop: 6898, Start Num: 11

Candidate Starts for Turbido\_12:

(Start: 11 @6434 has 156 MA's), (18, 6503), (30, 6611), (34, 6653), (35, 6662), (43, 6734), (48, 6758),

Gene: TygerBlood\_9 Start: 5422, Stop: 5883, Start Num: 9

Candidate Starts for TygerBlood\_9:

(Start: 9 @5422 has 179 MA's), (25, 5554), (30, 5599), (32, 5629), (34, 5644), (37, 5665), (43, 5725), (44, 5728),

Gene: Ulysses\_8 Start: 5148, Stop: 5600, Start Num: 9

Candidate Starts for Ulysses\_8:

(6, 5055), (Start: 9 @5148 has 179 MA's), (18, 5217), (29, 5319), (30, 5325), (37, 5391), (44, 5454), (61, 5529),

Gene: Updawg\_12 Start: 6492, Stop: 6929, Start Num: 11

Candidate Starts for Updawg\_12:

(6, 6396), (Start: 11 @6492 has 156 MA's), (14, 6537), (43, 6792), (48, 6816),

Gene: VA6\_10 Start: 5970, Stop: 6431, Start Num: 11

Candidate Starts for VA6\_10:

(4, 5799), (Start: 11 @5970 has 156 MA's), (34, 6189), (41, 6252), (46, 6285),

Gene: VC3\_13 Start: 6174, Stop: 6599, Start Num: 11

Candidate Starts for VC3\_13:

(Start: 11 @6174 has 156 MA's), (34, 6393), (39, 6423),

Gene: Vanisoa\_10 Start: 5811, Stop: 6197, Start Num: 11

Candidate Starts for Vanisoa\_10:

(7, 5736), (Start: 11 @5811 has 156 MA's), (17, 5871), (29, 5979), (31, 6012),

Gene: VohminGhazi\_14 Start: 7065, Stop: 7496, Start Num: 11

Candidate Starts for VohminGhazi\_14:

(Start: 11 @7065 has 156 MA's), (34, 7284), (36, 7296), (37, 7305), (46, 7380),

Gene: Wander\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for Wander\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Whabigail7\_12 Start: 6446, Stop: 6886, Start Num: 11  
Candidate Starts for Whabigail7\_12:  
(6, 6359), (Start: 11 @6446 has 156 MA's), (14, 6491), (48, 6770), (53, 6791),

Gene: Whirlwind\_28 Start: 26172, Stop: 26585, Start Num: 11  
Candidate Starts for Whirlwind\_28:  
(Start: 11 @26172 has 156 MA's), (14, 26217), (16, 26229), (18, 26241), (39, 26424),

Gene: Whitty\_28 Start: 25159, Stop: 25599, Start Num: 11  
Candidate Starts for Whitty\_28:  
(3, 24922), (6, 25063), (8, 25141), (Start: 11 @25159 has 156 MA's), (24, 25288), (30, 25336), (36, 25393), (42, 25453), (44, 25465), (49, 25489), (67, 25579), (72, 25594),

Gene: WideWale\_12 Start: 6492, Stop: 6929, Start Num: 11  
Candidate Starts for WideWale\_12:  
(6, 6396), (Start: 11 @6492 has 156 MA's), (14, 6537), (43, 6792), (48, 6816),

Gene: Wiks\_14 Start: 7046, Stop: 7477, Start Num: 11  
Candidate Starts for Wiks\_14:  
(Start: 11 @7046 has 156 MA's), (34, 7265), (36, 7277), (37, 7286), (46, 7361),

Gene: Wilbur\_9 Start: 5419, Stop: 5880, Start Num: 9  
Candidate Starts for Wilbur\_9:  
(Start: 9 @5419 has 179 MA's), (25, 5551), (30, 5596), (32, 5626), (34, 5641), (37, 5662), (43, 5722), (44, 5725),

Gene: Wile\_9 Start: 5430, Stop: 5891, Start Num: 9  
Candidate Starts for Wile\_9:  
(Start: 9 @5430 has 179 MA's), (18, 5499), (36, 5664), (37, 5673), (42, 5724), (44, 5736), (70, 5859),

Gene: Wizard007\_9 Start: 5422, Stop: 5883, Start Num: 9  
Candidate Starts for Wizard007\_9:  
(Start: 9 @5422 has 179 MA's), (25, 5554), (30, 5599), (32, 5629), (34, 5644), (37, 5665), (43, 5725), (44, 5728),

Gene: Wolpertinger\_10 Start: 7624, Stop: 8010, Start Num: 9  
Candidate Starts for Wolpertinger\_10:  
(Start: 9 @7624 has 179 MA's), (18, 7693), (39, 7873), (46, 7939),

Gene: WunderPhul\_14 Start: 7046, Stop: 7477, Start Num: 11  
Candidate Starts for WunderPhul\_14:  
(Start: 11 @7046 has 156 MA's), (34, 7265), (36, 7277), (37, 7286), (46, 7361),

Gene: Xena\_9 Start: 5429, Stop: 5878, Start Num: 9  
Candidate Starts for Xena\_9:  
(Start: 9 @5429 has 179 MA's), (18, 5498), (36, 5663), (37, 5672), (42, 5723), (44, 5735), (59, 5801), (66, 5846),

Gene: XianYue\_10 Start: 5913, Stop: 6362, Start Num: 11  
Candidate Starts for XianYue\_10:  
(Start: 11 @5913 has 156 MA's), (13, 5955), (14, 5958), (34, 6132), (53, 6258),

Gene: Yecey3\_11 Start: 5912, Stop: 6295, Start Num: 11

Candidate Starts for Yecey3\_11:

(2, 5666), (Start: 11 @5912 has 156 MA's), (16, 5969), (40, 6167),

Gene: YoSam321\_9 Start: 5420, Stop: 5881, Start Num: 9

Candidate Starts for YoSam321\_9:

(Start: 9 @5420 has 179 MA's), (25, 5552), (30, 5597), (32, 5627), (34, 5642), (37, 5663), (43, 5723), (44, 5726),

Gene: Yokurt\_14 Start: 7046, Stop: 7477, Start Num: 11

Candidate Starts for Yokurt\_14:

(Start: 11 @7046 has 156 MA's), (34, 7265), (36, 7277), (37, 7286), (46, 7361),

Gene: Zaka\_14 Start: 7046, Stop: 7477, Start Num: 11

Candidate Starts for Zaka\_14:

(Start: 11 @7046 has 156 MA's), (34, 7265), (36, 7277), (37, 7286), (46, 7361),

Gene: ZenTime222\_28 Start: 25159, Stop: 25599, Start Num: 11

Candidate Starts for ZenTime222\_28:

(3, 24922), (6, 25063), (8, 25141), (Start: 11 @25159 has 156 MA's), (24, 25288), (30, 25336), (36, 25393), (42, 25453), (44, 25465), (49, 25489), (67, 25579), (72, 25594),

Gene: Zulu\_14 Start: 7045, Stop: 7476, Start Num: 11

Candidate Starts for Zulu\_14:

(Start: 11 @7045 has 156 MA's), (34, 7264), (36, 7276), (37, 7285), (46, 7360),