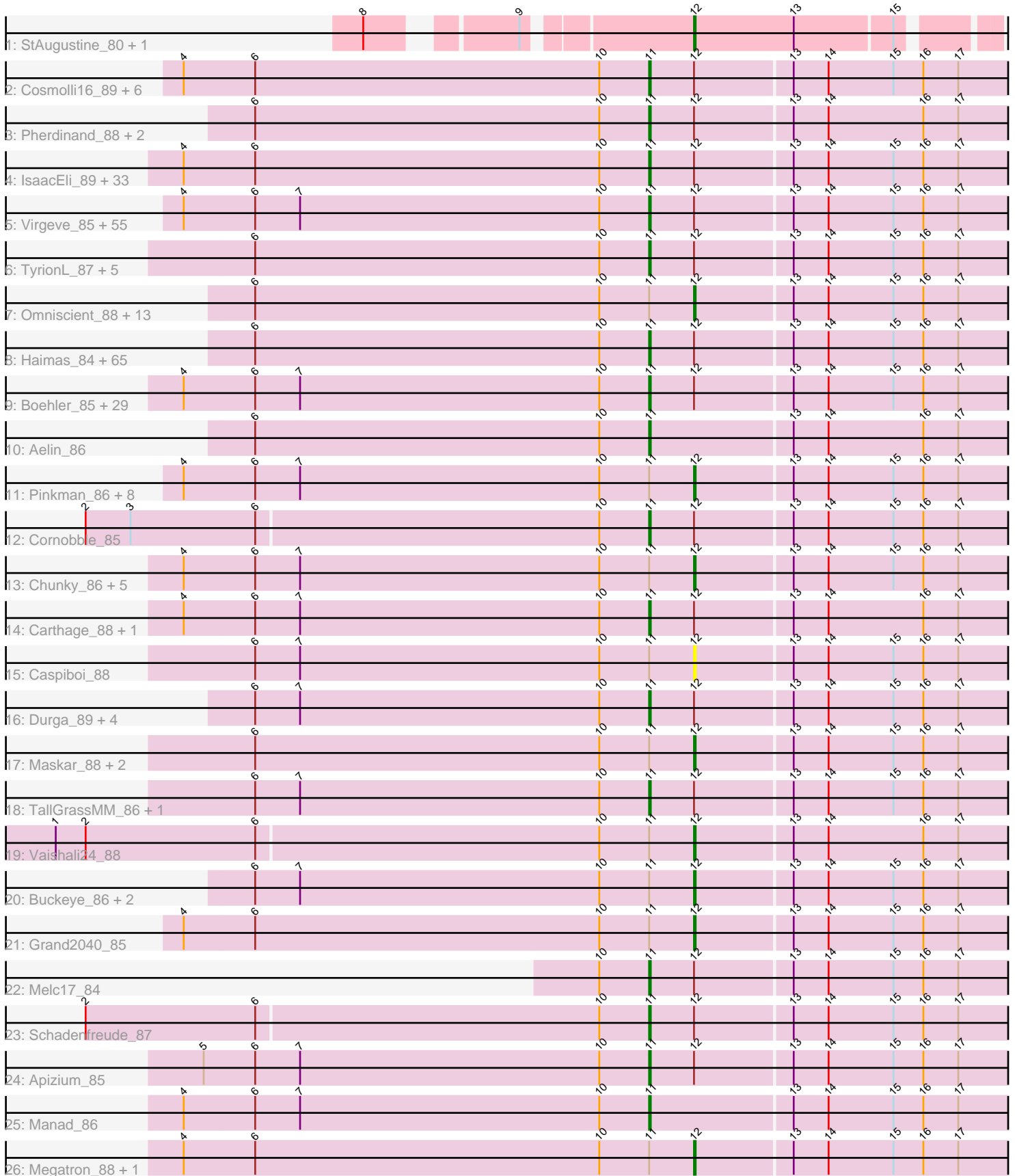


# Pham 206530



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 206530 Report

This analysis was run 02/22/25 on database version 588.

Pham number 206530 has 259 members, 22 are drafts.

Phages represented in each track:

- Track 1 : StAugustine\_80, Causa\_83
- Track 2 : Cosmolli16\_89, Adriana\_87, Chorkpop\_88, Vaticameos\_84, Brilliant\_90, Maru\_87, Lulwa\_84
- Track 3 : Pherdinand\_88, Lego3393\_85, Yoshand\_88
- Track 4 : IsaacEli\_89, Harvey\_84, Kikipoo\_89, Duggie\_87, SDcharge11\_86, AbsoluteMadLad\_85, TomBombadil\_87, Daffy\_86, Held\_85, Orfeu\_86, Antonia\_86, Soto\_84, EmpTee\_86, Hetaeria\_87, Hertubise\_86, Struggle\_87, Burr\_87, Morgushi\_84, Vivaldi\_87, Tooj\_84, KlimbOn\_86, MitKao\_87, Swiphy\_91, Daka\_89, ProfessorX\_85, Prickles\_88, Jiminy\_87, UAch1\_88, CampRoach\_88, Xavier\_86, PhatCats2014\_86, Colbert\_85, Riggan\_88, PhatLouie\_89
- Track 5 : Virgeve\_85, SilverBell\_88, Zonia\_87, Lumine\_88, Fringe\_91, Numberten\_86, Jillium\_88, Andre\_89, Hocus\_85, Quisquilliae\_89, Toni\_86, Etaye\_86, PhrankReynolds\_85, Mecca\_87, SirBeauregard\_88, FriarPreacher\_84, HenryJackson\_87, Phipps\_85, JDog\_86, Longacauda\_88, Spartan300\_86, Selr12\_88, LuckyMarjie\_84, Squid\_86, Orwigg\_86, Gareth\_87, Phareon\_85, Pipsqueak\_84, UncleHowie\_83, Legolas\_88, ABU\_85, DaddyDaniels\_90, JakeO\_88, Skippy\_87, DoesntMatter\_84, Nacho\_0089, PhenghisKhan\_87, Mosaic\_84, Vortex\_85, Kahve\_87, GeneCoco\_87, Kimbrough\_88, Gyarad\_0086, Dice\_86, Serendipity\_86, Hartsy\_85, Serpentine\_0088, Roy17\_84, Simielle\_86, Puhltonio\_83, Charles1\_88, Weher20\_84, Phergie\_87, Chaelin\_88, Mesh1\_88, SassyCat97\_85
- Track 6 : TyrionL\_87, Labeouficaum\_87, Derpp\_86, Kwksand96\_88, CharlieGBrown\_85, DuchessDung\_84
- Track 7 : Omniscient\_88, Coletti\_89, AngelCake\_83, Sigman\_86, Khan1\_87, MelsMeow\_86, FluffyNinja\_88, Dione\_85, Cornbread\_86, Mesmerelda\_88, Chute\_87, Veritas\_86, Pops\_84, Katniss\_89
- Track 8 : Haimas\_84, BatteryCK\_85, PinheadLarry\_86, Oosterbaan\_87, Squiggle\_86, Wallhey\_88, OSmaximus\_88, Oline\_86, Mcshane\_86, Chah\_89, HSavage\_85, Doddsville\_84, ShiVal\_85, PhrodoBaggins\_89, Childish\_87, Hamish\_84, Inchworm\_88, Surely\_87, Samaymay\_87, Zaider\_88, Thora\_85, Kwadwo\_86, Virapocalypse\_88, Nicole21\_88, Ricotta\_87, Fozzie\_84, Soile\_88, Nyala\_86, FugateOSU\_87, Lopsy\_83, Mutante\_88, Sophia\_85, CamL\_87, Iridoclysis\_86, MRabcd\_87, Scrick\_86, DelRivs\_85, Pacifista\_86, PG1\_85, Fang\_88, MichaelPhcott\_85, Mulan\_86, Keitherie\_90, Magic8\_86, Swish\_88, Orion\_85, QueenBeane\_87, Phleuron\_84, BlackStallion\_86, Mag7\_85, JacAttac\_87, ThreeOh3D2\_88, Windsor\_87, Murdoc\_83, JangoPhett\_85, LasagnaCat\_88, Vista\_86, Kloppinator\_87, LemonSlice\_87, Telesworld\_85, Kailash\_85, True\_85, Emiris\_89, Scoot17C\_87, Slatt\_87, Schueller\_85

- Track 9 : Boehler\_85, Haleema\_86, Gwilliam\_87, Placalicious\_85, KingVeVeVe\_85, Olak\_86, Roliet\_84, Bluephacebaby\_86, Frankicide\_85, RedMaple\_86, Inverness\_85, Jiraiya\_88, Cobra\_87, Cher\_87, Basato\_86, Dingo\_84, KLucky39\_85, Suffolk\_83, MiniBoss\_83, Bishoperium\_87, TooFast2Furius\_88, Lasso\_86, Crownjwl\_84, CheetO\_84, YouGoGlencoco\_87, Eremos\_85, BlueHusk\_88, Dati\_84, Potter\_82, ElvisPhasley\_93
- Track 10 : Aelin\_86
- Track 11 : Pinkman\_86, Gwennie1\_84, LeeLot\_85, Waterdiva\_88, LostAndPhound\_86, Megamind20\_87, Trypo\_87, MrPhizzler\_86, Jesabah\_86
- Track 12 : Cornobble\_85
- Track 13 : Chunky\_86, Zelda\_87, Plata\_85, Chipette\_85, Riverton\_86, Nathan\_87
- Track 14 : Carthage\_88, Robyn\_89
- Track 15 : Caspiboi\_88
- Track 16 : Durga\_89, Thunderbird\_87, KingTut\_78, HighStump\_88, Giraffe\_87
- Track 17 : Maskar\_88, ImtiyazSitla\_88, Ashraf\_88
- Track 18 : TallGrassMM\_86, Solosis\_85
- Track 19 : Vaishali24\_88
- Track 20 : Buckeye\_86, Eugenia\_89, Matalotodo\_85
- Track 21 : Grand2040\_85
- Track 22 : Melc17\_84
- Track 23 : Schadenfreude\_87
- Track 24 : Apizium\_85
- Track 25 : Manad\_86
- Track 26 : Megatron\_88, LeiMonet\_89

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

The start number called the most often in the published annotations is 11, it was called in 212 of the 237 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU\_85, AbsoluteMadLad\_85, Adriana\_87, Aelin\_86, Andre\_89, Antonia\_86, Apizium\_85, Basato\_86, BatteryCK\_85, Bishoperium\_87, BlackStallion\_86, BlueHusk\_88, Bluephacebaby\_86, Boehler\_85, Brilliant\_90, Burr\_87, CamL\_87, CampRoach\_88, Carthage\_88, Chaelin\_88, Chah\_89, Charles1\_88, CharlieGBrown\_85, CheetO\_84, Cher\_87, Childish\_87, Chorkpop\_88, Cobra\_87, Colbert\_85, Cornobble\_85, Cosmolli16\_89, Crownjwl\_84, DaddyDaniels\_90, Daffy\_86, Daka\_89, Dati\_84, DelRivs\_85, Derpp\_86, Dice\_86, Dingo\_84, Doddsville\_84, DoesntMatter\_84, DuchessDung\_84, Duggie\_87, Durga\_89, ElvisPhasley\_93, Emiris\_89, EmpTee\_86, Eremos\_85, Etaye\_86, Fang\_88, Fozzie\_84, Frankicide\_85, FriarPreacher\_84, Fringe\_91, FugateOSU\_87, Gareth\_87, GeneCoco\_87, Giraffe\_87, Gwilliam\_87, Gyarad\_0086, HSavage\_85, Haimas\_84, Haleema\_86, Hamish\_84, Hartsy\_85, Harvey\_84, Held\_85, HenryJackson\_87, Hertubise\_86, Hetaeria\_87, HighStump\_88, Hocus\_85, Inchworm\_88, Inverness\_85, Iridoclysis\_86, IsaacEli\_89, JDog\_86, JacAttac\_87, JakeO\_88, JangoPhett\_85, Jillium\_88, Jiminy\_87, Jiraiya\_88, KLucky39\_85, Kahve\_87, Kailash\_85, Keitherie\_90, Kikipoo\_89, Kimbrough\_88, KingTut\_78, KingVeVeVe\_85, KlimbOn\_86, Kloppinator\_87, Kwadwo\_86, Kwksand96\_88, Labeouficaum\_87, LasagnaCat\_88, Lasso\_86, Lego3393\_85, Legolas\_88, LemonSlice\_87, Longacauda\_88, Lopsy\_83, LuckyMarjie\_84, Lulwa\_84, Lumine\_88, MRabcd\_87,

Mag7\_85, Magic8\_86, Manad\_86, Maru\_87, Mcshane\_86, Mecca\_87, Melc17\_84, Mesh1\_88, MichaelPhcott\_85, MiniBoss\_83, MitKao\_87, Morgushi\_84, Mosaic\_84, Mulan\_86, Murdoc\_83, Mutante\_88, Nacho\_0089, Nicole21\_88, Numberten\_86, Nyala\_86, OSmaximus\_88, Olak\_86, Oline\_86, Oosterbaan\_87, Orfeu\_86, Orion\_85, Orwigg\_86, PG1\_85, Pacifista\_86, Phareon\_85, PhatCats2014\_86, PhatLouie\_89, PhenghisKhan\_87, Pherdinand\_88, Phergie\_87, Phipps\_85, Phleuron\_84, PhrankReynolds\_85, PhrodoBaggins\_89, PinheadLarry\_86, Pipsqueak\_84, Placalicious\_85, Potter\_82, Prickles\_88, ProfessorX\_85, Puhltonio\_83, QueenBeane\_87, Quisquilliae\_89, RedMaple\_86, Ricotta\_87, Riggan\_88, Robyn\_89, Roliet\_84, Roy17\_84, SDcharge11\_86, Samaymay\_87, SassyCat97\_85, Schadenfreude\_87, Schueller\_85, Scoot17C\_87, Scrick\_86, Selr12\_88, Serendipity\_86, Serpentine\_0088, ShiVal\_85, SilverBell\_88, Simielle\_86, SirBeauregard\_88, Skippy\_87, Slatt\_87, Soile\_88, Solosis\_85, Sophia\_85, Soto\_84, Spartan300\_86, Squid\_86, Squiggle\_86, Struggle\_87, Suffolk\_83, Surely\_87, Swiphy\_91, Swish\_88, TallGrassMM\_86, Telesworld\_85, Thora\_85, ThreeOh3D2\_88, Thunderbird\_87, TomBombadil\_87, Toni\_86, TooFast2Furius\_88, Tooj\_84, True\_85, TyrionL\_87, UAch1\_88, UncleHowie\_83, Vaticameos\_84, Virapocalypse\_88, Virgeve\_85, Vista\_86, Vivaldi\_87, Vortex\_85, Wallhey\_88, Weher20\_84, Windsor\_87, Xavier\_86, Yoshand\_88, YouGoGlencoco\_87, Zaider\_88, Zonia\_87,

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

- AngelCake\_83, Ashraf\_88, Buckeye\_86, Caspiboi\_88, Chipette\_85, Chunky\_86, Chute\_87, Coletti\_89, Cornbread\_86, Dione\_85, Eugenia\_89, FluffyNinja\_88, Grand2040\_85, Gwennie1\_84, ImtiyazSitla\_88, Jesabah\_86, Katniss\_89, Khan1\_87, LeeLot\_85, LeiMonet\_89, LostAndPhound\_86, Maskar\_88, Matalotodo\_85, Megamind20\_87, Megatron\_88, MelsMeow\_86, Mesmerelda\_88, MrPhizzler\_86, Nathan\_87, Omniscient\_88, Pinkman\_86, Plata\_85, Pops\_84, Riverton\_86, Sigman\_86, Trypo\_87, Vaishali24\_88, Veritas\_86, Waterdiva\_88, Zelda\_87,

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

- Causa\_83, StAugustine\_80,

### Summary by start number:

Start 11:

- Found in 257 of 259 ( 99.2% ) of genes in pham
- Manual Annotations of this start: 212 of 237
- Called 84.4% of time when present
- Phage (with cluster) where this start called: ABU\_85 (B1), AbsoluteMadLad\_85 (B1), Adriana\_87 (B1), Aelin\_86 (B1), Andre\_89 (B1), Antonia\_86 (B1), Apizium\_85 (B1), Basato\_86 (B1), BatteryCK\_85 (B1), Bishoperium\_87 (B1), BlackStallion\_86 (B1), BlueHusk\_88 (B1), Bluephacebaby\_86 (B1), Boehler\_85 (B1), Brilliant\_90 (B1), Burr\_87 (B1), CamL\_87 (B1), CampRoach\_88 (B1), Carthage\_88 (B1), Chaelin\_88 (B1), Chah\_89 (B1), Charles1\_88 (B1), CharlieGBrown\_85 (B1), CheetO\_84 (B1), Cher\_87 (B1), Childish\_87 (B1), Chorkpop\_88 (B1), Cobra\_87 (B1), Colbert\_85 (B1), Cornobble\_85 (B1), Cosmolli16\_89 (B1), Crownjwl\_84 (B1), DaddyDaniels\_90 (B1), Daffy\_86 (B1), Daka\_89 (B1), Dati\_84 (B1), DelRivs\_85 (B1), Derpp\_86 (B1), Dice\_86 (B1), Dingo\_84 (B1), Doddsville\_84 (B1), DoesntMatter\_84 (B1), DuchessDung\_84 (B1), Duggie\_87 (B1), Durga\_89 (B1), ElvisPhasley\_93 (B1), Emiris\_89 (B1), EmpTee\_86 (B1), Eremos\_85 (B1), Etaye\_86 (B1), Fang\_88 (B1), Fozzie\_84 (B1), Frankicide\_85 (B1), FriarPreacher\_84 (B1), Fringe\_91 (B1), FugateOSU\_87 (B1), Gareth\_87 (B1), GeneCoco\_87 (B1), Giraffe\_87 (B1),

Gwilliam\_87 (B1), Gyarad\_0086 (B1), HSavage\_85 (B1), Haimas\_84 (B1), Haleema\_86 (B1), Hamish\_84 (B1), Hartsy\_85 (B1), Harvey\_84 (B1), Held\_85 (B1), HenryJackson\_87 (B1), Hertubise\_86 (B1), Hetaeria\_87 (B1), HighStump\_88 (B1), Hocus\_85 (B1), Inchworm\_88 (B1), Inverness\_85 (B1), Iridoclysis\_86 (B1), IsaacEli\_89 (B1), JDog\_86 (B1), JacAttac\_87 (B1), JakeO\_88 (B1), JangoPhett\_85 (B1), Jillium\_88 (B1), Jiminy\_87 (B1), Jiraiya\_88 (B1), KLucky39\_85 (B1), Kahve\_87 (B1), Kailash\_85 (B1), Keitherie\_90 (B1), Kikipoo\_89 (B1), Kimbrough\_88 (B1), KingTut\_78 (B1), KingVeVeVe\_85 (B1), KlimbOn\_86 (B1), Kloppinator\_87 (B1), Kwadwo\_86 (B1), Kwksand96\_88 (B1), Labeouficaum\_87 (B1), LasagnaCat\_88 (B1), Lasso\_86 (B1), Lego3393\_85 (B1), Legolas\_88 (B1), LemonSlice\_87 (B1), Longacauda\_88 (B1), Lopsy\_83 (B1), LuckyMarjie\_84 (B1), Lulwa\_84 (B1), Lumine\_88 (B1), MRabcd\_87 (B1), Mag7\_85 (B1), Magic8\_86 (B1), Manad\_86 (B1), Maru\_87 (B1), Mcshane\_86 (B1), Mecca\_87 (B1), Melc17\_84 (B1), Mesh1\_88 (B1), MichaelPhcott\_85 (B1), MiniBoss\_83 (B1), MitKao\_87 (B1), Morgushi\_84 (B1), Mosaic\_84 (B1), Mulan\_86 (B1), Murdoc\_83 (B1), Mutante\_88 (B1), Nacho\_0089 (B1), Nicole21\_88 (B1), Numberten\_86 (B1), Nyala\_86 (B1), OSmaximus\_88 (B1), Olak\_86 (B1), Oline\_86 (B1), Oosterbaan\_87 (B1), Orfeu\_86 (B1), Orion\_85 (B1), Orwigg\_86 (B1), PG1\_85 (B1), Pacifista\_86 (B1), Phareon\_85 (B1), PhatCats2014\_86 (B1), PhatLouie\_89 (B1), PhenghisKhan\_87 (B1), Pherdinand\_88 (B1), Phergie\_87 (B1), Phipps\_85 (B1), Phleuron\_84 (B1), PhrankReynolds\_85 (B1), PhrodoBaggins\_89 (B1), PinheadLarry\_86 (B1), Pipsqueak\_84 (B1), Placalicious\_85 (B1), Potter\_82 (B1), Prickles\_88 (B1), ProfessorX\_85 (B1), Puhltonio\_83 (B1), QueenBeane\_87 (B1), Quisquiliae\_89 (B1), RedMaple\_86 (B1), Ricotta\_87 (B1), Riggan\_88 (B1), Robyn\_89 (B1), Roliet\_84 (B1), Roy17\_84 (B1), SDcharge11\_86 (B1), Samaymay\_87 (B1), SassyCat97\_85 (B1), Schadenfreude\_87 (B1), Schueller\_85 (B1), Scoot17C\_87 (B1), Scrick\_86 (B1), Selr12\_88 (B1), Serendipity\_86 (B1), Serpentine\_0088 (B1), ShiVal\_85 (B1), SilverBell\_88 (B1), Simielle\_86 (B1), SirBeauregard\_88 (B1), Skippy\_87 (B1), Slatt\_87 (B1), Soile\_88 (B1), Solosis\_85 (B1), Sophia\_85 (B1), Soto\_84 (B1), Spartan300\_86 (B1), Squid\_86 (B1), Squiggle\_86 (B1), Struggle\_87 (B1), Suffolk\_83 (B1), Surely\_87 (B1), Swiphy\_91 (B1), Swish\_88 (B1), TallGrassMM\_86 (B1), Telesworld\_85 (B1), Thora\_85 (B1), ThreeOh3D2\_88 (B1), Thunderbird\_87 (B1), TomBombadil\_87 (B1), Toni\_86 (B1), TooFast2Furius\_88 (B1), Tooj\_84 (B1), True\_85 (B1), TyrionL\_87 (B1), UAch1\_88 (B1), UncleHowie\_83 (B1), Vaticameos\_84 (B1), Virapocalypse\_88 (B1), Virgeve\_85 (B1), Vista\_86 (B1), Vivaldi\_87 (B1), Vortex\_85 (B1), Wallhey\_88 (B1), Weher20\_84 (B1), Windsor\_87 (B1), Xavier\_86 (B1), Yoshand\_88 (B1), YouGoGlencoco\_87 (B1), Zaider\_88 (B1), Zonia\_87 (B1),

Start 12:

- Found in 257 of 259 ( 99.2% ) of genes in pham
- Manual Annotations of this start: 25 of 237
- Called 16.3% of time when present
- Phage (with cluster) where this start called: AngelCake\_83 (B1), Ashraf\_88 (B1), Buckeye\_86 (B1), CaspiBoi\_88 (B1), Causa\_83 (AI), Chipette\_85 (B1), Chunky\_86 (B1), Chute\_87 (B1), Coletti\_89 (B1), Cornbread\_86 (B1), Dione\_85 (B1), Eugenia\_89 (B1), FluffyNinja\_88 (B1), Grand2040\_85 (B1), Gwennie1\_84 (B1), ImtiyazSitla\_88 (B1), Jesabah\_86 (B1), Katniss\_89 (B1), Khan1\_87 (B1), LeeLot\_85 (B1), LeiMonet\_89 (B1), LostAndPhound\_86 (B1), Maskar\_88 (B1), Matalotodo\_85 (B1), Megamind20\_87 (B1), Megatron\_88 (B1), MelsMeow\_86 (B1), Mesmerelda\_88 (B1), MrPhizzler\_86 (B1), Nathan\_87 (B1), Omniscient\_88 (B1), Pinkman\_86 (B1), Plata\_85 (B1), Pops\_84 (B1), Riverton\_86 (B1), Sigman\_86 (B1), StAugustine\_80 (AI), Trypo\_87 (B1), Vaishali24\_88 (B1), Veritas\_86 (B1), Waterdiva\_88 (B1), Zeldia\_87 (B1),

## Summary by clusters:

There are 2 clusters represented in this pham: A1, B1,

Info for manual annotations of cluster A1:

- Start number 12 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster B1:

- Start number 11 was manually annotated 212 times for cluster B1.
- Start number 12 was manually annotated 24 times for cluster B1.

### **Gene Information:**

Gene: ABU\_85 Start: 63937, Stop: 63677, Start Num: 11

Candidate Starts for ABU\_85:

(4, 64216), (6, 64174), (7, 64147), (10, 63967), (Start: 11 @63937 has 212 MA's), (Start: 12 @63910 has 25 MA's), (13, 63853), (14, 63832), (15, 63793), (16, 63775), (17, 63754),

Gene: AbsoluteMadLad\_85 Start: 63890, Stop: 63630, Start Num: 11

Candidate Starts for AbsoluteMadLad\_85:

(4, 64169), (6, 64127), (10, 63920), (Start: 11 @63890 has 212 MA's), (Start: 12 @63863 has 25 MA's), (13, 63806), (14, 63785), (15, 63746), (16, 63728), (17, 63707),

Gene: Adriana\_87 Start: 64452, Stop: 64192, Start Num: 11

Candidate Starts for Adriana\_87:

(4, 64731), (6, 64689), (10, 64482), (Start: 11 @64452 has 212 MA's), (Start: 12 @64425 has 25 MA's), (13, 64368), (14, 64347), (15, 64308), (16, 64290), (17, 64269),

Gene: Aelin\_86 Start: 63394, Stop: 63134, Start Num: 11

Candidate Starts for Aelin\_86:

(6, 63631), (10, 63424), (Start: 11 @63394 has 212 MA's), (13, 63310), (14, 63289), (16, 63232), (17, 63211),

Gene: Andre\_89 Start: 63835, Stop: 63575, Start Num: 11

Candidate Starts for Andre\_89:

(4, 64114), (6, 64072), (7, 64045), (10, 63865), (Start: 11 @63835 has 212 MA's), (Start: 12 @63808 has 25 MA's), (13, 63751), (14, 63730), (15, 63691), (16, 63673), (17, 63652),

Gene: AngelCake\_83 Start: 63535, Stop: 63302, Start Num: 12

Candidate Starts for AngelCake\_83:

(6, 63799), (10, 63592), (Start: 11 @63562 has 212 MA's), (Start: 12 @63535 has 25 MA's), (13, 63478), (14, 63457), (15, 63418), (16, 63400), (17, 63379),

Gene: Antonia\_86 Start: 63439, Stop: 63179, Start Num: 11

Candidate Starts for Antonia\_86:

(4, 63718), (6, 63676), (10, 63469), (Start: 11 @63439 has 212 MA's), (Start: 12 @63412 has 25 MA's), (13, 63355), (14, 63334), (15, 63295), (16, 63277), (17, 63256),

Gene: Apizium\_85 Start: 63094, Stop: 62834, Start Num: 11

Candidate Starts for Apizium\_85:

(5, 63361), (6, 63331), (7, 63304), (10, 63124), (Start: 11 @63094 has 212 MA's), (Start: 12 @63067 has 25 MA's), (13, 63010), (14, 62989), (15, 62950), (16, 62932), (17, 62911),

Gene: Ashraf\_88 Start: 63899, Stop: 63666, Start Num: 12

Candidate Starts for Ashraf\_88:

(6, 64163), (10, 63956), (Start: 11 @63926 has 212 MA's), (Start: 12 @63899 has 25 MA's), (13, 63842), (14, 63821), (15, 63782), (16, 63764), (17, 63743),

Gene: Basato\_86 Start: 63848, Stop: 63588, Start Num: 11

Candidate Starts for Basato\_86:

(4, 64127), (6, 64085), (7, 64058), (10, 63878), (Start: 11 @63848 has 212 MA's), (Start: 12 @63821 has 25 MA's), (13, 63764), (14, 63743), (15, 63704), (16, 63686), (17, 63665),

Gene: BatteryCK\_85 Start: 63374, Stop: 63114, Start Num: 11

Candidate Starts for BatteryCK\_85:

(6, 63611), (10, 63404), (Start: 11 @63374 has 212 MA's), (Start: 12 @63347 has 25 MA's), (13, 63290), (14, 63269), (15, 63230), (16, 63212), (17, 63191),

Gene: Bishoperium\_87 Start: 63952, Stop: 63692, Start Num: 11

Candidate Starts for Bishoperium\_87:

(4, 64231), (6, 64189), (7, 64162), (10, 63982), (Start: 11 @63952 has 212 MA's), (Start: 12 @63925 has 25 MA's), (13, 63868), (14, 63847), (15, 63808), (16, 63790), (17, 63769),

Gene: BlackStallion\_86 Start: 63802, Stop: 63542, Start Num: 11

Candidate Starts for BlackStallion\_86:

(6, 64039), (10, 63832), (Start: 11 @63802 has 212 MA's), (Start: 12 @63775 has 25 MA's), (13, 63718), (14, 63697), (15, 63658), (16, 63640), (17, 63619),

Gene: BlueHusk\_88 Start: 63626, Stop: 63366, Start Num: 11

Candidate Starts for BlueHusk\_88:

(4, 63905), (6, 63863), (7, 63836), (10, 63656), (Start: 11 @63626 has 212 MA's), (Start: 12 @63599 has 25 MA's), (13, 63542), (14, 63521), (15, 63482), (16, 63464), (17, 63443),

Gene: Bluephacebaby\_86 Start: 63986, Stop: 63726, Start Num: 11

Candidate Starts for Bluephacebaby\_86:

(4, 64265), (6, 64223), (7, 64196), (10, 64016), (Start: 11 @63986 has 212 MA's), (Start: 12 @63959 has 25 MA's), (13, 63902), (14, 63881), (15, 63842), (16, 63824), (17, 63803),

Gene: Boehler\_85 Start: 63777, Stop: 63517, Start Num: 11

Candidate Starts for Boehler\_85:

(4, 64056), (6, 64014), (7, 63987), (10, 63807), (Start: 11 @63777 has 212 MA's), (Start: 12 @63750 has 25 MA's), (13, 63693), (14, 63672), (15, 63633), (16, 63615), (17, 63594),

Gene: Brilliant\_90 Start: 63966, Stop: 63706, Start Num: 11

Candidate Starts for Brilliant\_90:

(4, 64245), (6, 64203), (10, 63996), (Start: 11 @63966 has 212 MA's), (Start: 12 @63939 has 25 MA's), (13, 63882), (14, 63861), (15, 63822), (16, 63804), (17, 63783),

Gene: Buckeye\_86 Start: 64477, Stop: 64244, Start Num: 12

Candidate Starts for Buckeye\_86:

(6, 64741), (7, 64714), (10, 64534), (Start: 11 @64504 has 212 MA's), (Start: 12 @64477 has 25 MA's), (13, 64420), (14, 64399), (15, 64360), (16, 64342), (17, 64321),

Gene: Burr\_87 Start: 63438, Stop: 63178, Start Num: 11

Candidate Starts for Burr\_87:

(4, 63717), (6, 63675), (10, 63468), (Start: 11 @63438 has 212 MA's), (Start: 12 @63411 has 25 MA's), (13, 63354), (14, 63333), (15, 63294), (16, 63276), (17, 63255),

Gene: CamL\_87 Start: 63737, Stop: 63477, Start Num: 11

Candidate Starts for CamL\_87:

(6, 63974), (10, 63767), (Start: 11 @63737 has 212 MA's), (Start: 12 @63710 has 25 MA's), (13, 63653), (14, 63632), (15, 63593), (16, 63575), (17, 63554),

Gene: CampRoach\_88 Start: 63834, Stop: 63574, Start Num: 11

Candidate Starts for CampRoach\_88:

(4, 64113), (6, 64071), (10, 63864), (Start: 11 @63834 has 212 MA's), (Start: 12 @63807 has 25 MA's), (13, 63750), (14, 63729), (15, 63690), (16, 63672), (17, 63651),

Gene: Carthage\_88 Start: 63508, Stop: 63248, Start Num: 11

Candidate Starts for Carthage\_88:

(4, 63787), (6, 63745), (7, 63718), (10, 63538), (Start: 11 @63508 has 212 MA's), (Start: 12 @63481 has 25 MA's), (13, 63424), (14, 63403), (16, 63346), (17, 63325),

Gene: Caspiboi\_88 Start: 63646, Stop: 63413, Start Num: 12

Candidate Starts for Caspiboi\_88:

(6, 63910), (7, 63883), (10, 63703), (Start: 11 @63673 has 212 MA's), (Start: 12 @63646 has 25 MA's), (13, 63589), (14, 63568), (15, 63529), (16, 63511), (17, 63490),

Gene: Causa\_83 Start: 61986, Stop: 61777, Start Num: 12

Candidate Starts for Causa\_83:

(8, 62148), (9, 62076), (Start: 12 @61986 has 25 MA's), (13, 61926), (15, 61869),

Gene: Chaelin\_88 Start: 63968, Stop: 63708, Start Num: 11

Candidate Starts for Chaelin\_88:

(4, 64247), (6, 64205), (7, 64178), (10, 63998), (Start: 11 @63968 has 212 MA's), (Start: 12 @63941 has 25 MA's), (13, 63884), (14, 63863), (15, 63824), (16, 63806), (17, 63785),

Gene: Chah\_89 Start: 63537, Stop: 63277, Start Num: 11

Candidate Starts for Chah\_89:

(6, 63774), (10, 63567), (Start: 11 @63537 has 212 MA's), (Start: 12 @63510 has 25 MA's), (13, 63453), (14, 63432), (15, 63393), (16, 63375), (17, 63354),

Gene: Charles1\_88 Start: 63746, Stop: 63486, Start Num: 11

Candidate Starts for Charles1\_88:

(4, 64025), (6, 63983), (7, 63956), (10, 63776), (Start: 11 @63746 has 212 MA's), (Start: 12 @63719 has 25 MA's), (13, 63662), (14, 63641), (15, 63602), (16, 63584), (17, 63563),

Gene: CharlieGBrown\_85 Start: 63469, Stop: 63209, Start Num: 11

Candidate Starts for CharlieGBrown\_85:

(6, 63706), (10, 63499), (Start: 11 @63469 has 212 MA's), (Start: 12 @63442 has 25 MA's), (13, 63385), (14, 63364), (15, 63325), (16, 63307), (17, 63286),

Gene: CheetO\_84 Start: 63843, Stop: 63583, Start Num: 11

Candidate Starts for CheetO\_84:

(4, 64122), (6, 64080), (7, 64053), (10, 63873), (Start: 11 @63843 has 212 MA's), (Start: 12 @63816 has 25 MA's), (13, 63759), (14, 63738), (15, 63699), (16, 63681), (17, 63660),



Gene: Cher\_87 Start: 63940, Stop: 63680, Start Num: 11

Candidate Starts for Cher\_87:

(4, 64219), (6, 64177), (7, 64150), (10, 63970), (Start: 11 @63940 has 212 MA's), (Start: 12 @63913 has 25 MA's), (13, 63856), (14, 63835), (15, 63796), (16, 63778), (17, 63757),

Gene: Childish\_87 Start: 64131, Stop: 63871, Start Num: 11

Candidate Starts for Childish\_87:

(6, 64368), (10, 64161), (Start: 11 @64131 has 212 MA's), (Start: 12 @64104 has 25 MA's), (13, 64047), (14, 64026), (15, 63987), (16, 63969), (17, 63948),

Gene: Chipette\_85 Start: 63641, Stop: 63408, Start Num: 12

Candidate Starts for Chipette\_85:

(4, 63947), (6, 63905), (7, 63878), (10, 63698), (Start: 11 @63668 has 212 MA's), (Start: 12 @63641 has 25 MA's), (13, 63584), (14, 63563), (15, 63524), (16, 63506), (17, 63485),

Gene: Chorkpop\_88 Start: 63594, Stop: 63334, Start Num: 11

Candidate Starts for Chorkpop\_88:

(4, 63873), (6, 63831), (10, 63624), (Start: 11 @63594 has 212 MA's), (Start: 12 @63567 has 25 MA's), (13, 63510), (14, 63489), (15, 63450), (16, 63432), (17, 63411),

Gene: Chunky\_86 Start: 63412, Stop: 63179, Start Num: 12

Candidate Starts for Chunky\_86:

(4, 63718), (6, 63676), (7, 63649), (10, 63469), (Start: 11 @63439 has 212 MA's), (Start: 12 @63412 has 25 MA's), (13, 63355), (14, 63334), (15, 63295), (16, 63277), (17, 63256),

Gene: Chute\_87 Start: 64105, Stop: 63872, Start Num: 12

Candidate Starts for Chute\_87:

(6, 64369), (10, 64162), (Start: 11 @64132 has 212 MA's), (Start: 12 @64105 has 25 MA's), (13, 64048), (14, 64027), (15, 63988), (16, 63970), (17, 63949),

Gene: Cobra\_87 Start: 63963, Stop: 63703, Start Num: 11

Candidate Starts for Cobra\_87:

(4, 64242), (6, 64200), (7, 64173), (10, 63993), (Start: 11 @63963 has 212 MA's), (Start: 12 @63936 has 25 MA's), (13, 63879), (14, 63858), (15, 63819), (16, 63801), (17, 63780),

Gene: Colbert\_85 Start: 62861, Stop: 62601, Start Num: 11

Candidate Starts for Colbert\_85:

(4, 63140), (6, 63098), (10, 62891), (Start: 11 @62861 has 212 MA's), (Start: 12 @62834 has 25 MA's), (13, 62777), (14, 62756), (15, 62717), (16, 62699), (17, 62678),

Gene: Coletti\_89 Start: 64461, Stop: 64228, Start Num: 12

Candidate Starts for Coletti\_89:

(6, 64725), (10, 64518), (Start: 11 @64488 has 212 MA's), (Start: 12 @64461 has 25 MA's), (13, 64404), (14, 64383), (15, 64344), (16, 64326), (17, 64305),

Gene: Cornbread\_86 Start: 63594, Stop: 63361, Start Num: 12

Candidate Starts for Cornbread\_86:

(6, 63858), (10, 63651), (Start: 11 @63621 has 212 MA's), (Start: 12 @63594 has 25 MA's), (13, 63537), (14, 63516), (15, 63477), (16, 63459), (17, 63438),

Gene: Cornobble\_85 Start: 63431, Stop: 63171, Start Num: 11

Candidate Starts for Cornobble\_85:

(2, 63767), (3, 63740), (6, 63665), (10, 63461), (Start: 11 @63431 has 212 MA's), (Start: 12 @63404 has 25 MA's), (13, 63347), (14, 63326), (15, 63287), (16, 63269), (17, 63248),

Gene: Cosmolli16\_89 Start: 64309, Stop: 64049, Start Num: 11

Candidate Starts for Cosmolli16\_89:

(4, 64588), (6, 64546), (10, 64339), (Start: 11 @64309 has 212 MA's), (Start: 12 @64282 has 25 MA's), (13, 64225), (14, 64204), (15, 64165), (16, 64147), (17, 64126),

Gene: Crownjwl\_84 Start: 63618, Stop: 63358, Start Num: 11

Candidate Starts for Crownjwl\_84:

(4, 63897), (6, 63855), (7, 63828), (10, 63648), (Start: 11 @63618 has 212 MA's), (Start: 12 @63591 has 25 MA's), (13, 63534), (14, 63513), (15, 63474), (16, 63456), (17, 63435),

Gene: DaddyDaniels\_90 Start: 64085, Stop: 63825, Start Num: 11

Candidate Starts for DaddyDaniels\_90:

(4, 64364), (6, 64322), (7, 64295), (10, 64115), (Start: 11 @64085 has 212 MA's), (Start: 12 @64058 has 25 MA's), (13, 64001), (14, 63980), (15, 63941), (16, 63923), (17, 63902),

Gene: Daffy\_86 Start: 63579, Stop: 63319, Start Num: 11

Candidate Starts for Daffy\_86:

(4, 63858), (6, 63816), (10, 63609), (Start: 11 @63579 has 212 MA's), (Start: 12 @63552 has 25 MA's), (13, 63495), (14, 63474), (15, 63435), (16, 63417), (17, 63396),

Gene: Daka\_89 Start: 63784, Stop: 63524, Start Num: 11

Candidate Starts for Daka\_89:

(4, 64063), (6, 64021), (10, 63814), (Start: 11 @63784 has 212 MA's), (Start: 12 @63757 has 25 MA's), (13, 63700), (14, 63679), (15, 63640), (16, 63622), (17, 63601),

Gene: Dati\_84 Start: 63763, Stop: 63503, Start Num: 11

Candidate Starts for Dati\_84:

(4, 64042), (6, 64000), (7, 63973), (10, 63793), (Start: 11 @63763 has 212 MA's), (Start: 12 @63736 has 25 MA's), (13, 63679), (14, 63658), (15, 63619), (16, 63601), (17, 63580),

Gene: DelRivs\_85 Start: 63392, Stop: 63132, Start Num: 11

Candidate Starts for DelRivs\_85:

(6, 63629), (10, 63422), (Start: 11 @63392 has 212 MA's), (Start: 12 @63365 has 25 MA's), (13, 63308), (14, 63287), (15, 63248), (16, 63230), (17, 63209),

Gene: Derpp\_86 Start: 63502, Stop: 63242, Start Num: 11

Candidate Starts for Derpp\_86:

(6, 63739), (10, 63532), (Start: 11 @63502 has 212 MA's), (Start: 12 @63475 has 25 MA's), (13, 63418), (14, 63397), (15, 63358), (16, 63340), (17, 63319),

Gene: Dice\_86 Start: 63424, Stop: 63164, Start Num: 11

Candidate Starts for Dice\_86:

(4, 63703), (6, 63661), (7, 63634), (10, 63454), (Start: 11 @63424 has 212 MA's), (Start: 12 @63397 has 25 MA's), (13, 63340), (14, 63319), (15, 63280), (16, 63262), (17, 63241),

Gene: Dingo\_84 Start: 63145, Stop: 62885, Start Num: 11

Candidate Starts for Dingo\_84:

(4, 63424), (6, 63382), (7, 63355), (10, 63175), (Start: 11 @63145 has 212 MA's), (Start: 12 @63118 has 25 MA's), (13, 63061), (14, 63040), (15, 63001), (16, 62983), (17, 62962),

Gene: Dione\_85 Start: 63117, Stop: 62884, Start Num: 12

Candidate Starts for Dione\_85:

(6, 63381), (10, 63174), (Start: 11 @63144 has 212 MA's), (Start: 12 @63117 has 25 MA's), (13, 63060), (14, 63039), (15, 63000), (16, 62982), (17, 62961),

Gene: Doddsville\_84 Start: 63584, Stop: 63324, Start Num: 11

Candidate Starts for Doddsville\_84:

(6, 63821), (10, 63614), (Start: 11 @63584 has 212 MA's), (Start: 12 @63557 has 25 MA's), (13, 63500), (14, 63479), (15, 63440), (16, 63422), (17, 63401),

Gene: DoesntMatter\_84 Start: 63420, Stop: 63160, Start Num: 11

Candidate Starts for DoesntMatter\_84:

(4, 63699), (6, 63657), (7, 63630), (10, 63450), (Start: 11 @63420 has 212 MA's), (Start: 12 @63393 has 25 MA's), (13, 63336), (14, 63315), (15, 63276), (16, 63258), (17, 63237),

Gene: DuchessDung\_84 Start: 63100, Stop: 62840, Start Num: 11

Candidate Starts for DuchessDung\_84:

(6, 63337), (10, 63130), (Start: 11 @63100 has 212 MA's), (Start: 12 @63073 has 25 MA's), (13, 63016), (14, 62995), (15, 62956), (16, 62938), (17, 62917),

Gene: Duggie\_87 Start: 63726, Stop: 63466, Start Num: 11

Candidate Starts for Duggie\_87:

(4, 64005), (6, 63963), (10, 63756), (Start: 11 @63726 has 212 MA's), (Start: 12 @63699 has 25 MA's), (13, 63642), (14, 63621), (15, 63582), (16, 63564), (17, 63543),

Gene: Durga\_89 Start: 64208, Stop: 63948, Start Num: 11

Candidate Starts for Durga\_89:

(6, 64445), (7, 64418), (10, 64238), (Start: 11 @64208 has 212 MA's), (Start: 12 @64181 has 25 MA's), (13, 64124), (14, 64103), (15, 64064), (16, 64046), (17, 64025),

Gene: ElvisPhasley\_93 Start: 64750, Stop: 64490, Start Num: 11

Candidate Starts for ElvisPhasley\_93:

(4, 65029), (6, 64987), (7, 64960), (10, 64780), (Start: 11 @64750 has 212 MA's), (Start: 12 @64723 has 25 MA's), (13, 64666), (14, 64645), (15, 64606), (16, 64588), (17, 64567),

Gene: Emiris\_89 Start: 64114, Stop: 63854, Start Num: 11

Candidate Starts for Emiris\_89:

(6, 64351), (10, 64144), (Start: 11 @64114 has 212 MA's), (Start: 12 @64087 has 25 MA's), (13, 64030), (14, 64009), (15, 63970), (16, 63952), (17, 63931),

Gene: EmpTee\_86 Start: 63516, Stop: 63256, Start Num: 11

Candidate Starts for EmpTee\_86:

(4, 63795), (6, 63753), (10, 63546), (Start: 11 @63516 has 212 MA's), (Start: 12 @63489 has 25 MA's), (13, 63432), (14, 63411), (15, 63372), (16, 63354), (17, 63333),

Gene: Eremos\_85 Start: 63806, Stop: 63546, Start Num: 11

Candidate Starts for Eremos\_85:

(4, 64085), (6, 64043), (7, 64016), (10, 63836), (Start: 11 @63806 has 212 MA's), (Start: 12 @63779 has 25 MA's), (13, 63722), (14, 63701), (15, 63662), (16, 63644), (17, 63623),

Gene: Etaye\_86 Start: 64292, Stop: 64032, Start Num: 11

Candidate Starts for Etaye\_86:

(4, 64571), (6, 64529), (7, 64502), (10, 64322), (Start: 11 @64292 has 212 MA's), (Start: 12 @64265 has 25 MA's), (13, 64208), (14, 64187), (15, 64148), (16, 64130), (17, 64109),

Gene: Eugenia\_89 Start: 64199, Stop: 63966, Start Num: 12

Candidate Starts for Eugenia\_89:

(6, 64463), (7, 64436), (10, 64256), (Start: 11 @64226 has 212 MA's), (Start: 12 @64199 has 25 MA's), (13, 64142), (14, 64121), (15, 64082), (16, 64064), (17, 64043),

Gene: Fang\_88 Start: 63934, Stop: 63674, Start Num: 11

Candidate Starts for Fang\_88:

(6, 64171), (10, 63964), (Start: 11 @63934 has 212 MA's), (Start: 12 @63907 has 25 MA's), (13, 63850), (14, 63829), (15, 63790), (16, 63772), (17, 63751),

Gene: FluffyNinja\_88 Start: 63777, Stop: 63544, Start Num: 12

Candidate Starts for FluffyNinja\_88:

(6, 64041), (10, 63834), (Start: 11 @63804 has 212 MA's), (Start: 12 @63777 has 25 MA's), (13, 63720), (14, 63699), (15, 63660), (16, 63642), (17, 63621),

Gene: Fozzie\_84 Start: 64130, Stop: 63870, Start Num: 11

Candidate Starts for Fozzie\_84:

(6, 64367), (10, 64160), (Start: 11 @64130 has 212 MA's), (Start: 12 @64103 has 25 MA's), (13, 64046), (14, 64025), (15, 63986), (16, 63968), (17, 63947),

Gene: Frankicide\_85 Start: 63630, Stop: 63370, Start Num: 11

Candidate Starts for Frankicide\_85:

(4, 63909), (6, 63867), (7, 63840), (10, 63660), (Start: 11 @63630 has 212 MA's), (Start: 12 @63603 has 25 MA's), (13, 63546), (14, 63525), (15, 63486), (16, 63468), (17, 63447),

Gene: FriarPreacher\_84 Start: 63503, Stop: 63243, Start Num: 11

Candidate Starts for FriarPreacher\_84:

(4, 63782), (6, 63740), (7, 63713), (10, 63533), (Start: 11 @63503 has 212 MA's), (Start: 12 @63476 has 25 MA's), (13, 63419), (14, 63398), (15, 63359), (16, 63341), (17, 63320),

Gene: Fringe\_91 Start: 64280, Stop: 64020, Start Num: 11

Candidate Starts for Fringe\_91:

(4, 64559), (6, 64517), (7, 64490), (10, 64310), (Start: 11 @64280 has 212 MA's), (Start: 12 @64253 has 25 MA's), (13, 64196), (14, 64175), (15, 64136), (16, 64118), (17, 64097),

Gene: FugateOSU\_87 Start: 64563, Stop: 64303, Start Num: 11

Candidate Starts for FugateOSU\_87:

(6, 64800), (10, 64593), (Start: 11 @64563 has 212 MA's), (Start: 12 @64536 has 25 MA's), (13, 64479), (14, 64458), (15, 64419), (16, 64401), (17, 64380),

Gene: Gareth\_87 Start: 63952, Stop: 63692, Start Num: 11

Candidate Starts for Gareth\_87:

(4, 64231), (6, 64189), (7, 64162), (10, 63982), (Start: 11 @63952 has 212 MA's), (Start: 12 @63925 has 25 MA's), (13, 63868), (14, 63847), (15, 63808), (16, 63790), (17, 63769),

Gene: GeneCoco\_87 Start: 64132, Stop: 63872, Start Num: 11

Candidate Starts for GeneCoco\_87:

(4, 64411), (6, 64369), (7, 64342), (10, 64162), (Start: 11 @64132 has 212 MA's), (Start: 12 @64105 has 25 MA's), (13, 64048), (14, 64027), (15, 63988), (16, 63970), (17, 63949),

Gene: Giraffe\_87 Start: 63956, Stop: 63696, Start Num: 11

Candidate Starts for Giraffe\_87:

(6, 64193), (7, 64166), (10, 63986), (Start: 11 @63956 has 212 MA's), (Start: 12 @63929 has 25 MA's), (13, 63872), (14, 63851), (15, 63812), (16, 63794), (17, 63773),

Gene: Grand2040\_85 Start: 63894, Stop: 63661, Start Num: 12

Candidate Starts for Grand2040\_85:

(4, 64200), (6, 64158), (10, 63951), (Start: 11 @63921 has 212 MA's), (Start: 12 @63894 has 25 MA's), (13, 63837), (14, 63816), (15, 63777), (16, 63759), (17, 63738),

Gene: Gwennie1\_84 Start: 63740, Stop: 63507, Start Num: 12

Candidate Starts for Gwennie1\_84:

(4, 64046), (6, 64004), (7, 63977), (10, 63797), (Start: 11 @63767 has 212 MA's), (Start: 12 @63740 has 25 MA's), (13, 63683), (14, 63662), (15, 63623), (16, 63605), (17, 63584),

Gene: Gwilliam\_87 Start: 64487, Stop: 64227, Start Num: 11

Candidate Starts for Gwilliam\_87:

(4, 64766), (6, 64724), (7, 64697), (10, 64517), (Start: 11 @64487 has 212 MA's), (Start: 12 @64460 has 25 MA's), (13, 64403), (14, 64382), (15, 64343), (16, 64325), (17, 64304),

Gene: Gyarad\_0086 Start: 63441, Stop: 63181, Start Num: 11

Candidate Starts for Gyarad\_0086:

(4, 63720), (6, 63678), (7, 63651), (10, 63471), (Start: 11 @63441 has 212 MA's), (Start: 12 @63414 has 25 MA's), (13, 63357), (14, 63336), (15, 63297), (16, 63279), (17, 63258),

Gene: HSavage\_85 Start: 63458, Stop: 63198, Start Num: 11

Candidate Starts for HSavage\_85:

(6, 63695), (10, 63488), (Start: 11 @63458 has 212 MA's), (Start: 12 @63431 has 25 MA's), (13, 63374), (14, 63353), (15, 63314), (16, 63296), (17, 63275),

Gene: Haimas\_84 Start: 63383, Stop: 63123, Start Num: 11

Candidate Starts for Haimas\_84:

(6, 63620), (10, 63413), (Start: 11 @63383 has 212 MA's), (Start: 12 @63356 has 25 MA's), (13, 63299), (14, 63278), (15, 63239), (16, 63221), (17, 63200),

Gene: Haleema\_86 Start: 63502, Stop: 63242, Start Num: 11

Candidate Starts for Haleema\_86:

(4, 63781), (6, 63739), (7, 63712), (10, 63532), (Start: 11 @63502 has 212 MA's), (Start: 12 @63475 has 25 MA's), (13, 63418), (14, 63397), (15, 63358), (16, 63340), (17, 63319),

Gene: Hamish\_84 Start: 63671, Stop: 63411, Start Num: 11

Candidate Starts for Hamish\_84:

(6, 63908), (10, 63701), (Start: 11 @63671 has 212 MA's), (Start: 12 @63644 has 25 MA's), (13, 63587), (14, 63566), (15, 63527), (16, 63509), (17, 63488),

Gene: Hartsy\_85 Start: 63620, Stop: 63360, Start Num: 11

Candidate Starts for Hartsy\_85:

(4, 63899), (6, 63857), (7, 63830), (10, 63650), (Start: 11 @63620 has 212 MA's), (Start: 12 @63593 has 25 MA's), (13, 63536), (14, 63515), (15, 63476), (16, 63458), (17, 63437),

Gene: Harvey\_84 Start: 63280, Stop: 63020, Start Num: 11

Candidate Starts for Harvey\_84:

(4, 63559), (6, 63517), (10, 63310), (Start: 11 @63280 has 212 MA's), (Start: 12 @63253 has 25 MA's), (13, 63196), (14, 63175), (15, 63136), (16, 63118), (17, 63097),

Gene: Held\_85 Start: 63401, Stop: 63141, Start Num: 11

Candidate Starts for Held\_85:

(4, 63680), (6, 63638), (10, 63431), (Start: 11 @63401 has 212 MA's), (Start: 12 @63374 has 25 MA's), (13, 63317), (14, 63296), (15, 63257), (16, 63239), (17, 63218),

Gene: HenryJackson\_87 Start: 64120, Stop: 63860, Start Num: 11

Candidate Starts for HenryJackson\_87:

(4, 64399), (6, 64357), (7, 64330), (10, 64150), (Start: 11 @64120 has 212 MA's), (Start: 12 @64093 has 25 MA's), (13, 64036), (14, 64015), (15, 63976), (16, 63958), (17, 63937),

Gene: Hertubise\_86 Start: 63762, Stop: 63502, Start Num: 11

Candidate Starts for Hertubise\_86:

(4, 64041), (6, 63999), (10, 63792), (Start: 11 @63762 has 212 MA's), (Start: 12 @63735 has 25 MA's), (13, 63678), (14, 63657), (15, 63618), (16, 63600), (17, 63579),

Gene: Hetaeria\_87 Start: 63769, Stop: 63509, Start Num: 11

Candidate Starts for Hetaeria\_87:

(4, 64048), (6, 64006), (10, 63799), (Start: 11 @63769 has 212 MA's), (Start: 12 @63742 has 25 MA's), (13, 63685), (14, 63664), (15, 63625), (16, 63607), (17, 63586),

Gene: HighStump\_88 Start: 63907, Stop: 63647, Start Num: 11

Candidate Starts for HighStump\_88:

(6, 64144), (7, 64117), (10, 63937), (Start: 11 @63907 has 212 MA's), (Start: 12 @63880 has 25 MA's), (13, 63823), (14, 63802), (15, 63763), (16, 63745), (17, 63724),

Gene: Hocus\_85 Start: 63421, Stop: 63161, Start Num: 11

Candidate Starts for Hocus\_85:

(4, 63700), (6, 63658), (7, 63631), (10, 63451), (Start: 11 @63421 has 212 MA's), (Start: 12 @63394 has 25 MA's), (13, 63337), (14, 63316), (15, 63277), (16, 63259), (17, 63238),

Gene: ImtiyazSitla\_88 Start: 63899, Stop: 63666, Start Num: 12

Candidate Starts for ImtiyazSitla\_88:

(6, 64163), (10, 63956), (Start: 11 @63926 has 212 MA's), (Start: 12 @63899 has 25 MA's), (13, 63842), (14, 63821), (15, 63782), (16, 63764), (17, 63743),

Gene: Inchworm\_88 Start: 63794, Stop: 63534, Start Num: 11

Candidate Starts for Inchworm\_88:

(6, 64031), (10, 63824), (Start: 11 @63794 has 212 MA's), (Start: 12 @63767 has 25 MA's), (13, 63710), (14, 63689), (15, 63650), (16, 63632), (17, 63611),

Gene: Inverness\_85 Start: 63595, Stop: 63335, Start Num: 11

Candidate Starts for Inverness\_85:

(4, 63874), (6, 63832), (7, 63805), (10, 63625), (Start: 11 @63595 has 212 MA's), (Start: 12 @63568 has 25 MA's), (13, 63511), (14, 63490), (15, 63451), (16, 63433), (17, 63412),

Gene: Iridoclysis\_86 Start: 63685, Stop: 63425, Start Num: 11

Candidate Starts for Iridoclysis\_86:

(6, 63922), (10, 63715), (Start: 11 @63685 has 212 MA's), (Start: 12 @63658 has 25 MA's), (13, 63601), (14, 63580), (15, 63541), (16, 63523), (17, 63502),

Gene: IsaacEli\_89 Start: 63925, Stop: 63665, Start Num: 11

Candidate Starts for IsaacEli\_89:

(4, 64204), (6, 64162), (10, 63955), (Start: 11 @63925 has 212 MA's), (Start: 12 @63898 has 25 MA's), (13, 63841), (14, 63820), (15, 63781), (16, 63763), (17, 63742),

Gene: JDog\_86 Start: 63955, Stop: 63695, Start Num: 11

Candidate Starts for JDog\_86:

(4, 64234), (6, 64192), (7, 64165), (10, 63985), (Start: 11 @63955 has 212 MA's), (Start: 12 @63928 has 25 MA's), (13, 63871), (14, 63850), (15, 63811), (16, 63793), (17, 63772),

Gene: JacAttac\_87 Start: 63399, Stop: 63139, Start Num: 11

Candidate Starts for JacAttac\_87:

(6, 63636), (10, 63429), (Start: 11 @63399 has 212 MA's), (Start: 12 @63372 has 25 MA's), (13, 63315), (14, 63294), (15, 63255), (16, 63237), (17, 63216),

Gene: JakeO\_88 Start: 63683, Stop: 63423, Start Num: 11

Candidate Starts for JakeO\_88:

(4, 63962), (6, 63920), (7, 63893), (10, 63713), (Start: 11 @63683 has 212 MA's), (Start: 12 @63656 has 25 MA's), (13, 63599), (14, 63578), (15, 63539), (16, 63521), (17, 63500),

Gene: JangoPhett\_85 Start: 63759, Stop: 63499, Start Num: 11

Candidate Starts for JangoPhett\_85:

(6, 63996), (10, 63789), (Start: 11 @63759 has 212 MA's), (Start: 12 @63732 has 25 MA's), (13, 63675), (14, 63654), (15, 63615), (16, 63597), (17, 63576),

Gene: Jesabah\_86 Start: 64494, Stop: 64261, Start Num: 12

Candidate Starts for Jesabah\_86:

(4, 64800), (6, 64758), (7, 64731), (10, 64551), (Start: 11 @64521 has 212 MA's), (Start: 12 @64494 has 25 MA's), (13, 64437), (14, 64416), (15, 64377), (16, 64359), (17, 64338),

Gene: Jillium\_88 Start: 64115, Stop: 63855, Start Num: 11

Candidate Starts for Jillium\_88:

(4, 64394), (6, 64352), (7, 64325), (10, 64145), (Start: 11 @64115 has 212 MA's), (Start: 12 @64088 has 25 MA's), (13, 64031), (14, 64010), (15, 63971), (16, 63953), (17, 63932),

Gene: Jiminy\_87 Start: 63619, Stop: 63359, Start Num: 11

Candidate Starts for Jiminy\_87:

(4, 63898), (6, 63856), (10, 63649), (Start: 11 @63619 has 212 MA's), (Start: 12 @63592 has 25 MA's), (13, 63535), (14, 63514), (15, 63475), (16, 63457), (17, 63436),

Gene: Jiraiya\_88 Start: 63703, Stop: 63443, Start Num: 11

Candidate Starts for Jiraiya\_88:

(4, 63982), (6, 63940), (7, 63913), (10, 63733), (Start: 11 @63703 has 212 MA's), (Start: 12 @63676 has 25 MA's), (13, 63619), (14, 63598), (15, 63559), (16, 63541), (17, 63520),

Gene: KLucky39\_85 Start: 63478, Stop: 63218, Start Num: 11

Candidate Starts for KLucky39\_85:

(4, 63757), (6, 63715), (7, 63688), (10, 63508), (Start: 11 @63478 has 212 MA's), (Start: 12 @63451 has 25 MA's), (13, 63394), (14, 63373), (15, 63334), (16, 63316), (17, 63295),

Gene: Kahve\_87 Start: 64118, Stop: 63858, Start Num: 11

Candidate Starts for Kahve\_87:

(4, 64397), (6, 64355), (7, 64328), (10, 64148), (Start: 11 @64118 has 212 MA's), (Start: 12 @64091 has 25 MA's), (13, 64034), (14, 64013), (15, 63974), (16, 63956), (17, 63935),

Gene: Kailash\_85 Start: 63818, Stop: 63558, Start Num: 11

Candidate Starts for Kailash\_85:

(6, 64055), (10, 63848), (Start: 11 @63818 has 212 MA's), (Start: 12 @63791 has 25 MA's), (13, 63734), (14, 63713), (15, 63674), (16, 63656), (17, 63635),

Gene: Katniss\_89 Start: 63507, Stop: 63274, Start Num: 12

Candidate Starts for Katniss\_89:

(6, 63771), (10, 63564), (Start: 11 @63534 has 212 MA's), (Start: 12 @63507 has 25 MA's), (13, 63450), (14, 63429), (15, 63390), (16, 63372), (17, 63351),

Gene: Keitherie\_90 Start: 64176, Stop: 63916, Start Num: 11

Candidate Starts for Keitherie\_90:

(6, 64413), (10, 64206), (Start: 11 @64176 has 212 MA's), (Start: 12 @64149 has 25 MA's), (13, 64092), (14, 64071), (15, 64032), (16, 64014), (17, 63993),

Gene: Khan1\_87 Start: 63870, Stop: 63637, Start Num: 12

Candidate Starts for Khan1\_87:

(6, 64134), (10, 63927), (Start: 11 @63897 has 212 MA's), (Start: 12 @63870 has 25 MA's), (13, 63813), (14, 63792), (15, 63753), (16, 63735), (17, 63714),

Gene: Kikipoo\_89 Start: 63925, Stop: 63665, Start Num: 11

Candidate Starts for Kikipoo\_89:

(4, 64204), (6, 64162), (10, 63955), (Start: 11 @63925 has 212 MA's), (Start: 12 @63898 has 25 MA's), (13, 63841), (14, 63820), (15, 63781), (16, 63763), (17, 63742),

Gene: Kimbrough\_88 Start: 63997, Stop: 63737, Start Num: 11

Candidate Starts for Kimbrough\_88:

(4, 64276), (6, 64234), (7, 64207), (10, 64027), (Start: 11 @63997 has 212 MA's), (Start: 12 @63970 has 25 MA's), (13, 63913), (14, 63892), (15, 63853), (16, 63835), (17, 63814),

Gene: KingTut\_78 Start: 60157, Stop: 59897, Start Num: 11

Candidate Starts for KingTut\_78:

(6, 60394), (7, 60367), (10, 60187), (Start: 11 @60157 has 212 MA's), (Start: 12 @60130 has 25 MA's), (13, 60073), (14, 60052), (15, 60013), (16, 59995), (17, 59974),

Gene: KingVeVeVe\_85 Start: 63131, Stop: 62871, Start Num: 11

Candidate Starts for KingVeVeVe\_85:

(4, 63410), (6, 63368), (7, 63341), (10, 63161), (Start: 11 @63131 has 212 MA's), (Start: 12 @63104 has 25 MA's), (13, 63047), (14, 63026), (15, 62987), (16, 62969), (17, 62948),

Gene: KlimbOn\_86 Start: 63437, Stop: 63177, Start Num: 11

Candidate Starts for KlimbOn\_86:

(4, 63716), (6, 63674), (10, 63467), (Start: 11 @63437 has 212 MA's), (Start: 12 @63410 has 25 MA's), (13, 63353), (14, 63332), (15, 63293), (16, 63275), (17, 63254),

Gene: Kloppinator\_87 Start: 63567, Stop: 63307, Start Num: 11

Candidate Starts for Kloppinator\_87:

(6, 63804), (10, 63597), (Start: 11 @63567 has 212 MA's), (Start: 12 @63540 has 25 MA's), (13, 63483), (14, 63462), (15, 63423), (16, 63405), (17, 63384),



Gene: Kwadwo\_86 Start: 63422, Stop: 63162, Start Num: 11

Candidate Starts for Kwadwo\_86:

(6, 63659), (10, 63452), (Start: 11 @63422 has 212 MA's), (Start: 12 @63395 has 25 MA's), (13, 63338), (14, 63317), (15, 63278), (16, 63260), (17, 63239),

Gene: Kwksand96\_88 Start: 63689, Stop: 63429, Start Num: 11

Candidate Starts for Kwksand96\_88:

(6, 63926), (10, 63719), (Start: 11 @63689 has 212 MA's), (Start: 12 @63662 has 25 MA's), (13, 63605), (14, 63584), (15, 63545), (16, 63527), (17, 63506),

Gene: Labeouficaum\_87 Start: 63502, Stop: 63242, Start Num: 11

Candidate Starts for Labeouficaum\_87:

(6, 63739), (10, 63532), (Start: 11 @63502 has 212 MA's), (Start: 12 @63475 has 25 MA's), (13, 63418), (14, 63397), (15, 63358), (16, 63340), (17, 63319),

Gene: LasagnaCat\_88 Start: 63804, Stop: 63544, Start Num: 11

Candidate Starts for LasagnaCat\_88:

(6, 64041), (10, 63834), (Start: 11 @63804 has 212 MA's), (Start: 12 @63777 has 25 MA's), (13, 63720), (14, 63699), (15, 63660), (16, 63642), (17, 63621),

Gene: Lasso\_86 Start: 63663, Stop: 63403, Start Num: 11

Candidate Starts for Lasso\_86:

(4, 63942), (6, 63900), (7, 63873), (10, 63693), (Start: 11 @63663 has 212 MA's), (Start: 12 @63636 has 25 MA's), (13, 63579), (14, 63558), (15, 63519), (16, 63501), (17, 63480),

Gene: LeeLot\_85 Start: 63980, Stop: 63747, Start Num: 12

Candidate Starts for LeeLot\_85:

(4, 64286), (6, 64244), (7, 64217), (10, 64037), (Start: 11 @64007 has 212 MA's), (Start: 12 @63980 has 25 MA's), (13, 63923), (14, 63902), (15, 63863), (16, 63845), (17, 63824),

Gene: Lego3393\_85 Start: 64124, Stop: 63864, Start Num: 11

Candidate Starts for Lego3393\_85:

(6, 64361), (10, 64154), (Start: 11 @64124 has 212 MA's), (Start: 12 @64097 has 25 MA's), (13, 64040), (14, 64019), (16, 63962), (17, 63941),

Gene: Legolas\_88 Start: 63751, Stop: 63491, Start Num: 11

Candidate Starts for Legolas\_88:

(4, 64030), (6, 63988), (7, 63961), (10, 63781), (Start: 11 @63751 has 212 MA's), (Start: 12 @63724 has 25 MA's), (13, 63667), (14, 63646), (15, 63607), (16, 63589), (17, 63568),

Gene: LeiMonet\_89 Start: 63858, Stop: 63625, Start Num: 12

Candidate Starts for LeiMonet\_89:

(4, 64164), (6, 64122), (10, 63915), (Start: 11 @63885 has 212 MA's), (Start: 12 @63858 has 25 MA's), (13, 63801), (14, 63780), (15, 63741), (16, 63723), (17, 63702),

Gene: LemonSlice\_87 Start: 63410, Stop: 63150, Start Num: 11

Candidate Starts for LemonSlice\_87:

(6, 63647), (10, 63440), (Start: 11 @63410 has 212 MA's), (Start: 12 @63383 has 25 MA's), (13, 63326), (14, 63305), (15, 63266), (16, 63248), (17, 63227),

Gene: Longacauda\_88 Start: 63904, Stop: 63644, Start Num: 11

Candidate Starts for Longacauda\_88:

(4, 64183), (6, 64141), (7, 64114), (10, 63934), (Start: 11 @63904 has 212 MA's), (Start: 12 @63877 has 25 MA's), (13, 63820), (14, 63799), (15, 63760), (16, 63742), (17, 63721),

Gene: Lopsy\_83 Start: 63143, Stop: 62883, Start Num: 11

Candidate Starts for Lopsy\_83:

(6, 63380), (10, 63173), (Start: 11 @63143 has 212 MA's), (Start: 12 @63116 has 25 MA's), (13, 63059), (14, 63038), (15, 62999), (16, 62981), (17, 62960),

Gene: LostAndPhound\_86 Start: 63925, Stop: 63692, Start Num: 12

Candidate Starts for LostAndPhound\_86:

(4, 64231), (6, 64189), (7, 64162), (10, 63982), (Start: 11 @63952 has 212 MA's), (Start: 12 @63925 has 25 MA's), (13, 63868), (14, 63847), (15, 63808), (16, 63790), (17, 63769),

Gene: LuckyMarjie\_84 Start: 63162, Stop: 62902, Start Num: 11

Candidate Starts for LuckyMarjie\_84:

(4, 63441), (6, 63399), (7, 63372), (10, 63192), (Start: 11 @63162 has 212 MA's), (Start: 12 @63135 has 25 MA's), (13, 63078), (14, 63057), (15, 63018), (16, 63000), (17, 62979),

Gene: Lulwa\_84 Start: 62776, Stop: 62516, Start Num: 11

Candidate Starts for Lulwa\_84:

(4, 63055), (6, 63013), (10, 62806), (Start: 11 @62776 has 212 MA's), (Start: 12 @62749 has 25 MA's), (13, 62692), (14, 62671), (15, 62632), (16, 62614), (17, 62593),

Gene: Lumine\_88 Start: 63601, Stop: 63341, Start Num: 11

Candidate Starts for Lumine\_88:

(4, 63880), (6, 63838), (7, 63811), (10, 63631), (Start: 11 @63601 has 212 MA's), (Start: 12 @63574 has 25 MA's), (13, 63517), (14, 63496), (15, 63457), (16, 63439), (17, 63418),

Gene: MRabcd\_87 Start: 63878, Stop: 63618, Start Num: 11

Candidate Starts for MRabcd\_87:

(6, 64115), (10, 63908), (Start: 11 @63878 has 212 MA's), (Start: 12 @63851 has 25 MA's), (13, 63794), (14, 63773), (15, 63734), (16, 63716), (17, 63695),

Gene: Mag7\_85 Start: 63362, Stop: 63102, Start Num: 11

Candidate Starts for Mag7\_85:

(6, 63599), (10, 63392), (Start: 11 @63362 has 212 MA's), (Start: 12 @63335 has 25 MA's), (13, 63278), (14, 63257), (15, 63218), (16, 63200), (17, 63179),

Gene: Magic8\_86 Start: 63730, Stop: 63470, Start Num: 11

Candidate Starts for Magic8\_86:

(6, 63967), (10, 63760), (Start: 11 @63730 has 212 MA's), (Start: 12 @63703 has 25 MA's), (13, 63646), (14, 63625), (15, 63586), (16, 63568), (17, 63547),

Gene: Manad\_86 Start: 63676, Stop: 63416, Start Num: 11

Candidate Starts for Manad\_86:

(4, 63955), (6, 63913), (7, 63886), (10, 63706), (Start: 11 @63676 has 212 MA's), (13, 63592), (14, 63571), (15, 63532), (16, 63514), (17, 63493),

Gene: Maru\_87 Start: 64014, Stop: 63754, Start Num: 11

Candidate Starts for Maru\_87:

(4, 64293), (6, 64251), (10, 64044), (Start: 11 @64014 has 212 MA's), (Start: 12 @63987 has 25 MA's), (13, 63930), (14, 63909), (15, 63870), (16, 63852), (17, 63831),

Gene: Maskar\_88 Start: 63899, Stop: 63666, Start Num: 12

Candidate Starts for Maskar\_88:

(6, 64163), (10, 63956), (Start: 11 @63926 has 212 MA's), (Start: 12 @63899 has 25 MA's), (13, 63842), (14, 63821), (15, 63782), (16, 63764), (17, 63743),

Gene: Matalotodo\_85 Start: 64383, Stop: 64150, Start Num: 12

Candidate Starts for Matalotodo\_85:

(6, 64647), (7, 64620), (10, 64440), (Start: 11 @64410 has 212 MA's), (Start: 12 @64383 has 25 MA's), (13, 64326), (14, 64305), (15, 64266), (16, 64248), (17, 64227),

Gene: Mcshane\_86 Start: 63424, Stop: 63164, Start Num: 11

Candidate Starts for Mcshane\_86:

(6, 63661), (10, 63454), (Start: 11 @63424 has 212 MA's), (Start: 12 @63397 has 25 MA's), (13, 63340), (14, 63319), (15, 63280), (16, 63262), (17, 63241),

Gene: Mecca\_87 Start: 63978, Stop: 63718, Start Num: 11

Candidate Starts for Mecca\_87:

(4, 64257), (6, 64215), (7, 64188), (10, 64008), (Start: 11 @63978 has 212 MA's), (Start: 12 @63951 has 25 MA's), (13, 63894), (14, 63873), (15, 63834), (16, 63816), (17, 63795),

Gene: Megamind20\_87 Start: 63361, Stop: 63128, Start Num: 12

Candidate Starts for Megamind20\_87:

(4, 63667), (6, 63625), (7, 63598), (10, 63418), (Start: 11 @63388 has 212 MA's), (Start: 12 @63361 has 25 MA's), (13, 63304), (14, 63283), (15, 63244), (16, 63226), (17, 63205),

Gene: Megatron\_88 Start: 64069, Stop: 63836, Start Num: 12

Candidate Starts for Megatron\_88:

(4, 64375), (6, 64333), (10, 64126), (Start: 11 @64096 has 212 MA's), (Start: 12 @64069 has 25 MA's), (13, 64012), (14, 63991), (15, 63952), (16, 63934), (17, 63913),

Gene: Melc17\_84 Start: 64046, Stop: 63786, Start Num: 11

Candidate Starts for Melc17\_84:

(10, 64076), (Start: 11 @64046 has 212 MA's), (Start: 12 @64019 has 25 MA's), (13, 63962), (14, 63941), (15, 63902), (16, 63884), (17, 63863),

Gene: MelsMeow\_86 Start: 63659, Stop: 63426, Start Num: 12

Candidate Starts for MelsMeow\_86:

(6, 63923), (10, 63716), (Start: 11 @63686 has 212 MA's), (Start: 12 @63659 has 25 MA's), (13, 63602), (14, 63581), (15, 63542), (16, 63524), (17, 63503),

Gene: Mesh1\_88 Start: 64142, Stop: 63882, Start Num: 11

Candidate Starts for Mesh1\_88:

(4, 64421), (6, 64379), (7, 64352), (10, 64172), (Start: 11 @64142 has 212 MA's), (Start: 12 @64115 has 25 MA's), (13, 64058), (14, 64037), (15, 63998), (16, 63980), (17, 63959),

Gene: Mesmerelda\_88 Start: 63950, Stop: 63717, Start Num: 12

Candidate Starts for Mesmerelda\_88:

(6, 64214), (10, 64007), (Start: 11 @63977 has 212 MA's), (Start: 12 @63950 has 25 MA's), (13, 63893), (14, 63872), (15, 63833), (16, 63815), (17, 63794),

Gene: MichaelPhcott\_85 Start: 63359, Stop: 63099, Start Num: 11

Candidate Starts for MichaelPhcott\_85:

(6, 63596), (10, 63389), (Start: 11 @63359 has 212 MA's), (Start: 12 @63332 has 25 MA's), (13, 63275), (14, 63254), (15, 63215), (16, 63197), (17, 63176),

Gene: MiniBoss\_83 Start: 62730, Stop: 62470, Start Num: 11

Candidate Starts for MiniBoss\_83:

(4, 63009), (6, 62967), (7, 62940), (10, 62760), (Start: 11 @62730 has 212 MA's), (Start: 12 @62703 has 25 MA's), (13, 62646), (14, 62625), (15, 62586), (16, 62568), (17, 62547),

Gene: MitKao\_87 Start: 63580, Stop: 63320, Start Num: 11

Candidate Starts for MitKao\_87:

(4, 63859), (6, 63817), (10, 63610), (Start: 11 @63580 has 212 MA's), (Start: 12 @63553 has 25 MA's), (13, 63496), (14, 63475), (15, 63436), (16, 63418), (17, 63397),

Gene: Morgushi\_84 Start: 63394, Stop: 63134, Start Num: 11

Candidate Starts for Morgushi\_84:

(4, 63673), (6, 63631), (10, 63424), (Start: 11 @63394 has 212 MA's), (Start: 12 @63367 has 25 MA's), (13, 63310), (14, 63289), (15, 63250), (16, 63232), (17, 63211),

Gene: Mosaic\_84 Start: 63576, Stop: 63316, Start Num: 11

Candidate Starts for Mosaic\_84:

(4, 63855), (6, 63813), (7, 63786), (10, 63606), (Start: 11 @63576 has 212 MA's), (Start: 12 @63549 has 25 MA's), (13, 63492), (14, 63471), (15, 63432), (16, 63414), (17, 63393),

Gene: MrPhizzler\_86 Start: 63847, Stop: 63614, Start Num: 12

Candidate Starts for MrPhizzler\_86:

(4, 64153), (6, 64111), (7, 64084), (10, 63904), (Start: 11 @63874 has 212 MA's), (Start: 12 @63847 has 25 MA's), (13, 63790), (14, 63769), (15, 63730), (16, 63712), (17, 63691),

Gene: Mulan\_86 Start: 63608, Stop: 63348, Start Num: 11

Candidate Starts for Mulan\_86:

(6, 63845), (10, 63638), (Start: 11 @63608 has 212 MA's), (Start: 12 @63581 has 25 MA's), (13, 63524), (14, 63503), (15, 63464), (16, 63446), (17, 63425),

Gene: Murdoc\_83 Start: 63687, Stop: 63427, Start Num: 11

Candidate Starts for Murdoc\_83:

(6, 63924), (10, 63717), (Start: 11 @63687 has 212 MA's), (Start: 12 @63660 has 25 MA's), (13, 63603), (14, 63582), (15, 63543), (16, 63525), (17, 63504),

Gene: Mutante\_88 Start: 63581, Stop: 63321, Start Num: 11

Candidate Starts for Mutante\_88:

(6, 63818), (10, 63611), (Start: 11 @63581 has 212 MA's), (Start: 12 @63554 has 25 MA's), (13, 63497), (14, 63476), (15, 63437), (16, 63419), (17, 63398),

Gene: Nacho\_0089 Start: 64652, Stop: 64392, Start Num: 11

Candidate Starts for Nacho\_0089:

(4, 64931), (6, 64889), (7, 64862), (10, 64682), (Start: 11 @64652 has 212 MA's), (Start: 12 @64625 has 25 MA's), (13, 64568), (14, 64547), (15, 64508), (16, 64490), (17, 64469),

Gene: Nathan\_87 Start: 64080, Stop: 63847, Start Num: 12

Candidate Starts for Nathan\_87:

(4, 64386), (6, 64344), (7, 64317), (10, 64137), (Start: 11 @64107 has 212 MA's), (Start: 12 @64080 has 25 MA's), (13, 64023), (14, 64002), (15, 63963), (16, 63945), (17, 63924),

Gene: Nicole21\_88 Start: 63714, Stop: 63454, Start Num: 11

Candidate Starts for Nicole21\_88:

(6, 63951), (10, 63744), (Start: 11 @63714 has 212 MA's), (Start: 12 @63687 has 25 MA's), (13, 63630), (14, 63609), (15, 63570), (16, 63552), (17, 63531),

Gene: Numberten\_86 Start: 63696, Stop: 63436, Start Num: 11

Candidate Starts for Numberten\_86:

(4, 63975), (6, 63933), (7, 63906), (10, 63726), (Start: 11 @63696 has 212 MA's), (Start: 12 @63669 has 25 MA's), (13, 63612), (14, 63591), (15, 63552), (16, 63534), (17, 63513),

Gene: Nyala\_86 Start: 63430, Stop: 63170, Start Num: 11

Candidate Starts for Nyala\_86:

(6, 63667), (10, 63460), (Start: 11 @63430 has 212 MA's), (Start: 12 @63403 has 25 MA's), (13, 63346), (14, 63325), (15, 63286), (16, 63268), (17, 63247),

Gene: OSmaximus\_88 Start: 64261, Stop: 64001, Start Num: 11

Candidate Starts for OSmaximus\_88:

(6, 64498), (10, 64291), (Start: 11 @64261 has 212 MA's), (Start: 12 @64234 has 25 MA's), (13, 64177), (14, 64156), (15, 64117), (16, 64099), (17, 64078),

Gene: Olak\_86 Start: 63594, Stop: 63334, Start Num: 11

Candidate Starts for Olak\_86:

(4, 63873), (6, 63831), (7, 63804), (10, 63624), (Start: 11 @63594 has 212 MA's), (Start: 12 @63567 has 25 MA's), (13, 63510), (14, 63489), (15, 63450), (16, 63432), (17, 63411),

Gene: Oline\_86 Start: 63585, Stop: 63325, Start Num: 11

Candidate Starts for Oline\_86:

(6, 63822), (10, 63615), (Start: 11 @63585 has 212 MA's), (Start: 12 @63558 has 25 MA's), (13, 63501), (14, 63480), (15, 63441), (16, 63423), (17, 63402),

Gene: Omniscient\_88 Start: 64257, Stop: 64024, Start Num: 12

Candidate Starts for Omniscient\_88:

(6, 64521), (10, 64314), (Start: 11 @64284 has 212 MA's), (Start: 12 @64257 has 25 MA's), (13, 64200), (14, 64179), (15, 64140), (16, 64122), (17, 64101),

Gene: Oosterbaan\_87 Start: 63821, Stop: 63561, Start Num: 11

Candidate Starts for Oosterbaan\_87:

(6, 64058), (10, 63851), (Start: 11 @63821 has 212 MA's), (Start: 12 @63794 has 25 MA's), (13, 63737), (14, 63716), (15, 63677), (16, 63659), (17, 63638),

Gene: Orfeu\_86 Start: 63944, Stop: 63684, Start Num: 11

Candidate Starts for Orfeu\_86:

(4, 64223), (6, 64181), (10, 63974), (Start: 11 @63944 has 212 MA's), (Start: 12 @63917 has 25 MA's), (13, 63860), (14, 63839), (15, 63800), (16, 63782), (17, 63761),

Gene: Orion\_85 Start: 63514, Stop: 63254, Start Num: 11

Candidate Starts for Orion\_85:

(6, 63751), (10, 63544), (Start: 11 @63514 has 212 MA's), (Start: 12 @63487 has 25 MA's), (13, 63430), (14, 63409), (15, 63370), (16, 63352), (17, 63331),

Gene: Orwigg\_86 Start: 63350, Stop: 63090, Start Num: 11

Candidate Starts for Orwigg\_86:

(4, 63629), (6, 63587), (7, 63560), (10, 63380), (Start: 11 @63350 has 212 MA's), (Start: 12 @63323 has 25 MA's), (13, 63266), (14, 63245), (15, 63206), (16, 63188), (17, 63167),

Gene: PG1\_85 Start: 64086, Stop: 63826, Start Num: 11

Candidate Starts for PG1\_85:

(6, 64323), (10, 64116), (Start: 11 @64086 has 212 MA's), (Start: 12 @64059 has 25 MA's), (13, 64002), (14, 63981), (15, 63942), (16, 63924), (17, 63903),

Gene: Pacifista\_86 Start: 63435, Stop: 63175, Start Num: 11

Candidate Starts for Pacifista\_86:

(6, 63672), (10, 63465), (Start: 11 @63435 has 212 MA's), (Start: 12 @63408 has 25 MA's), (13, 63351), (14, 63330), (15, 63291), (16, 63273), (17, 63252),

Gene: Phareon\_85 Start: 63127, Stop: 62867, Start Num: 11

Candidate Starts for Phareon\_85:

(4, 63406), (6, 63364), (7, 63337), (10, 63157), (Start: 11 @63127 has 212 MA's), (Start: 12 @63100 has 25 MA's), (13, 63043), (14, 63022), (15, 62983), (16, 62965), (17, 62944),

Gene: PhatCats2014\_86 Start: 64086, Stop: 63826, Start Num: 11

Candidate Starts for PhatCats2014\_86:

(4, 64365), (6, 64323), (10, 64116), (Start: 11 @64086 has 212 MA's), (Start: 12 @64059 has 25 MA's), (13, 64002), (14, 63981), (15, 63942), (16, 63924), (17, 63903),

Gene: PhatLouie\_89 Start: 63960, Stop: 63700, Start Num: 11

Candidate Starts for PhatLouie\_89:

(4, 64239), (6, 64197), (10, 63990), (Start: 11 @63960 has 212 MA's), (Start: 12 @63933 has 25 MA's), (13, 63876), (14, 63855), (15, 63816), (16, 63798), (17, 63777),

Gene: PhenghisKhan\_87 Start: 63591, Stop: 63331, Start Num: 11

Candidate Starts for PhenghisKhan\_87:

(4, 63870), (6, 63828), (7, 63801), (10, 63621), (Start: 11 @63591 has 212 MA's), (Start: 12 @63564 has 25 MA's), (13, 63507), (14, 63486), (15, 63447), (16, 63429), (17, 63408),

Gene: Pherdinand\_88 Start: 63806, Stop: 63546, Start Num: 11

Candidate Starts for Pherdinand\_88:

(6, 64043), (10, 63836), (Start: 11 @63806 has 212 MA's), (Start: 12 @63779 has 25 MA's), (13, 63722), (14, 63701), (16, 63644), (17, 63623),

Gene: Phergie\_87 Start: 63580, Stop: 63320, Start Num: 11

Candidate Starts for Phergie\_87:

(4, 63859), (6, 63817), (7, 63790), (10, 63610), (Start: 11 @63580 has 212 MA's), (Start: 12 @63553 has 25 MA's), (13, 63496), (14, 63475), (15, 63436), (16, 63418), (17, 63397),

Gene: Phipps\_85 Start: 63658, Stop: 63398, Start Num: 11

Candidate Starts for Phipps\_85:

(4, 63937), (6, 63895), (7, 63868), (10, 63688), (Start: 11 @63658 has 212 MA's), (Start: 12 @63631 has 25 MA's), (13, 63574), (14, 63553), (15, 63514), (16, 63496), (17, 63475),

Gene: Phleuron\_84 Start: 63392, Stop: 63132, Start Num: 11

Candidate Starts for Phleuron\_84:

(6, 63629), (10, 63422), (Start: 11 @63392 has 212 MA's), (Start: 12 @63365 has 25 MA's), (13, 63308), (14, 63287), (15, 63248), (16, 63230), (17, 63209),

Gene: PhrankReynolds\_85 Start: 63585, Stop: 63325, Start Num: 11  
Candidate Starts for PhrankReynolds\_85:  
(4, 63864), (6, 63822), (7, 63795), (10, 63615), (Start: 11 @63585 has 212 MA's), (Start: 12 @63558 has 25 MA's), (13, 63501), (14, 63480), (15, 63441), (16, 63423), (17, 63402),

Gene: PhrodoBaggins\_89 Start: 63961, Stop: 63701, Start Num: 11  
Candidate Starts for PhrodoBaggins\_89:  
(6, 64198), (10, 63991), (Start: 11 @63961 has 212 MA's), (Start: 12 @63934 has 25 MA's), (13, 63877), (14, 63856), (15, 63817), (16, 63799), (17, 63778),

Gene: PinheadLarry\_86 Start: 63731, Stop: 63471, Start Num: 11  
Candidate Starts for PinheadLarry\_86:  
(6, 63968), (10, 63761), (Start: 11 @63731 has 212 MA's), (Start: 12 @63704 has 25 MA's), (13, 63647), (14, 63626), (15, 63587), (16, 63569), (17, 63548),

Gene: Pinkman\_86 Start: 63777, Stop: 63544, Start Num: 12  
Candidate Starts for Pinkman\_86:  
(4, 64083), (6, 64041), (7, 64014), (10, 63834), (Start: 11 @63804 has 212 MA's), (Start: 12 @63777 has 25 MA's), (13, 63720), (14, 63699), (15, 63660), (16, 63642), (17, 63621),

Gene: Pipsqueak\_84 Start: 63417, Stop: 63157, Start Num: 11  
Candidate Starts for Pipsqueak\_84:  
(4, 63696), (6, 63654), (7, 63627), (10, 63447), (Start: 11 @63417 has 212 MA's), (Start: 12 @63390 has 25 MA's), (13, 63333), (14, 63312), (15, 63273), (16, 63255), (17, 63234),

Gene: Placalicious\_85 Start: 64450, Stop: 64190, Start Num: 11  
Candidate Starts for Placalicious\_85:  
(4, 64729), (6, 64687), (7, 64660), (10, 64480), (Start: 11 @64450 has 212 MA's), (Start: 12 @64423 has 25 MA's), (13, 64366), (14, 64345), (15, 64306), (16, 64288), (17, 64267),

Gene: Plata\_85 Start: 63645, Stop: 63412, Start Num: 12  
Candidate Starts for Plata\_85:  
(4, 63951), (6, 63909), (7, 63882), (10, 63702), (Start: 11 @63672 has 212 MA's), (Start: 12 @63645 has 25 MA's), (13, 63588), (14, 63567), (15, 63528), (16, 63510), (17, 63489),

Gene: Pops\_84 Start: 63568, Stop: 63335, Start Num: 12  
Candidate Starts for Pops\_84:  
(6, 63832), (10, 63625), (Start: 11 @63595 has 212 MA's), (Start: 12 @63568 has 25 MA's), (13, 63511), (14, 63490), (15, 63451), (16, 63433), (17, 63412),

Gene: Potter\_82 Start: 63414, Stop: 63154, Start Num: 11  
Candidate Starts for Potter\_82:  
(4, 63693), (6, 63651), (7, 63624), (10, 63444), (Start: 11 @63414 has 212 MA's), (Start: 12 @63387 has 25 MA's), (13, 63330), (14, 63309), (15, 63270), (16, 63252), (17, 63231),

Gene: Prickles\_88 Start: 63783, Stop: 63523, Start Num: 11  
Candidate Starts for Prickles\_88:  
(4, 64062), (6, 64020), (10, 63813), (Start: 11 @63783 has 212 MA's), (Start: 12 @63756 has 25 MA's), (13, 63699), (14, 63678), (15, 63639), (16, 63621), (17, 63600),

Gene: ProfessorX\_85 Start: 63451, Stop: 63191, Start Num: 11  
Candidate Starts for ProfessorX\_85:

(4, 63730), (6, 63688), (10, 63481), (Start: 11 @63451 has 212 MA's), (Start: 12 @63424 has 25 MA's), (13, 63367), (14, 63346), (15, 63307), (16, 63289), (17, 63268),

Gene: Puhltonio\_83 Start: 63688, Stop: 63428, Start Num: 11

Candidate Starts for Puhltonio\_83:

(4, 63967), (6, 63925), (7, 63898), (10, 63718), (Start: 11 @63688 has 212 MA's), (Start: 12 @63661 has 25 MA's), (13, 63604), (14, 63583), (15, 63544), (16, 63526), (17, 63505),

Gene: QueenBeane\_87 Start: 63737, Stop: 63477, Start Num: 11

Candidate Starts for QueenBeane\_87:

(6, 63974), (10, 63767), (Start: 11 @63737 has 212 MA's), (Start: 12 @63710 has 25 MA's), (13, 63653), (14, 63632), (15, 63593), (16, 63575), (17, 63554),

Gene: Quisquilliae\_89 Start: 63748, Stop: 63488, Start Num: 11

Candidate Starts for Quisquilliae\_89:

(4, 64027), (6, 63985), (7, 63958), (10, 63778), (Start: 11 @63748 has 212 MA's), (Start: 12 @63721 has 25 MA's), (13, 63664), (14, 63643), (15, 63604), (16, 63586), (17, 63565),

Gene: RedMaple\_86 Start: 64351, Stop: 64091, Start Num: 11

Candidate Starts for RedMaple\_86:

(4, 64630), (6, 64588), (7, 64561), (10, 64381), (Start: 11 @64351 has 212 MA's), (Start: 12 @64324 has 25 MA's), (13, 64267), (14, 64246), (15, 64207), (16, 64189), (17, 64168),

Gene: Ricotta\_87 Start: 63433, Stop: 63173, Start Num: 11

Candidate Starts for Ricotta\_87:

(6, 63670), (10, 63463), (Start: 11 @63433 has 212 MA's), (Start: 12 @63406 has 25 MA's), (13, 63349), (14, 63328), (15, 63289), (16, 63271), (17, 63250),

Gene: Riggan\_88 Start: 63918, Stop: 63658, Start Num: 11

Candidate Starts for Riggan\_88:

(4, 64197), (6, 64155), (10, 63948), (Start: 11 @63918 has 212 MA's), (Start: 12 @63891 has 25 MA's), (13, 63834), (14, 63813), (15, 63774), (16, 63756), (17, 63735),

Gene: Riverton\_86 Start: 63650, Stop: 63417, Start Num: 12

Candidate Starts for Riverton\_86:

(4, 63956), (6, 63914), (7, 63887), (10, 63707), (Start: 11 @63677 has 212 MA's), (Start: 12 @63650 has 25 MA's), (13, 63593), (14, 63572), (15, 63533), (16, 63515), (17, 63494),

Gene: Robyn\_89 Start: 64176, Stop: 63916, Start Num: 11

Candidate Starts for Robyn\_89:

(4, 64455), (6, 64413), (7, 64386), (10, 64206), (Start: 11 @64176 has 212 MA's), (Start: 12 @64149 has 25 MA's), (13, 64092), (14, 64071), (16, 64014), (17, 63993),

Gene: Roliet\_84 Start: 62778, Stop: 62518, Start Num: 11

Candidate Starts for Roliet\_84:

(4, 63057), (6, 63015), (7, 62988), (10, 62808), (Start: 11 @62778 has 212 MA's), (Start: 12 @62751 has 25 MA's), (13, 62694), (14, 62673), (15, 62634), (16, 62616), (17, 62595),

Gene: Roy17\_84 Start: 63143, Stop: 62883, Start Num: 11

Candidate Starts for Roy17\_84:

(4, 63422), (6, 63380), (7, 63353), (10, 63173), (Start: 11 @63143 has 212 MA's), (Start: 12 @63116 has 25 MA's), (13, 63059), (14, 63038), (15, 62999), (16, 62981), (17, 62960),



Gene: SDcharge11\_86 Start: 63071, Stop: 62811, Start Num: 11  
Candidate Starts for SDcharge11\_86:  
(4, 63350), (6, 63308), (10, 63101), (Start: 11 @63071 has 212 MA's), (Start: 12 @63044 has 25 MA's),  
(13, 62987), (14, 62966), (15, 62927), (16, 62909), (17, 62888),

Gene: Samaymay\_87 Start: 63737, Stop: 63477, Start Num: 11  
Candidate Starts for Samaymay\_87:  
(6, 63974), (10, 63767), (Start: 11 @63737 has 212 MA's), (Start: 12 @63710 has 25 MA's), (13,  
63653), (14, 63632), (15, 63593), (16, 63575), (17, 63554),

Gene: SassyCat97\_85 Start: 63405, Stop: 63145, Start Num: 11  
Candidate Starts for SassyCat97\_85:  
(4, 63684), (6, 63642), (7, 63615), (10, 63435), (Start: 11 @63405 has 212 MA's), (Start: 12 @63378  
has 25 MA's), (13, 63321), (14, 63300), (15, 63261), (16, 63243), (17, 63222),

Gene: Schadenfreude\_87 Start: 63296, Stop: 63036, Start Num: 11  
Candidate Starts for Schadenfreude\_87:  
(2, 63632), (6, 63530), (10, 63326), (Start: 11 @63296 has 212 MA's), (Start: 12 @63269 has 25 MA's),  
(13, 63212), (14, 63191), (15, 63152), (16, 63134), (17, 63113),

Gene: Schueller\_85 Start: 63679, Stop: 63419, Start Num: 11  
Candidate Starts for Schueller\_85:  
(6, 63916), (10, 63709), (Start: 11 @63679 has 212 MA's), (Start: 12 @63652 has 25 MA's), (13,  
63595), (14, 63574), (15, 63535), (16, 63517), (17, 63496),

Gene: Scoot17C\_87 Start: 63518, Stop: 63258, Start Num: 11  
Candidate Starts for Scoot17C\_87:  
(6, 63755), (10, 63548), (Start: 11 @63518 has 212 MA's), (Start: 12 @63491 has 25 MA's), (13,  
63434), (14, 63413), (15, 63374), (16, 63356), (17, 63335),

Gene: Scrick\_86 Start: 63419, Stop: 63159, Start Num: 11  
Candidate Starts for Scrick\_86:  
(6, 63656), (10, 63449), (Start: 11 @63419 has 212 MA's), (Start: 12 @63392 has 25 MA's), (13,  
63335), (14, 63314), (15, 63275), (16, 63257), (17, 63236),

Gene: Selr12\_88 Start: 63460, Stop: 63200, Start Num: 11  
Candidate Starts for Selr12\_88:  
(4, 63739), (6, 63697), (7, 63670), (10, 63490), (Start: 11 @63460 has 212 MA's), (Start: 12 @63433  
has 25 MA's), (13, 63376), (14, 63355), (15, 63316), (16, 63298), (17, 63277),

Gene: Serendipity\_86 Start: 63891, Stop: 63631, Start Num: 11  
Candidate Starts for Serendipity\_86:  
(4, 64170), (6, 64128), (7, 64101), (10, 63921), (Start: 11 @63891 has 212 MA's), (Start: 12 @63864  
has 25 MA's), (13, 63807), (14, 63786), (15, 63747), (16, 63729), (17, 63708),

Gene: Serpentine\_0088 Start: 63972, Stop: 63712, Start Num: 11  
Candidate Starts for Serpentine\_0088:  
(4, 64251), (6, 64209), (7, 64182), (10, 64002), (Start: 11 @63972 has 212 MA's), (Start: 12 @63945  
has 25 MA's), (13, 63888), (14, 63867), (15, 63828), (16, 63810), (17, 63789),

Gene: ShiVal\_85 Start: 63442, Stop: 63182, Start Num: 11  
Candidate Starts for ShiVal\_85:

(6, 63679), (10, 63472), (Start: 11 @63442 has 212 MA's), (Start: 12 @63415 has 25 MA's), (13, 63358), (14, 63337), (15, 63298), (16, 63280), (17, 63259),

Gene: Sigman\_86 Start: 63372, Stop: 63139, Start Num: 12

Candidate Starts for Sigman\_86:

(6, 63636), (10, 63429), (Start: 11 @63399 has 212 MA's), (Start: 12 @63372 has 25 MA's), (13, 63315), (14, 63294), (15, 63255), (16, 63237), (17, 63216),

Gene: SilverBell\_88 Start: 63852, Stop: 63592, Start Num: 11

Candidate Starts for SilverBell\_88:

(4, 64131), (6, 64089), (7, 64062), (10, 63882), (Start: 11 @63852 has 212 MA's), (Start: 12 @63825 has 25 MA's), (13, 63768), (14, 63747), (15, 63708), (16, 63690), (17, 63669),

Gene: Simielle\_86 Start: 63384, Stop: 63124, Start Num: 11

Candidate Starts for Simielle\_86:

(4, 63663), (6, 63621), (7, 63594), (10, 63414), (Start: 11 @63384 has 212 MA's), (Start: 12 @63357 has 25 MA's), (13, 63300), (14, 63279), (15, 63240), (16, 63222), (17, 63201),

Gene: SirBeauregard\_88 Start: 63965, Stop: 63705, Start Num: 11

Candidate Starts for SirBeauregard\_88:

(4, 64244), (6, 64202), (7, 64175), (10, 63995), (Start: 11 @63965 has 212 MA's), (Start: 12 @63938 has 25 MA's), (13, 63881), (14, 63860), (15, 63821), (16, 63803), (17, 63782),

Gene: Skippy\_87 Start: 63813, Stop: 63553, Start Num: 11

Candidate Starts for Skippy\_87:

(4, 64092), (6, 64050), (7, 64023), (10, 63843), (Start: 11 @63813 has 212 MA's), (Start: 12 @63786 has 25 MA's), (13, 63729), (14, 63708), (15, 63669), (16, 63651), (17, 63630),

Gene: Slatt\_87 Start: 63700, Stop: 63440, Start Num: 11

Candidate Starts for Slatt\_87:

(6, 63937), (10, 63730), (Start: 11 @63700 has 212 MA's), (Start: 12 @63673 has 25 MA's), (13, 63616), (14, 63595), (15, 63556), (16, 63538), (17, 63517),

Gene: Soile\_88 Start: 63938, Stop: 63678, Start Num: 11

Candidate Starts for Soile\_88:

(6, 64175), (10, 63968), (Start: 11 @63938 has 212 MA's), (Start: 12 @63911 has 25 MA's), (13, 63854), (14, 63833), (15, 63794), (16, 63776), (17, 63755),

Gene: Solosis\_85 Start: 63406, Stop: 63146, Start Num: 11

Candidate Starts for Solosis\_85:

(6, 63643), (7, 63616), (10, 63436), (Start: 11 @63406 has 212 MA's), (Start: 12 @63379 has 25 MA's), (13, 63322), (14, 63301), (15, 63262), (16, 63244), (17, 63223),

Gene: Sophia\_85 Start: 63394, Stop: 63134, Start Num: 11

Candidate Starts for Sophia\_85:

(6, 63631), (10, 63424), (Start: 11 @63394 has 212 MA's), (Start: 12 @63367 has 25 MA's), (13, 63310), (14, 63289), (15, 63250), (16, 63232), (17, 63211),

Gene: Soto\_84 Start: 63111, Stop: 62851, Start Num: 11

Candidate Starts for Soto\_84:

(4, 63390), (6, 63348), (10, 63141), (Start: 11 @63111 has 212 MA's), (Start: 12 @63084 has 25 MA's), (13, 63027), (14, 63006), (15, 62967), (16, 62949), (17, 62928),

Gene: Spartan300\_86 Start: 63656, Stop: 63396, Start Num: 11

Candidate Starts for Spartan300\_86:

(4, 63935), (6, 63893), (7, 63866), (10, 63686), (Start: 11 @63656 has 212 MA's), (Start: 12 @63629 has 25 MA's), (13, 63572), (14, 63551), (15, 63512), (16, 63494), (17, 63473),

Gene: Squid\_86 Start: 63685, Stop: 63425, Start Num: 11

Candidate Starts for Squid\_86:

(4, 63964), (6, 63922), (7, 63895), (10, 63715), (Start: 11 @63685 has 212 MA's), (Start: 12 @63658 has 25 MA's), (13, 63601), (14, 63580), (15, 63541), (16, 63523), (17, 63502),

Gene: Squiggle\_86 Start: 63413, Stop: 63153, Start Num: 11

Candidate Starts for Squiggle\_86:

(6, 63650), (10, 63443), (Start: 11 @63413 has 212 MA's), (Start: 12 @63386 has 25 MA's), (13, 63329), (14, 63308), (15, 63269), (16, 63251), (17, 63230),

Gene: StAugustine\_80 Start: 63685, Stop: 63476, Start Num: 12

Candidate Starts for StAugustine\_80:

(8, 63847), (9, 63775), (Start: 12 @63685 has 25 MA's), (13, 63625), (15, 63568),

Gene: Struggle\_87 Start: 63511, Stop: 63251, Start Num: 11

Candidate Starts for Struggle\_87:

(4, 63790), (6, 63748), (10, 63541), (Start: 11 @63511 has 212 MA's), (Start: 12 @63484 has 25 MA's), (13, 63427), (14, 63406), (15, 63367), (16, 63349), (17, 63328),

Gene: Suffolk\_83 Start: 63407, Stop: 63147, Start Num: 11

Candidate Starts for Suffolk\_83:

(4, 63686), (6, 63644), (7, 63617), (10, 63437), (Start: 11 @63407 has 212 MA's), (Start: 12 @63380 has 25 MA's), (13, 63323), (14, 63302), (15, 63263), (16, 63245), (17, 63224),

Gene: Surely\_87 Start: 63976, Stop: 63716, Start Num: 11

Candidate Starts for Surely\_87:

(6, 64213), (10, 64006), (Start: 11 @63976 has 212 MA's), (Start: 12 @63949 has 25 MA's), (13, 63892), (14, 63871), (15, 63832), (16, 63814), (17, 63793),

Gene: Swiphy\_91 Start: 63960, Stop: 63700, Start Num: 11

Candidate Starts for Swiphy\_91:

(4, 64239), (6, 64197), (10, 63990), (Start: 11 @63960 has 212 MA's), (Start: 12 @63933 has 25 MA's), (13, 63876), (14, 63855), (15, 63816), (16, 63798), (17, 63777),

Gene: Swish\_88 Start: 63822, Stop: 63562, Start Num: 11

Candidate Starts for Swish\_88:

(6, 64059), (10, 63852), (Start: 11 @63822 has 212 MA's), (Start: 12 @63795 has 25 MA's), (13, 63738), (14, 63717), (15, 63678), (16, 63660), (17, 63639),

Gene: TallGrassMM\_86 Start: 63471, Stop: 63211, Start Num: 11

Candidate Starts for TallGrassMM\_86:

(6, 63708), (7, 63681), (10, 63501), (Start: 11 @63471 has 212 MA's), (Start: 12 @63444 has 25 MA's), (13, 63387), (14, 63366), (15, 63327), (16, 63309), (17, 63288),

Gene: Telesworld\_85 Start: 63548, Stop: 63288, Start Num: 11

Candidate Starts for Telesworld\_85:

(6, 63785), (10, 63578), (Start: 11 @63548 has 212 MA's), (Start: 12 @63521 has 25 MA's), (13, 63464), (14, 63443), (15, 63404), (16, 63386), (17, 63365),

Gene: Thora\_85 Start: 63925, Stop: 63665, Start Num: 11

Candidate Starts for Thora\_85:

(6, 64162), (10, 63955), (Start: 11 @63925 has 212 MA's), (Start: 12 @63898 has 25 MA's), (13, 63841), (14, 63820), (15, 63781), (16, 63763), (17, 63742),

Gene: ThreeOh3D2\_88 Start: 64079, Stop: 63819, Start Num: 11

Candidate Starts for ThreeOh3D2\_88:

(6, 64316), (10, 64109), (Start: 11 @64079 has 212 MA's), (Start: 12 @64052 has 25 MA's), (13, 63995), (14, 63974), (15, 63935), (16, 63917), (17, 63896),

Gene: Thunderbird\_87 Start: 63668, Stop: 63408, Start Num: 11

Candidate Starts for Thunderbird\_87:

(6, 63905), (7, 63878), (10, 63698), (Start: 11 @63668 has 212 MA's), (Start: 12 @63641 has 25 MA's), (13, 63584), (14, 63563), (15, 63524), (16, 63506), (17, 63485),

Gene: TomBombadil\_87 Start: 63969, Stop: 63709, Start Num: 11

Candidate Starts for TomBombadil\_87:

(4, 64248), (6, 64206), (10, 63999), (Start: 11 @63969 has 212 MA's), (Start: 12 @63942 has 25 MA's), (13, 63885), (14, 63864), (15, 63825), (16, 63807), (17, 63786),

Gene: Toni\_86 Start: 63871, Stop: 63611, Start Num: 11

Candidate Starts for Toni\_86:

(4, 64150), (6, 64108), (7, 64081), (10, 63901), (Start: 11 @63871 has 212 MA's), (Start: 12 @63844 has 25 MA's), (13, 63787), (14, 63766), (15, 63727), (16, 63709), (17, 63688),

Gene: TooFast2Furius\_88 Start: 63833, Stop: 63573, Start Num: 11

Candidate Starts for TooFast2Furius\_88:

(4, 64112), (6, 64070), (7, 64043), (10, 63863), (Start: 11 @63833 has 212 MA's), (Start: 12 @63806 has 25 MA's), (13, 63749), (14, 63728), (15, 63689), (16, 63671), (17, 63650),

Gene: Tooj\_84 Start: 63085, Stop: 62825, Start Num: 11

Candidate Starts for Tooj\_84:

(4, 63364), (6, 63322), (10, 63115), (Start: 11 @63085 has 212 MA's), (Start: 12 @63058 has 25 MA's), (13, 63001), (14, 62980), (15, 62941), (16, 62923), (17, 62902),

Gene: True\_85 Start: 63418, Stop: 63158, Start Num: 11

Candidate Starts for True\_85:

(6, 63655), (10, 63448), (Start: 11 @63418 has 212 MA's), (Start: 12 @63391 has 25 MA's), (13, 63334), (14, 63313), (15, 63274), (16, 63256), (17, 63235),

Gene: Trypo\_87 Start: 64113, Stop: 63880, Start Num: 12

Candidate Starts for Trypo\_87:

(4, 64419), (6, 64377), (7, 64350), (10, 64170), (Start: 11 @64140 has 212 MA's), (Start: 12 @64113 has 25 MA's), (13, 64056), (14, 64035), (15, 63996), (16, 63978), (17, 63957),

Gene: TyrionL\_87 Start: 63502, Stop: 63242, Start Num: 11

Candidate Starts for TyrionL\_87:

(6, 63739), (10, 63532), (Start: 11 @63502 has 212 MA's), (Start: 12 @63475 has 25 MA's), (13, 63418), (14, 63397), (15, 63358), (16, 63340), (17, 63319),

Gene: UAch1\_88 Start: 63769, Stop: 63509, Start Num: 11

Candidate Starts for UAch1\_88:

(4, 64048), (6, 64006), (10, 63799), (Start: 11 @63769 has 212 MA's), (Start: 12 @63742 has 25 MA's), (13, 63685), (14, 63664), (15, 63625), (16, 63607), (17, 63586),

Gene: UncleHowie\_83 Start: 63106, Stop: 62846, Start Num: 11

Candidate Starts for UncleHowie\_83:

(4, 63385), (6, 63343), (7, 63316), (10, 63136), (Start: 11 @63106 has 212 MA's), (Start: 12 @63079 has 25 MA's), (13, 63022), (14, 63001), (15, 62962), (16, 62944), (17, 62923),

Gene: Vaishali24\_88 Start: 63848, Stop: 63615, Start Num: 12

Candidate Starts for Vaishali24\_88:

(1, 64229), (2, 64211), (6, 64109), (10, 63905), (Start: 11 @63875 has 212 MA's), (Start: 12 @63848 has 25 MA's), (13, 63791), (14, 63770), (16, 63713), (17, 63692),

Gene: Vaticameos\_84 Start: 61975, Stop: 61715, Start Num: 11

Candidate Starts for Vaticameos\_84:

(4, 62254), (6, 62212), (10, 62005), (Start: 11 @61975 has 212 MA's), (Start: 12 @61948 has 25 MA's), (13, 61891), (14, 61870), (15, 61831), (16, 61813), (17, 61792),

Gene: Veritas\_86 Start: 63556, Stop: 63323, Start Num: 12

Candidate Starts for Veritas\_86:

(6, 63820), (10, 63613), (Start: 11 @63583 has 212 MA's), (Start: 12 @63556 has 25 MA's), (13, 63499), (14, 63478), (15, 63439), (16, 63421), (17, 63400),

Gene: Virapocalypse\_88 Start: 63768, Stop: 63508, Start Num: 11

Candidate Starts for Virapocalypse\_88:

(6, 64005), (10, 63798), (Start: 11 @63768 has 212 MA's), (Start: 12 @63741 has 25 MA's), (13, 63684), (14, 63663), (15, 63624), (16, 63606), (17, 63585),

Gene: Virgeve\_85 Start: 63387, Stop: 63127, Start Num: 11

Candidate Starts for Virgeve\_85:

(4, 63666), (6, 63624), (7, 63597), (10, 63417), (Start: 11 @63387 has 212 MA's), (Start: 12 @63360 has 25 MA's), (13, 63303), (14, 63282), (15, 63243), (16, 63225), (17, 63204),

Gene: Vista\_86 Start: 63581, Stop: 63321, Start Num: 11

Candidate Starts for Vista\_86:

(6, 63818), (10, 63611), (Start: 11 @63581 has 212 MA's), (Start: 12 @63554 has 25 MA's), (13, 63497), (14, 63476), (15, 63437), (16, 63419), (17, 63398),

Gene: Vivaldi\_87 Start: 63847, Stop: 63587, Start Num: 11

Candidate Starts for Vivaldi\_87:

(4, 64126), (6, 64084), (10, 63877), (Start: 11 @63847 has 212 MA's), (Start: 12 @63820 has 25 MA's), (13, 63763), (14, 63742), (15, 63703), (16, 63685), (17, 63664),

Gene: Vortex\_85 Start: 63688, Stop: 63428, Start Num: 11

Candidate Starts for Vortex\_85:

(4, 63967), (6, 63925), (7, 63898), (10, 63718), (Start: 11 @63688 has 212 MA's), (Start: 12 @63661 has 25 MA's), (13, 63604), (14, 63583), (15, 63544), (16, 63526), (17, 63505),

Gene: Wallhey\_88 Start: 63689, Stop: 63429, Start Num: 11

Candidate Starts for Wallhey\_88:

(6, 63926), (10, 63719), (Start: 11 @63689 has 212 MA's), (Start: 12 @63662 has 25 MA's), (13, 63605), (14, 63584), (15, 63545), (16, 63527), (17, 63506),

Gene: Waterdiva\_88 Start: 63928, Stop: 63695, Start Num: 12

Candidate Starts for Waterdiva\_88:

(4, 64234), (6, 64192), (7, 64165), (10, 63985), (Start: 11 @63955 has 212 MA's), (Start: 12 @63928 has 25 MA's), (13, 63871), (14, 63850), (15, 63811), (16, 63793), (17, 63772),

Gene: Weher20\_84 Start: 64026, Stop: 63766, Start Num: 11

Candidate Starts for Weher20\_84:

(4, 64305), (6, 64263), (7, 64236), (10, 64056), (Start: 11 @64026 has 212 MA's), (Start: 12 @63999 has 25 MA's), (13, 63942), (14, 63921), (15, 63882), (16, 63864), (17, 63843),

Gene: Windsor\_87 Start: 63971, Stop: 63711, Start Num: 11

Candidate Starts for Windsor\_87:

(6, 64208), (10, 64001), (Start: 11 @63971 has 212 MA's), (Start: 12 @63944 has 25 MA's), (13, 63887), (14, 63866), (15, 63827), (16, 63809), (17, 63788),

Gene: Xavier\_86 Start: 63580, Stop: 63320, Start Num: 11

Candidate Starts for Xavier\_86:

(4, 63859), (6, 63817), (10, 63610), (Start: 11 @63580 has 212 MA's), (Start: 12 @63553 has 25 MA's), (13, 63496), (14, 63475), (15, 63436), (16, 63418), (17, 63397),

Gene: Yoshand\_88 Start: 63805, Stop: 63545, Start Num: 11

Candidate Starts for Yoshand\_88:

(6, 64042), (10, 63835), (Start: 11 @63805 has 212 MA's), (Start: 12 @63778 has 25 MA's), (13, 63721), (14, 63700), (16, 63643), (17, 63622),

Gene: YouGoGlencoco\_87 Start: 63695, Stop: 63435, Start Num: 11

Candidate Starts for YouGoGlencoco\_87:

(4, 63974), (6, 63932), (7, 63905), (10, 63725), (Start: 11 @63695 has 212 MA's), (Start: 12 @63668 has 25 MA's), (13, 63611), (14, 63590), (15, 63551), (16, 63533), (17, 63512),

Gene: Zaider\_88 Start: 64070, Stop: 63810, Start Num: 11

Candidate Starts for Zaider\_88:

(6, 64307), (10, 64100), (Start: 11 @64070 has 212 MA's), (Start: 12 @64043 has 25 MA's), (13, 63986), (14, 63965), (15, 63926), (16, 63908), (17, 63887),

Gene: Zelda\_87 Start: 63999, Stop: 63766, Start Num: 12

Candidate Starts for Zelda\_87:

(4, 64305), (6, 64263), (7, 64236), (10, 64056), (Start: 11 @64026 has 212 MA's), (Start: 12 @63999 has 25 MA's), (13, 63942), (14, 63921), (15, 63882), (16, 63864), (17, 63843),

Gene: Zonia\_87 Start: 64137, Stop: 63877, Start Num: 11

Candidate Starts for Zonia\_87:

(4, 64416), (6, 64374), (7, 64347), (10, 64167), (Start: 11 @64137 has 212 MA's), (Start: 12 @64110 has 25 MA's), (13, 64053), (14, 64032), (15, 63993), (16, 63975), (17, 63954),