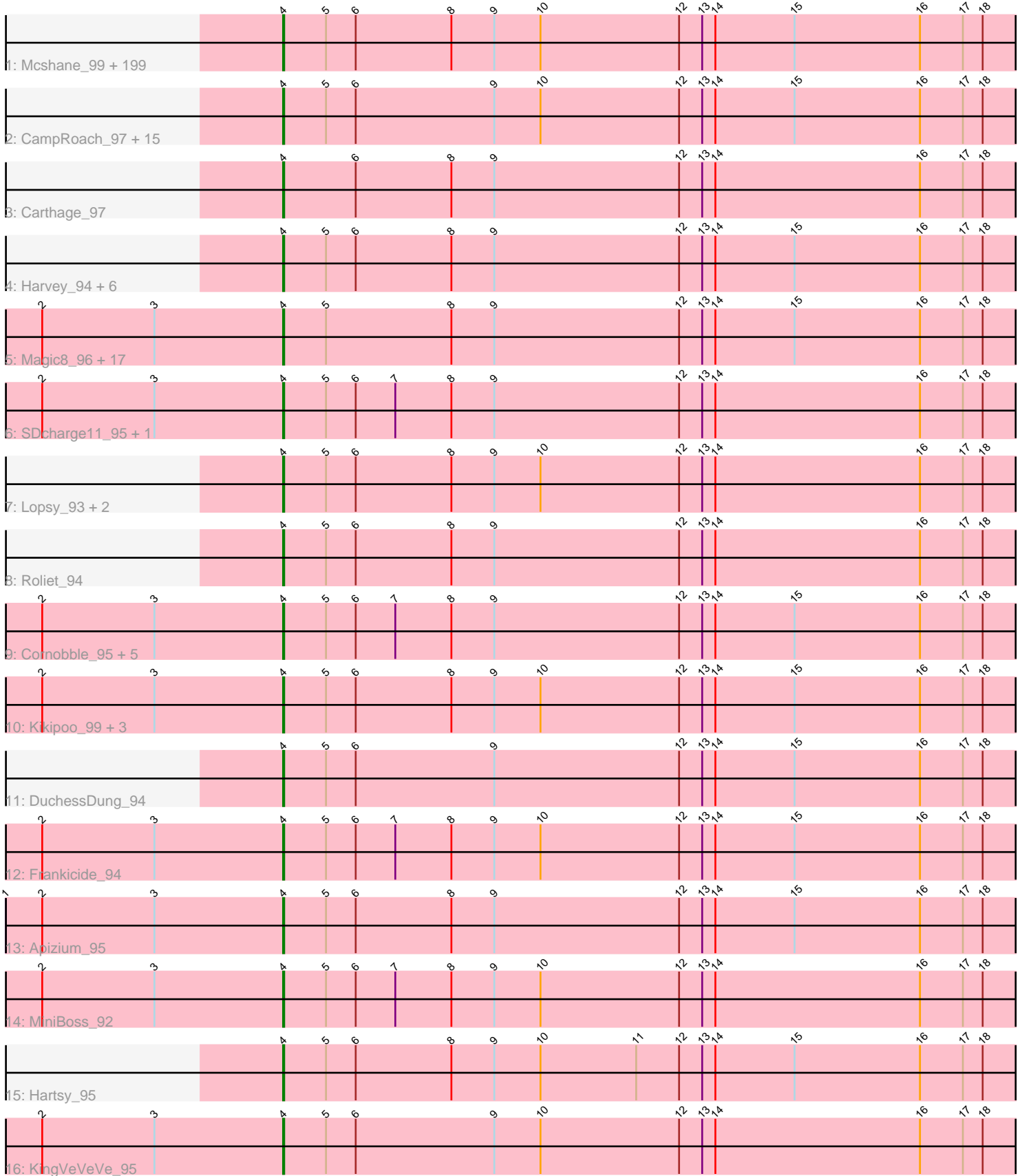


# Pham 193697



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 193697 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193697 has 264 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Mcshane\_99, Placalicious\_94, Craff\_98, UAch1\_97, DelRivs\_96, Puhltonio\_92, Gareth\_97, SilverBell\_98, Struggle\_97, True\_98, Olive\_93, Riggan\_98, Thunderbird\_97, Phunky\_94, BlackStallion\_96, Fringe\_101, Keitherie\_100, Phipps\_94, Eugenia\_99, Mesh1\_97, Weher20\_94, Olak\_99, Mecca\_97, Oline\_96, Phergie\_97, Selr12\_101, Ricotta\_98, JacAttac\_97, Lego3393\_95, Inverness\_94, Anderson\_98, Simielle\_97, Andre\_101, Orfeu\_97, Lumine\_98, Bishoperium\_97, Longacauda\_97, ProfessorX\_94, Numberten\_97, Oosterbaan\_97, Kimbrough\_98, TallGrassMM\_96, Inchworm\_98, Yoshand\_98, Chah\_99, Newman\_92, Podrick\_95, Badfish\_97, Cannibal\_97, Beaglebox\_93, Slatt\_99, Etaye\_96, Kwadwo\_96, FugateOSU\_97, Hertubise\_96, Toni\_96, Manad\_96, OliverWalter\_96, GeneCoco\_96, Doddsville\_94, TomBombadil\_97, Dione\_95, Nicole21\_98, Haimas\_94, FluffyNinja\_98, Phareon\_94, Waterdiva\_98, DirtJuice\_98, Daffy\_96, HenryJackson\_97, DonSanchon\_92, Childish\_97, KLucky39\_94, UncleHowie\_93, Sheila\_91, Swiphy\_101, Cosmolli16\_98, Legolas\_98, Matalotodo\_95, Haleema\_96, KingTut\_87, Charles1\_100, Tomlarah\_97, JDog\_96, LemonSlice\_97, Nyala\_97, EmpTee\_96, Jillium\_97, Melc17\_94, Burr\_99, Giraffe\_98, Piglet\_0096, Cher\_97, Spartan300\_96, Altwerkus\_94, Hocus\_96, Samaymay\_97, Squid\_96, LuckyMarjie\_94, Buckeye\_95, Timmi\_95, CamL\_97, MRabcd\_97, Adriana\_97, Scoot17C\_97, MitKao\_97, Freya\_93, Thora\_95, Plmatters\_94, Jiminy\_97, Virapocalypse\_98, Chute\_97, HighStump\_99, Held\_95, Pherdinand\_98, Banjo\_93, Zaider\_98, Mulan\_96, Coletti\_99, Potter\_91, Hamish\_94, Grand2040\_94, Bluephacebaby\_96, Usavi\_97, FriarPreacher\_94, Morgushi\_94, DaddyDaniels\_100, QueenBeane\_97, Suffolk\_92, Squiggle\_96, Dice\_97, Soile\_98, ABU\_95, Orion\_95, Zelda\_97, LostAndPhound\_96, CheetO\_93, KlimbOn\_96, Serpentine\_0099, JakeO\_98, Prickles\_97, LasagnaCat\_98, Cobra\_97, Sigman\_96, Crownjwl\_94, Scrick\_98, Sophia\_95, Vaticameos\_94, Skippy\_97, DoesntMatter\_94, Iridoclysis\_96, Trypo\_97, Colbert\_95, Xavier\_96, Lulwa\_94, PhenghisKhan\_97, Nacho\_0099, Emiris\_99, Katniss\_99, Telesworld\_95, LeiMonet\_99, PhatLouie\_99, PhatCats2014\_96, Brilliant\_100, Mosaic\_94, Megatron\_98, Lasso\_96, SassyCat97\_95, Vortex\_95, PG1\_95, PhrodoBaggins\_99, PhrankReynolds\_95, ShiVal\_96, Maru\_96, Fang\_97, Mutante\_98, Pacifista\_99, Kahve\_97, Dati\_94, Omniscient\_98, Morty\_97, AbsoluteMadLad\_95, LeeLot\_95, Mana\_94, Swish\_98, Duggie\_97, Serendipity\_96, ThreeOh3D2\_98, Quisquiliae\_99, PinheadLarry\_96, Solosis\_95, Hetaeria\_96, Jiraiya\_102, Phamished\_96, Gophee\_96, Orwigg\_99, Vista\_96, YouGoGlencoco\_97, Murdoc\_93, JangoPhett\_95
- Track 2 : CampRoach\_97, Durga\_99, Wallhey\_98, Chorkpop\_98, Surely\_97, Fozzie\_93, Lulumae\_92, Kwksand96\_98, Pinkman\_96, MrPhizzler\_96, Rimu\_100,

Roy17\_94, Valjean\_95, Megamind20\_99, Virgeve\_95, Zonia\_97

- Track 3 : Carthage\_97
- Track 4 : Harvey\_94, Dingo\_93, Soto\_93, Pipsqueak\_94, Mikota\_91, Basato\_95, Kloppinator\_97
- Track 5 : Magic8\_96, Labeouficaum\_97, Phleuron\_94, Derpp\_96, Maskar\_98, CharlieGBrown\_95, ImtiyazSitla\_98, MelsMeow\_95, Mag7\_95, BatteryCK\_95, Ashraf\_98, MichaelPhcott\_95, Chaelin\_97, Schueller\_96, Veritas\_96, Windsor\_96, Kailash\_95, TyrionL\_97
- Track 6 : SDcharge11\_95, Daka\_98
- Track 7 : Lopsy\_93, Tooj\_94, Eremos\_94
- Track 8 : Roliet\_94
- Track 9 : Cornobble\_95, Aelin\_96, Antonia\_96, OSmaximus\_97, RedMaple\_95, Schadenfreude\_97
- Track 10 : Kikipoo\_99, Gwilliam\_97, AltPhacts\_94, IsaacEli\_99
- Track 11 : DuchessDung\_94
- Track 12 : Frankicide\_94
- Track 13 : Apizium\_95
- Track 14 : MiniBoss\_92
- Track 15 : Hartsy\_95
- Track 16 : KingVeVeVe\_95

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

The start number called the most often in the published annotations is 4, it was called in 252 of the 252 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU\_95, AbsoluteMadLad\_95, Adriana\_97, Aelin\_96, AltPhacts\_94, Altwerkus\_94, Anderson\_98, Andre\_101, Antonia\_96, Apizium\_95, Ashraf\_98, Badfish\_97, Banjo\_93, Basato\_95, BatteryCK\_95, Beaglebox\_93, Bishoperium\_97, BlackStallion\_96, Bluephacebaby\_96, Brilliant\_100, Buckeye\_95, Burr\_99, CamL\_97, CampRoach\_97, Cannibal\_97, Carthage\_97, Chaelin\_97, Chah\_99, Charles1\_100, CharlieGBrown\_95, CheetO\_93, Cher\_97, Childish\_97, Chorkpop\_98, Chute\_97, Cobra\_97, Colbert\_95, Coletti\_99, Cornobble\_95, Cosmolli16\_98, Craff\_98, Crownjwl\_94, DaddyDaniels\_100, Daffy\_96, Daka\_98, Dati\_94, DelRivs\_96, Derpp\_96, Dice\_97, Dingo\_93, Dione\_95, DirtJuice\_98, Doddsville\_94, DoesntMatter\_94, DonSanchon\_92, DuchessDung\_94, Duggie\_97, Durga\_99, Emiris\_99, EmpTee\_96, Eremos\_94, Etaye\_96, Eugenia\_99, Fang\_97, FluffyNinja\_98, Fozzie\_93, Frankicide\_94, Freya\_93, FriarPreacher\_94, Fringe\_101, FugateOSU\_97, Gareth\_97, GeneCoco\_96, Giraffe\_98, Gophee\_96, Grand2040\_94, Gwilliam\_97, Haimas\_94, Haleema\_96, Hamish\_94, Hartsy\_95, Harvey\_94, Held\_95, HenryJackson\_97, Hertubise\_96, Hetaeria\_96, HighStump\_99, Hocus\_96, ImtiyazSitla\_98, Inchworm\_98, Inverness\_94, Iridoclysis\_96, IsaacEli\_99, JDog\_96, JacAttac\_97, JakeO\_98, JangoPhett\_95, Jillium\_97, Jiminy\_97, Jiraiya\_102, KLucky39\_94, Kahve\_97, Kailash\_95, Katniss\_99, Keitherie\_100, Kikipoo\_99, Kimbrough\_98, KingTut\_87, KingVeVeVe\_95, KlimbOn\_96, Kloppinator\_97, Kwadwo\_96, Kwksand96\_98, Labeouficaum\_97, LasagnaCat\_98, Lasso\_96, LeeLot\_95, Lego3393\_95, Legolas\_98, LeiMonet\_99, LemonSlice\_97, Longacauda\_97, Lopsy\_93, LostAndPhound\_96, LuckyMarjie\_94, Lulumae\_92, Lulwa\_94, Lumine\_98, MRabcd\_97, Mag7\_95, Magic8\_96, Mana\_94, Manad\_96,

Maru\_96, Maskar\_98, Matalotodo\_95, Mcshane\_99, Mecca\_97, Megamind20\_99, Megatron\_98, Melc17\_94, MelsMeow\_95, Mesh1\_97, MichaelPhcott\_95, Mikota\_91, MiniBoss\_92, MitKao\_97, Morgushi\_94, Morty\_97, Mosaic\_94, MrPhizzler\_96, Mulan\_96, Murdoc\_93, Mutante\_98, Nacho\_0099, Newman\_92, Nicole21\_98, Numberten\_97, Nyala\_97, OSmaximus\_97, Olak\_99, Oline\_96, Olive\_93, OliverWalter\_96, Omniscient\_98, Oosterbaan\_97, Orfeu\_97, Orion\_95, Orwigg\_99, PG1\_95, Pacifista\_99, Phamished\_96, Phareon\_94, PhatCats2014\_96, PhatLouie\_99, PhenghisKhan\_97, Pherdinand\_98, Phergie\_97, Phipps\_94, Phleuron\_94, PhrankReynolds\_95, PhrodoBaggins\_99, Phunky\_94, Piglet\_0096, PinheadLarry\_96, Pinkman\_96, Pipsqueak\_94, Placalicious\_94, Plmatters\_94, Podrick\_95, Potter\_91, Prickles\_97, ProfessorX\_94, Puhltonio\_92, QueenBeane\_97, Quisquilliae\_99, RedMaple\_95, Ricotta\_98, Riggan\_98, Rimu\_100, Roliet\_94, Roy17\_94, SDcharge11\_95, Samaymay\_97, SassyCat97\_95, Schadenfreude\_97, Schueller\_96, Scoot17C\_97, Scrick\_98, Selr12\_101, Serendipity\_96, Serpentine\_0099, Sheila\_91, ShiVal\_96, Sigman\_96, SilverBell\_98, Simielle\_97, Skippy\_97, Slatt\_99, Soile\_98, Solosis\_95, Sophia\_95, Soto\_93, Spartan300\_96, Squid\_96, Squiggle\_96, Struggle\_97, Suffolk\_92, Surely\_97, Swiphy\_101, Swish\_98, TallGrassMM\_96, Telesworld\_95, Thora\_95, ThreeOh3D2\_98, Thunderbird\_97, Timmi\_95, TomBombadil\_97, Tomlarah\_97, Toni\_96, Tooj\_94, True\_98, Trypo\_97, TyrionL\_97, UAch1\_97, UncleHowie\_93, Usavi\_97, Valjean\_95, Vaticameos\_94, Veritas\_96, Virapocalypse\_98, Virgeve\_95, Vista\_96, Vortex\_95, Wallhey\_98, Waterdiva\_98, Weher20\_94, Windsor\_96, Xavier\_96, Yoshand\_98, YouGoGlencoco\_97, Zaider\_98, Zelda\_97, Zonia\_97,

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

- 

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

- 

### Summary by start number:

Start 4:

- Found in 264 of 264 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 252 of 252
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ABU\_95 (B1), AbsoluteMadLad\_95 (B1), Adriana\_97 (B1), Aelin\_96 (B1), AltPhacts\_94 (B1), Altwerkus\_94 (B1), Anderson\_98 (B1), Andre\_101 (B1), Antonia\_96 (B1), Apizium\_95 (B1), Ashraf\_98 (B1), Badfish\_97 (B1), Banjo\_93 (B1), Basato\_95 (B1), BatteryCK\_95 (B1), Beaglebox\_93 (B1), Bishoperium\_97 (B1), BlackStallion\_96 (B1), Bluephacebaby\_96 (B1), Brilliant\_100 (B1), Buckeye\_95 (B1), Burr\_99 (B1), CamL\_97 (B1), CampRoach\_97 (B1), Cannibal\_97 (B1), Carthage\_97 (B1), Chaelin\_97 (B1), Chah\_99 (B1), Charles1\_100 (B1), CharlieGBrown\_95 (B1), CheetO\_93 (B1), Cher\_97 (B1), Childish\_97 (B1), Chorkpop\_98 (B1), Chute\_97 (B1), Cobra\_97 (B1), Colbert\_95 (B1), Coletti\_99 (B1), Cornobble\_95 (B1), Cosmolli16\_98 (B1), Craff\_98 (B1), Crownjwl\_94 (B1), DaddyDaniels\_100 (B1), Daffy\_96 (B1), Daka\_98 (B1), Dati\_94 (B1), DelRivs\_96 (B1), Derpp\_96 (B1), Dice\_97 (B1), Dingo\_93 (B1), Dione\_95 (B1), DirtJuice\_98 (B1), Doddsville\_94 (B1), DoesntMatter\_94 (B1), DonSanchon\_92 (B1), DuchessDung\_94 (B1), Duggie\_97 (B1), Durga\_99 (B1), Emiris\_99 (B1), EmpTee\_96 (B1), Eremos\_94 (B1), Etaye\_96 (B1), Eugenia\_99 (B1), Fang\_97 (B1), FluffyNinja\_98 (B1), Fozzie\_93 (B1), Frankicide\_94 (B1), Freya\_93 (B1), FriarPreacher\_94 (B1), Fringe\_101 (B1), FugateOSU\_97 (B1), Gareth\_97 (B1),

GeneCoco\_96 (B1), Giraffe\_98 (B1), Gophee\_96 (B1), Grand2040\_94 (B1), Gwilliam\_97 (B1), Haimas\_94 (B1), Haleema\_96 (B1), Hamish\_94 (B1), Hartsy\_95 (B1), Harvey\_94 (B1), Held\_95 (B1), HenryJackson\_97 (B1), Hertubise\_96 (B1), Hetaeria\_96 (B1), HighStump\_99 (B1), Hocus\_96 (B1), ImtiyazSitla\_98 (B1), Inchworm\_98 (B1), Inverness\_94 (B1), Iridoclysis\_96 (B1), IsaacEli\_99 (B1), JDog\_96 (B1), JacAttac\_97 (B1), JakeO\_98 (B1), JangoPhett\_95 (B1), Jillium\_97 (B1), Jiminy\_97 (B1), Jiraiya\_102 (B1), KLucky39\_94 (B1), Kahve\_97 (B1), Kailash\_95 (B1), Katniss\_99 (B1), Keitherie\_100 (B1), Kikipoo\_99 (B1), Kimbrough\_98 (B1), KingTut\_87 (B1), KingVeVeVe\_95 (B1), KlimbOn\_96 (B1), Kloppinator\_97 (B1), Kwadwo\_96 (B1), Kwksand96\_98 (B1), Labeouficaum\_97 (B1), LasagnaCat\_98 (B1), Lasso\_96 (B1), LeeLot\_95 (B1), Lego3393\_95 (B1), Legolas\_98 (B1), LeiMonet\_99 (B1), LemonSlice\_97 (B1), Longacauda\_97 (B1), Lopsy\_93 (B1), LostAndPhound\_96 (B1), LuckyMarjie\_94 (B1), Lulumae\_92 (B1), Lulwa\_94 (B1), Lumine\_98 (B1), MRabcd\_97 (B1), Mag7\_95 (B1), Magic8\_96 (B1), Mana\_94 (B1), Manad\_96 (B1), Maru\_96 (B1), Maskar\_98 (B1), Matalotodo\_95 (B1), Mcshane\_99 (B1), Mecca\_97 (B1), Megamind20\_99 (B1), Megatron\_98 (B1), Melc17\_94 (B1), MelsMeow\_95 (B1), Mesh1\_97 (B1), MichaelPhcott\_95 (B1), Mikota\_91 (B1), MiniBoss\_92 (B1), MitKao\_97 (B1), Morgushi\_94 (B1), Morty\_97 (B1), Mosaic\_94 (B1), MrPhizzler\_96 (B1), Mulan\_96 (B1), Murdoc\_93 (B1), Mutante\_98 (B1), Nacho\_0099 (B1), Newman\_92 (B1), Nicole21\_98 (B1), Numberten\_97 (B1), Nyala\_97 (B1), OSmaximus\_97 (B1), Olak\_99 (B1), Oline\_96 (B1), Olive\_93 (B1), OliverWalter\_96 (B1), Omniscient\_98 (B1), Oosterbaan\_97 (B1), Orfeu\_97 (B1), Orion\_95 (B1), Orwigg\_99 (B1), PG1\_95 (B1), Pacifista\_99 (B1), Phamished\_96 (B1), Phareon\_94 (B1), PhatCats2014\_96 (B1), PhatLouie\_99 (B1), PhenghisKhan\_97 (B1), Pherdinand\_98 (B1), Phergie\_97 (B1), Phipps\_94 (B1), Phleuron\_94 (B1), PhrankReynolds\_95 (B1), PhrodoBaggins\_99 (B1), Phunky\_94 (B1), Piglet\_0096 (B1), PinheadLarry\_96 (B1), Pinkman\_96 (B1), Pipsqueak\_94 (B1), Placalicious\_94 (B1), Plmatters\_94 (B1), Podrick\_95 (B1), Potter\_91 (B1), Prickles\_97 (B1), ProfessorX\_94 (B1), Puhltonio\_92 (B1), QueenBeane\_97 (B1), Quisquillae\_99 (B1), RedMaple\_95 (B1), Ricotta\_98 (B1), Riggan\_98 (B1), Rimu\_100 (B1), Roliet\_94 (B1), Roy17\_94 (B1), SDcharge11\_95 (B1), Samaymay\_97 (B1), SassyCat97\_95 (B1), Schadenfreude\_97 (B1), Schueller\_96 (B1), Scoot17C\_97 (B1), Scrick\_98 (B1), Selr12\_101 (B1), Serendipity\_96 (B1), Serpentine\_0099 (B1), Sheila\_91 (B1), ShiVal\_96 (B1), Sigman\_96 (B1), SilverBell\_98 (B1), Simielle\_97 (B1), Skippy\_97 (B1), Slatt\_99 (B1), Soile\_98 (B1), Solosis\_95 (B1), Sophia\_95 (B1), Soto\_93 (B1), Spartan300\_96 (B1), Squid\_96 (B1), Squiggle\_96 (B1), Struggle\_97 (B1), Suffolk\_92 (B1), Surely\_97 (B1), Swiphy\_101 (B1), Swish\_98 (B1), TallGrassMM\_96 (B1), Telesworld\_95 (B1), Thora\_95 (B1), ThreeOh3D2\_98 (B1), Thunderbird\_97 (B1), Timmi\_95 (B1), TomBombadil\_97 (B1), Tomlarah\_97 (B1), Toni\_96 (B1), Tooj\_94 (B1), True\_98 (B1), Trypo\_97 (B1), TyrionL\_97 (B1), UAch1\_97 (B1), UncleHowie\_93 (B1), Usavi\_97 (B1), Valjean\_95 (B1), Vaticameos\_94 (B1), Veritas\_96 (B1), Virapocalypse\_98 (B1), Virgeve\_95 (B1), Vista\_96 (B1), Vortex\_95 (B1), Wallhey\_98 (B1), Waterdiva\_98 (B1), Weher20\_94 (B1), Windsor\_96 (B1), Xavier\_96 (B1), Yoshand\_98 (B1), YouGoGlencoco\_97 (B1), Zaider\_98 (B1), Zelda\_97 (B1), Zonia\_97 (B1),

### Summary by clusters:

There is one cluster represented in this pham: B1

Info for manual annotations of cluster B1:

- Start number 4 was manually annotated 252 times for cluster B1.

**Gene Information:**

Gene: ABU\_95 Start: 67275, Stop: 66544, Start Num: 4

Candidate Starts for ABU\_95:

(Start: 4 @67275 has 252 MA's), (5, 67236), (6, 67209), (8, 67122), (9, 67083), (10, 67041), (12, 66915), (13, 66894), (14, 66882), (15, 66810), (16, 66696), (17, 66657), (18, 66639),

Gene: AbsoluteMadLad\_95 Start: 67228, Stop: 66497, Start Num: 4

Candidate Starts for AbsoluteMadLad\_95:

(Start: 4 @67228 has 252 MA's), (5, 67189), (6, 67162), (8, 67075), (9, 67036), (10, 66994), (12, 66868), (13, 66847), (14, 66835), (15, 66763), (16, 66649), (17, 66610), (18, 66592),

Gene: Adriana\_97 Start: 67547, Stop: 66816, Start Num: 4

Candidate Starts for Adriana\_97:

(Start: 4 @67547 has 252 MA's), (5, 67508), (6, 67481), (8, 67394), (9, 67355), (10, 67313), (12, 67187), (13, 67166), (14, 67154), (15, 67082), (16, 66968), (17, 66929), (18, 66911),

Gene: Aelin\_96 Start: 66908, Stop: 66177, Start Num: 4

Candidate Starts for Aelin\_96:

(2, 67127), (3, 67025), (Start: 4 @66908 has 252 MA's), (5, 66869), (6, 66842), (7, 66806), (8, 66755), (9, 66716), (12, 66548), (13, 66527), (14, 66515), (15, 66443), (16, 66329), (17, 66290), (18, 66272),

Gene: AltPhacts\_94 Start: 66481, Stop: 65750, Start Num: 4

Candidate Starts for AltPhacts\_94:

(2, 66700), (3, 66598), (Start: 4 @66481 has 252 MA's), (5, 66442), (6, 66415), (8, 66328), (9, 66289), (10, 66247), (12, 66121), (13, 66100), (14, 66088), (15, 66016), (16, 65902), (17, 65863), (18, 65845),

Gene: Altwerkus\_94 Start: 66604, Stop: 65873, Start Num: 4

Candidate Starts for Altwerkus\_94:

(Start: 4 @66604 has 252 MA's), (5, 66565), (6, 66538), (8, 66451), (9, 66412), (10, 66370), (12, 66244), (13, 66223), (14, 66211), (15, 66139), (16, 66025), (17, 65986), (18, 65968),

Gene: Anderson\_98 Start: 67151, Stop: 66420, Start Num: 4

Candidate Starts for Anderson\_98:

(Start: 4 @67151 has 252 MA's), (5, 67112), (6, 67085), (8, 66998), (9, 66959), (10, 66917), (12, 66791), (13, 66770), (14, 66758), (15, 66686), (16, 66572), (17, 66533), (18, 66515),

Gene: Andre\_101 Start: 67542, Stop: 66811, Start Num: 4

Candidate Starts for Andre\_101:

(Start: 4 @67542 has 252 MA's), (5, 67503), (6, 67476), (8, 67389), (9, 67350), (10, 67308), (12, 67182), (13, 67161), (14, 67149), (15, 67077), (16, 66963), (17, 66924), (18, 66906),

Gene: Antonia\_96 Start: 66776, Stop: 66045, Start Num: 4

Candidate Starts for Antonia\_96:

(2, 66995), (3, 66893), (Start: 4 @66776 has 252 MA's), (5, 66737), (6, 66710), (7, 66674), (8, 66623), (9, 66584), (12, 66416), (13, 66395), (14, 66383), (15, 66311), (16, 66197), (17, 66158), (18, 66140),

Gene: Apizium\_95 Start: 66429, Stop: 65698, Start Num: 4

Candidate Starts for Apizium\_95:

(1, 66681), (2, 66648), (3, 66546), (Start: 4 @66429 has 252 MA's), (5, 66390), (6, 66363), (8, 66276), (9, 66237), (12, 66069), (13, 66048), (14, 66036), (15, 65964), (16, 65850), (17, 65811), (18, 65793),

Gene: Ashraf\_98 Start: 67284, Stop: 66532, Start Num: 4

Candidate Starts for Ashraf\_98:

(2, 67503), (3, 67401), (Start: 4 @67284 has 252 MA's), (5, 67245), (8, 67131), (9, 67092), (12, 66924), (13, 66903), (14, 66891), (15, 66819), (16, 66705), (17, 66666), (18, 66648),

Gene: Badfish\_97 Start: 67455, Stop: 66724, Start Num: 4

Candidate Starts for Badfish\_97:

(Start: 4 @67455 has 252 MA's), (5, 67416), (6, 67389), (8, 67302), (9, 67263), (10, 67221), (12, 67095), (13, 67074), (14, 67062), (15, 66990), (16, 66876), (17, 66837), (18, 66819),

Gene: Banjo\_93 Start: 66721, Stop: 65990, Start Num: 4

Candidate Starts for Banjo\_93:

(Start: 4 @66721 has 252 MA's), (5, 66682), (6, 66655), (8, 66568), (9, 66529), (10, 66487), (12, 66361), (13, 66340), (14, 66328), (15, 66256), (16, 66142), (17, 66103), (18, 66085),

Gene: Basato\_95 Start: 66941, Stop: 66210, Start Num: 4

Candidate Starts for Basato\_95:

(Start: 4 @66941 has 252 MA's), (5, 66902), (6, 66875), (8, 66788), (9, 66749), (12, 66581), (13, 66560), (14, 66548), (15, 66476), (16, 66362), (17, 66323), (18, 66305),

Gene: BatteryCK\_95 Start: 66711, Stop: 65980, Start Num: 4

Candidate Starts for BatteryCK\_95:

(2, 66930), (3, 66828), (Start: 4 @66711 has 252 MA's), (5, 66672), (8, 66558), (9, 66519), (12, 66351), (13, 66330), (14, 66318), (15, 66246), (16, 66132), (17, 66093), (18, 66075),

Gene: Beaglebox\_93 Start: 66843, Stop: 66112, Start Num: 4

Candidate Starts for Beaglebox\_93:

(Start: 4 @66843 has 252 MA's), (5, 66804), (6, 66777), (8, 66690), (9, 66651), (10, 66609), (12, 66483), (13, 66462), (14, 66450), (15, 66378), (16, 66264), (17, 66225), (18, 66207),

Gene: Bishoperium\_97 Start: 67290, Stop: 66559, Start Num: 4

Candidate Starts for Bishoperium\_97:

(Start: 4 @67290 has 252 MA's), (5, 67251), (6, 67224), (8, 67137), (9, 67098), (10, 67056), (12, 66930), (13, 66909), (14, 66897), (15, 66825), (16, 66711), (17, 66672), (18, 66654),

Gene: BlackStallion\_96 Start: 67139, Stop: 66408, Start Num: 4

Candidate Starts for BlackStallion\_96:

(Start: 4 @67139 has 252 MA's), (5, 67100), (6, 67073), (8, 66986), (9, 66947), (10, 66905), (12, 66779), (13, 66758), (14, 66746), (15, 66674), (16, 66560), (17, 66521), (18, 66503),

Gene: Bluephacebaby\_96 Start: 67324, Stop: 66593, Start Num: 4

Candidate Starts for Bluephacebaby\_96:

(Start: 4 @67324 has 252 MA's), (5, 67285), (6, 67258), (8, 67171), (9, 67132), (10, 67090), (12, 66964), (13, 66943), (14, 66931), (15, 66859), (16, 66745), (17, 66706), (18, 66688),

Gene: Brilliant\_100 Start: 67303, Stop: 66572, Start Num: 4

Candidate Starts for Brilliant\_100:

(Start: 4 @67303 has 252 MA's), (5, 67264), (6, 67237), (8, 67150), (9, 67111), (10, 67069), (12, 66943), (13, 66922), (14, 66910), (15, 66838), (16, 66724), (17, 66685), (18, 66667),

Gene: Buckeye\_95 Start: 67599, Stop: 66868, Start Num: 4

Candidate Starts for Buckeye\_95:

(Start: 4 @67599 has 252 MA's), (5, 67560), (6, 67533), (8, 67446), (9, 67407), (10, 67365), (12, 67239), (13, 67218), (14, 67206), (15, 67134), (16, 67020), (17, 66981), (18, 66963),

Gene: Burr\_99 Start: 67145, Stop: 66414, Start Num: 4

Candidate Starts for Burr\_99:

(Start: 4 @67145 has 252 MA's), (5, 67106), (6, 67079), (8, 66992), (9, 66953), (10, 66911), (12, 66785), (13, 66764), (14, 66752), (15, 66680), (16, 66566), (17, 66527), (18, 66509),

Gene: CamL\_97 Start: 67075, Stop: 66344, Start Num: 4

Candidate Starts for CamL\_97:

(Start: 4 @67075 has 252 MA's), (5, 67036), (6, 67009), (8, 66922), (9, 66883), (10, 66841), (12, 66715), (13, 66694), (14, 66682), (15, 66610), (16, 66496), (17, 66457), (18, 66439),

Gene: CampRoach\_97 Start: 67171, Stop: 66440, Start Num: 4

Candidate Starts for CampRoach\_97:

(Start: 4 @67171 has 252 MA's), (5, 67132), (6, 67105), (9, 66979), (10, 66937), (12, 66811), (13, 66790), (14, 66778), (15, 66706), (16, 66592), (17, 66553), (18, 66535),

Gene: Cannibal\_97 Start: 67178, Stop: 66447, Start Num: 4

Candidate Starts for Cannibal\_97:

(Start: 4 @67178 has 252 MA's), (5, 67139), (6, 67112), (8, 67025), (9, 66986), (10, 66944), (12, 66818), (13, 66797), (14, 66785), (15, 66713), (16, 66599), (17, 66560), (18, 66542),

Gene: Carthage\_97 Start: 66633, Stop: 65902, Start Num: 4

Candidate Starts for Carthage\_97:

(Start: 4 @66633 has 252 MA's), (6, 66567), (8, 66480), (9, 66441), (12, 66273), (13, 66252), (14, 66240), (16, 66054), (17, 66015), (18, 65997),

Gene: Chaelin\_97 Start: 67047, Stop: 66295, Start Num: 4

Candidate Starts for Chaelin\_97:

(2, 67266), (3, 67164), (Start: 4 @67047 has 252 MA's), (5, 67008), (8, 66894), (9, 66855), (12, 66687), (13, 66666), (14, 66654), (15, 66582), (16, 66468), (17, 66429), (18, 66411),

Gene: Chah\_99 Start: 66875, Stop: 66144, Start Num: 4

Candidate Starts for Chah\_99:

(Start: 4 @66875 has 252 MA's), (5, 66836), (6, 66809), (8, 66722), (9, 66683), (10, 66641), (12, 66515), (13, 66494), (14, 66482), (15, 66410), (16, 66296), (17, 66257), (18, 66239),

Gene: Charles1\_100 Start: 67453, Stop: 66722, Start Num: 4

Candidate Starts for Charles1\_100:

(Start: 4 @67453 has 252 MA's), (5, 67414), (6, 67387), (8, 67300), (9, 67261), (10, 67219), (12, 67093), (13, 67072), (14, 67060), (15, 66988), (16, 66874), (17, 66835), (18, 66817),

Gene: CharlieGBrown\_95 Start: 66806, Stop: 66075, Start Num: 4

Candidate Starts for CharlieGBrown\_95:

(2, 67025), (3, 66923), (Start: 4 @66806 has 252 MA's), (5, 66767), (8, 66653), (9, 66614), (12, 66446), (13, 66425), (14, 66413), (15, 66341), (16, 66227), (17, 66188), (18, 66170),

Gene: CheetO\_93 Start: 66925, Stop: 66194, Start Num: 4

Candidate Starts for CheetO\_93:

(Start: 4 @66925 has 252 MA's), (5, 66886), (6, 66859), (8, 66772), (9, 66733), (10, 66691), (12, 66565), (13, 66544), (14, 66532), (15, 66460), (16, 66346), (17, 66307), (18, 66289),



Gene: Cher\_97 Start: 67279, Stop: 66548, Start Num: 4

Candidate Starts for Cher\_97:

(Start: 4 @67279 has 252 MA's), (5, 67240), (6, 67213), (8, 67126), (9, 67087), (10, 67045), (12, 66919), (13, 66898), (14, 66886), (15, 66814), (16, 66700), (17, 66661), (18, 66643),

Gene: Childish\_97 Start: 67469, Stop: 66738, Start Num: 4

Candidate Starts for Childish\_97:

(Start: 4 @67469 has 252 MA's), (5, 67430), (6, 67403), (8, 67316), (9, 67277), (10, 67235), (12, 67109), (13, 67088), (14, 67076), (15, 67004), (16, 66890), (17, 66851), (18, 66833),

Gene: Chorkpop\_98 Start: 66931, Stop: 66200, Start Num: 4

Candidate Starts for Chorkpop\_98:

(Start: 4 @66931 has 252 MA's), (5, 66892), (6, 66865), (9, 66739), (10, 66697), (12, 66571), (13, 66550), (14, 66538), (15, 66466), (16, 66352), (17, 66313), (18, 66295),

Gene: Chute\_97 Start: 67470, Stop: 66739, Start Num: 4

Candidate Starts for Chute\_97:

(Start: 4 @67470 has 252 MA's), (5, 67431), (6, 67404), (8, 67317), (9, 67278), (10, 67236), (12, 67110), (13, 67089), (14, 67077), (15, 67005), (16, 66891), (17, 66852), (18, 66834),

Gene: Cobra\_97 Start: 67300, Stop: 66569, Start Num: 4

Candidate Starts for Cobra\_97:

(Start: 4 @67300 has 252 MA's), (5, 67261), (6, 67234), (8, 67147), (9, 67108), (10, 67066), (12, 66940), (13, 66919), (14, 66907), (15, 66835), (16, 66721), (17, 66682), (18, 66664),

Gene: Colbert\_95 Start: 66199, Stop: 65468, Start Num: 4

Candidate Starts for Colbert\_95:

(Start: 4 @66199 has 252 MA's), (5, 66160), (6, 66133), (8, 66046), (9, 66007), (10, 65965), (12, 65839), (13, 65818), (14, 65806), (15, 65734), (16, 65620), (17, 65581), (18, 65563),

Gene: Coletti\_99 Start: 67826, Stop: 67095, Start Num: 4

Candidate Starts for Coletti\_99:

(Start: 4 @67826 has 252 MA's), (5, 67787), (6, 67760), (8, 67673), (9, 67634), (10, 67592), (12, 67466), (13, 67445), (14, 67433), (15, 67361), (16, 67247), (17, 67208), (18, 67190),

Gene: Cornobble\_95 Start: 66927, Stop: 66196, Start Num: 4

Candidate Starts for Cornobble\_95:

(2, 67146), (3, 67044), (Start: 4 @66927 has 252 MA's), (5, 66888), (6, 66861), (7, 66825), (8, 66774), (9, 66735), (12, 66567), (13, 66546), (14, 66534), (15, 66462), (16, 66348), (17, 66309), (18, 66291),

Gene: Cosmolli16\_98 Start: 67403, Stop: 66672, Start Num: 4

Candidate Starts for Cosmolli16\_98:

(Start: 4 @67403 has 252 MA's), (5, 67364), (6, 67337), (8, 67250), (9, 67211), (10, 67169), (12, 67043), (13, 67022), (14, 67010), (15, 66938), (16, 66824), (17, 66785), (18, 66767),

Gene: Craff\_98 Start: 67688, Stop: 66957, Start Num: 4

Candidate Starts for Craff\_98:

(Start: 4 @67688 has 252 MA's), (5, 67649), (6, 67622), (8, 67535), (9, 67496), (10, 67454), (12, 67328), (13, 67307), (14, 67295), (15, 67223), (16, 67109), (17, 67070), (18, 67052),

Gene: Crownjwl\_94 Start: 66943, Stop: 66212, Start Num: 4

Candidate Starts for Crownjwl\_94:

(Start: 4 @66943 has 252 MA's), (5, 66904), (6, 66877), (8, 66790), (9, 66751), (10, 66709), (12, 66583), (13, 66562), (14, 66550), (15, 66478), (16, 66364), (17, 66325), (18, 66307),

Gene: DaddyDaniels\_100 Start: 67422, Stop: 66691, Start Num: 4

Candidate Starts for DaddyDaniels\_100:

(Start: 4 @67422 has 252 MA's), (5, 67383), (6, 67356), (8, 67269), (9, 67230), (10, 67188), (12, 67062), (13, 67041), (14, 67029), (15, 66957), (16, 66843), (17, 66804), (18, 66786),

Gene: Daffy\_96 Start: 66916, Stop: 66185, Start Num: 4

Candidate Starts for Daffy\_96:

(Start: 4 @66916 has 252 MA's), (5, 66877), (6, 66850), (8, 66763), (9, 66724), (10, 66682), (12, 66556), (13, 66535), (14, 66523), (15, 66451), (16, 66337), (17, 66298), (18, 66280),

Gene: Daka\_98 Start: 66879, Stop: 66148, Start Num: 4

Candidate Starts for Daka\_98:

(2, 67098), (3, 66996), (Start: 4 @66879 has 252 MA's), (5, 66840), (6, 66813), (7, 66777), (8, 66726), (9, 66687), (12, 66519), (13, 66498), (14, 66486), (16, 66300), (17, 66261), (18, 66243),

Gene: Dati\_94 Start: 67101, Stop: 66370, Start Num: 4

Candidate Starts for Dati\_94:

(Start: 4 @67101 has 252 MA's), (5, 67062), (6, 67035), (8, 66948), (9, 66909), (10, 66867), (12, 66741), (13, 66720), (14, 66708), (15, 66636), (16, 66522), (17, 66483), (18, 66465),

Gene: DelRivs\_96 Start: 66730, Stop: 65999, Start Num: 4

Candidate Starts for DelRivs\_96:

(Start: 4 @66730 has 252 MA's), (5, 66691), (6, 66664), (8, 66577), (9, 66538), (10, 66496), (12, 66370), (13, 66349), (14, 66337), (15, 66265), (16, 66151), (17, 66112), (18, 66094),

Gene: Derpp\_96 Start: 66839, Stop: 66108, Start Num: 4

Candidate Starts for Derpp\_96:

(2, 67058), (3, 66956), (Start: 4 @66839 has 252 MA's), (5, 66800), (8, 66686), (9, 66647), (12, 66479), (13, 66458), (14, 66446), (15, 66374), (16, 66260), (17, 66221), (18, 66203),

Gene: Dice\_97 Start: 66762, Stop: 66031, Start Num: 4

Candidate Starts for Dice\_97:

(Start: 4 @66762 has 252 MA's), (5, 66723), (6, 66696), (8, 66609), (9, 66570), (10, 66528), (12, 66402), (13, 66381), (14, 66369), (15, 66297), (16, 66183), (17, 66144), (18, 66126),

Gene: Dingo\_93 Start: 66204, Stop: 65473, Start Num: 4

Candidate Starts for Dingo\_93:

(Start: 4 @66204 has 252 MA's), (5, 66165), (6, 66138), (8, 66051), (9, 66012), (12, 65844), (13, 65823), (14, 65811), (15, 65739), (16, 65625), (17, 65586), (18, 65568),

Gene: Dione\_95 Start: 66482, Stop: 65751, Start Num: 4

Candidate Starts for Dione\_95:

(Start: 4 @66482 has 252 MA's), (5, 66443), (6, 66416), (8, 66329), (9, 66290), (10, 66248), (12, 66122), (13, 66101), (14, 66089), (15, 66017), (16, 65903), (17, 65864), (18, 65846),

Gene: DirtJuice\_98 Start: 67591, Stop: 66860, Start Num: 4

Candidate Starts for DirtJuice\_98:

(Start: 4 @67591 has 252 MA's), (5, 67552), (6, 67525), (8, 67438), (9, 67399), (10, 67357), (12, 67231), (13, 67210), (14, 67198), (15, 67126), (16, 67012), (17, 66973), (18, 66955),

Gene: Doddsville\_94 Start: 66922, Stop: 66191, Start Num: 4

Candidate Starts for Doddsville\_94:

(Start: 4 @66922 has 252 MA's), (5, 66883), (6, 66856), (8, 66769), (9, 66730), (10, 66688), (12, 66562), (13, 66541), (14, 66529), (15, 66457), (16, 66343), (17, 66304), (18, 66286),

Gene: DoesntMatter\_94 Start: 66756, Stop: 66025, Start Num: 4

Candidate Starts for DoesntMatter\_94:

(Start: 4 @66756 has 252 MA's), (5, 66717), (6, 66690), (8, 66603), (9, 66564), (10, 66522), (12, 66396), (13, 66375), (14, 66363), (15, 66291), (16, 66177), (17, 66138), (18, 66120),

Gene: DonSanchon\_92 Start: 66440, Stop: 65709, Start Num: 4

Candidate Starts for DonSanchon\_92:

(Start: 4 @66440 has 252 MA's), (5, 66401), (6, 66374), (8, 66287), (9, 66248), (10, 66206), (12, 66080), (13, 66059), (14, 66047), (15, 65975), (16, 65861), (17, 65822), (18, 65804),

Gene: DuchessDung\_94 Start: 66437, Stop: 65706, Start Num: 4

Candidate Starts for DuchessDung\_94:

(Start: 4 @66437 has 252 MA's), (5, 66398), (6, 66371), (9, 66245), (12, 66077), (13, 66056), (14, 66044), (15, 65972), (16, 65858), (17, 65819), (18, 65801),

Gene: Duggie\_97 Start: 67064, Stop: 66333, Start Num: 4

Candidate Starts for Duggie\_97:

(Start: 4 @67064 has 252 MA's), (5, 67025), (6, 66998), (8, 66911), (9, 66872), (10, 66830), (12, 66704), (13, 66683), (14, 66671), (15, 66599), (16, 66485), (17, 66446), (18, 66428),

Gene: Durga\_99 Start: 67545, Stop: 66814, Start Num: 4

Candidate Starts for Durga\_99:

(Start: 4 @67545 has 252 MA's), (5, 67506), (6, 67479), (9, 67353), (10, 67311), (12, 67185), (13, 67164), (14, 67152), (15, 67080), (16, 66966), (17, 66927), (18, 66909),

Gene: Emiris\_99 Start: 67452, Stop: 66721, Start Num: 4

Candidate Starts for Emiris\_99:

(Start: 4 @67452 has 252 MA's), (5, 67413), (6, 67386), (8, 67299), (9, 67260), (10, 67218), (12, 67092), (13, 67071), (14, 67059), (15, 66987), (16, 66873), (17, 66834), (18, 66816),

Gene: EmpTee\_96 Start: 66853, Stop: 66122, Start Num: 4

Candidate Starts for EmpTee\_96:

(Start: 4 @66853 has 252 MA's), (5, 66814), (6, 66787), (8, 66700), (9, 66661), (10, 66619), (12, 66493), (13, 66472), (14, 66460), (15, 66388), (16, 66274), (17, 66235), (18, 66217),

Gene: Eremos\_94 Start: 66900, Stop: 66169, Start Num: 4

Candidate Starts for Eremos\_94:

(Start: 4 @66900 has 252 MA's), (5, 66861), (6, 66834), (8, 66747), (9, 66708), (10, 66666), (12, 66540), (13, 66519), (14, 66507), (16, 66321), (17, 66282), (18, 66264),

Gene: Etaye\_96 Start: 67629, Stop: 66898, Start Num: 4

Candidate Starts for Etaye\_96:

(Start: 4 @67629 has 252 MA's), (5, 67590), (6, 67563), (8, 67476), (9, 67437), (10, 67395), (12, 67269), (13, 67248), (14, 67236), (15, 67164), (16, 67050), (17, 67011), (18, 66993),

Gene: Eugenia\_99 Start: 67564, Stop: 66833, Start Num: 4

Candidate Starts for Eugenia\_99:

(Start: 4 @67564 has 252 MA's), (5, 67525), (6, 67498), (8, 67411), (9, 67372), (10, 67330), (12, 67204), (13, 67183), (14, 67171), (15, 67099), (16, 66985), (17, 66946), (18, 66928),

Gene: Fang\_97 Start: 66994, Stop: 66263, Start Num: 4

Candidate Starts for Fang\_97:

(Start: 4 @66994 has 252 MA's), (5, 66955), (6, 66928), (8, 66841), (9, 66802), (10, 66760), (12, 66634), (13, 66613), (14, 66601), (15, 66529), (16, 66415), (17, 66376), (18, 66358),

Gene: FluffyNinja\_98 Start: 67141, Stop: 66410, Start Num: 4

Candidate Starts for FluffyNinja\_98:

(Start: 4 @67141 has 252 MA's), (5, 67102), (6, 67075), (8, 66988), (9, 66949), (10, 66907), (12, 66781), (13, 66760), (14, 66748), (15, 66676), (16, 66562), (17, 66523), (18, 66505),

Gene: Fozzie\_93 Start: 67190, Stop: 66459, Start Num: 4

Candidate Starts for Fozzie\_93:

(Start: 4 @67190 has 252 MA's), (5, 67151), (6, 67124), (9, 66998), (10, 66956), (12, 66830), (13, 66809), (14, 66797), (15, 66725), (16, 66611), (17, 66572), (18, 66554),

Gene: Frankicide\_94 Start: 66690, Stop: 65959, Start Num: 4

Candidate Starts for Frankicide\_94:

(2, 66909), (3, 66807), (Start: 4 @66690 has 252 MA's), (5, 66651), (6, 66624), (7, 66588), (8, 66537), (9, 66498), (10, 66456), (12, 66330), (13, 66309), (14, 66297), (15, 66225), (16, 66111), (17, 66072), (18, 66054),

Gene: Freya\_93 Start: 66460, Stop: 65729, Start Num: 4

Candidate Starts for Freya\_93:

(Start: 4 @66460 has 252 MA's), (5, 66421), (6, 66394), (8, 66307), (9, 66268), (10, 66226), (12, 66100), (13, 66079), (14, 66067), (15, 65995), (16, 65881), (17, 65842), (18, 65824),

Gene: FriarPreacher\_94 Start: 66839, Stop: 66108, Start Num: 4

Candidate Starts for FriarPreacher\_94:

(Start: 4 @66839 has 252 MA's), (5, 66800), (6, 66773), (8, 66686), (9, 66647), (10, 66605), (12, 66479), (13, 66458), (14, 66446), (15, 66374), (16, 66260), (17, 66221), (18, 66203),

Gene: Fringe\_101 Start: 67616, Stop: 66885, Start Num: 4

Candidate Starts for Fringe\_101:

(Start: 4 @67616 has 252 MA's), (5, 67577), (6, 67550), (8, 67463), (9, 67424), (10, 67382), (12, 67256), (13, 67235), (14, 67223), (15, 67151), (16, 67037), (17, 66998), (18, 66980),

Gene: FugateOSU\_97 Start: 67901, Stop: 67170, Start Num: 4

Candidate Starts for FugateOSU\_97:

(Start: 4 @67901 has 252 MA's), (5, 67862), (6, 67835), (8, 67748), (9, 67709), (10, 67667), (12, 67541), (13, 67520), (14, 67508), (15, 67436), (16, 67322), (17, 67283), (18, 67265),

Gene: Gareth\_97 Start: 67290, Stop: 66559, Start Num: 4

Candidate Starts for Gareth\_97:

(Start: 4 @67290 has 252 MA's), (5, 67251), (6, 67224), (8, 67137), (9, 67098), (10, 67056), (12, 66930), (13, 66909), (14, 66897), (15, 66825), (16, 66711), (17, 66672), (18, 66654),

Gene: GeneCoco\_96 Start: 67226, Stop: 66495, Start Num: 4

Candidate Starts for GeneCoco\_96:

(Start: 4 @67226 has 252 MA's), (5, 67187), (6, 67160), (8, 67073), (9, 67034), (10, 66992), (12, 66866), (13, 66845), (14, 66833), (15, 66761), (16, 66647), (17, 66608), (18, 66590),

Gene: Giraffe\_98 Start: 67294, Stop: 66563, Start Num: 4

Candidate Starts for Giraffe\_98:

(Start: 4 @67294 has 252 MA's), (5, 67255), (6, 67228), (8, 67141), (9, 67102), (10, 67060), (12, 66934), (13, 66913), (14, 66901), (15, 66829), (16, 66715), (17, 66676), (18, 66658),

Gene: Gophee\_96 Start: 67281, Stop: 66550, Start Num: 4

Candidate Starts for Gophee\_96:

(Start: 4 @67281 has 252 MA's), (5, 67242), (6, 67215), (8, 67128), (9, 67089), (10, 67047), (12, 66921), (13, 66900), (14, 66888), (15, 66816), (16, 66702), (17, 66663), (18, 66645),

Gene: Grand2040\_94 Start: 67016, Stop: 66285, Start Num: 4

Candidate Starts for Grand2040\_94:

(Start: 4 @67016 has 252 MA's), (5, 66977), (6, 66950), (8, 66863), (9, 66824), (10, 66782), (12, 66656), (13, 66635), (14, 66623), (15, 66551), (16, 66437), (17, 66398), (18, 66380),

Gene: Gwilliam\_97 Start: 67824, Stop: 67093, Start Num: 4

Candidate Starts for Gwilliam\_97:

(2, 68043), (3, 67941), (Start: 4 @67824 has 252 MA's), (5, 67785), (6, 67758), (8, 67671), (9, 67632), (10, 67590), (12, 67464), (13, 67443), (14, 67431), (15, 67359), (16, 67245), (17, 67206), (18, 67188),

Gene: Haimas\_94 Start: 66721, Stop: 65990, Start Num: 4

Candidate Starts for Haimas\_94:

(Start: 4 @66721 has 252 MA's), (5, 66682), (6, 66655), (8, 66568), (9, 66529), (10, 66487), (12, 66361), (13, 66340), (14, 66328), (15, 66256), (16, 66142), (17, 66103), (18, 66085),

Gene: Haleema\_96 Start: 66840, Stop: 66109, Start Num: 4

Candidate Starts for Haleema\_96:

(Start: 4 @66840 has 252 MA's), (5, 66801), (6, 66774), (8, 66687), (9, 66648), (10, 66606), (12, 66480), (13, 66459), (14, 66447), (15, 66375), (16, 66261), (17, 66222), (18, 66204),

Gene: Hamish\_94 Start: 67009, Stop: 66278, Start Num: 4

Candidate Starts for Hamish\_94:

(Start: 4 @67009 has 252 MA's), (5, 66970), (6, 66943), (8, 66856), (9, 66817), (10, 66775), (12, 66649), (13, 66628), (14, 66616), (15, 66544), (16, 66430), (17, 66391), (18, 66373),

Gene: Hartsy\_95 Start: 66958, Stop: 66227, Start Num: 4

Candidate Starts for Hartsy\_95:

(Start: 4 @66958 has 252 MA's), (5, 66919), (6, 66892), (8, 66805), (9, 66766), (10, 66724), (11, 66637), (12, 66598), (13, 66577), (14, 66565), (15, 66493), (16, 66379), (17, 66340), (18, 66322),

Gene: Harvey\_94 Start: 66617, Stop: 65886, Start Num: 4

Candidate Starts for Harvey\_94:

(Start: 4 @66617 has 252 MA's), (5, 66578), (6, 66551), (8, 66464), (9, 66425), (12, 66257), (13, 66236), (14, 66224), (15, 66152), (16, 66038), (17, 65999), (18, 65981),

Gene: Held\_95 Start: 66738, Stop: 66007, Start Num: 4

Candidate Starts for Held\_95:

(Start: 4 @66738 has 252 MA's), (5, 66699), (6, 66672), (8, 66585), (9, 66546), (10, 66504), (12, 66378), (13, 66357), (14, 66345), (15, 66273), (16, 66159), (17, 66120), (18, 66102),

Gene: HenryJackson\_97 Start: 67458, Stop: 66727, Start Num: 4

Candidate Starts for HenryJackson\_97:

(Start: 4 @67458 has 252 MA's), (5, 67419), (6, 67392), (8, 67305), (9, 67266), (10, 67224), (12, 67098), (13, 67077), (14, 67065), (15, 66993), (16, 66879), (17, 66840), (18, 66822),

Gene: Hertubise\_96 Start: 67100, Stop: 66369, Start Num: 4

Candidate Starts for Hertubise\_96:

(Start: 4 @67100 has 252 MA's), (5, 67061), (6, 67034), (8, 66947), (9, 66908), (10, 66866), (12, 66740), (13, 66719), (14, 66707), (15, 66635), (16, 66521), (17, 66482), (18, 66464),

Gene: Hetaeria\_96 Start: 66830, Stop: 66099, Start Num: 4

Candidate Starts for Hetaeria\_96:

(Start: 4 @66830 has 252 MA's), (5, 66791), (6, 66764), (8, 66677), (9, 66638), (10, 66596), (12, 66470), (13, 66449), (14, 66437), (15, 66365), (16, 66251), (17, 66212), (18, 66194),

Gene: HighStump\_99 Start: 67245, Stop: 66514, Start Num: 4

Candidate Starts for HighStump\_99:

(Start: 4 @67245 has 252 MA's), (5, 67206), (6, 67179), (8, 67092), (9, 67053), (10, 67011), (12, 66885), (13, 66864), (14, 66852), (15, 66780), (16, 66666), (17, 66627), (18, 66609),

Gene: Hocus\_96 Start: 66759, Stop: 66028, Start Num: 4

Candidate Starts for Hocus\_96:

(Start: 4 @66759 has 252 MA's), (5, 66720), (6, 66693), (8, 66606), (9, 66567), (10, 66525), (12, 66399), (13, 66378), (14, 66366), (15, 66294), (16, 66180), (17, 66141), (18, 66123),

Gene: ImtiyazSitla\_98 Start: 67284, Stop: 66532, Start Num: 4

Candidate Starts for ImtiyazSitla\_98:

(2, 67503), (3, 67401), (Start: 4 @67284 has 252 MA's), (5, 67245), (8, 67131), (9, 67092), (12, 66924), (13, 66903), (14, 66891), (15, 66819), (16, 66705), (17, 66666), (18, 66648),

Gene: Inchworm\_98 Start: 67132, Stop: 66401, Start Num: 4

Candidate Starts for Inchworm\_98:

(Start: 4 @67132 has 252 MA's), (5, 67093), (6, 67066), (8, 66979), (9, 66940), (10, 66898), (12, 66772), (13, 66751), (14, 66739), (15, 66667), (16, 66553), (17, 66514), (18, 66496),

Gene: Inverness\_94 Start: 66689, Stop: 65958, Start Num: 4

Candidate Starts for Inverness\_94:

(Start: 4 @66689 has 252 MA's), (5, 66650), (6, 66623), (8, 66536), (9, 66497), (10, 66455), (12, 66329), (13, 66308), (14, 66296), (15, 66224), (16, 66110), (17, 66071), (18, 66053),

Gene: Iridoclysis\_96 Start: 67022, Stop: 66291, Start Num: 4

Candidate Starts for Iridoclysis\_96:

(Start: 4 @67022 has 252 MA's), (5, 66983), (6, 66956), (8, 66869), (9, 66830), (10, 66788), (12, 66662), (13, 66641), (14, 66629), (15, 66557), (16, 66443), (17, 66404), (18, 66386),

Gene: IsaacEli\_99 Start: 67263, Stop: 66532, Start Num: 4

Candidate Starts for IsaacEli\_99:

(2, 67482), (3, 67380), (Start: 4 @67263 has 252 MA's), (5, 67224), (6, 67197), (8, 67110), (9, 67071), (10, 67029), (12, 66903), (13, 66882), (14, 66870), (15, 66798), (16, 66684), (17, 66645), (18, 66627),

Gene: JDog\_96 Start: 67292, Stop: 66561, Start Num: 4

Candidate Starts for JDog\_96:

(Start: 4 @67292 has 252 MA's), (5, 67253), (6, 67226), (8, 67139), (9, 67100), (10, 67058), (12, 66932), (13, 66911), (14, 66899), (15, 66827), (16, 66713), (17, 66674), (18, 66656),

Gene: JacAttac\_97 Start: 66736, Stop: 66005, Start Num: 4

Candidate Starts for JacAttac\_97:

(Start: 4 @66736 has 252 MA's), (5, 66697), (6, 66670), (8, 66583), (9, 66544), (10, 66502), (12, 66376), (13, 66355), (14, 66343), (15, 66271), (16, 66157), (17, 66118), (18, 66100),

Gene: JakeO\_98 Start: 67020, Stop: 66289, Start Num: 4

Candidate Starts for JakeO\_98:

(Start: 4 @67020 has 252 MA's), (5, 66981), (6, 66954), (8, 66867), (9, 66828), (10, 66786), (12, 66660), (13, 66639), (14, 66627), (15, 66555), (16, 66441), (17, 66402), (18, 66384),

Gene: JangoPhett\_95 Start: 67098, Stop: 66367, Start Num: 4

Candidate Starts for JangoPhett\_95:

(Start: 4 @67098 has 252 MA's), (5, 67059), (6, 67032), (8, 66945), (9, 66906), (10, 66864), (12, 66738), (13, 66717), (14, 66705), (15, 66633), (16, 66519), (17, 66480), (18, 66462),

Gene: Jillium\_97 Start: 67175, Stop: 66444, Start Num: 4

Candidate Starts for Jillium\_97:

(Start: 4 @67175 has 252 MA's), (5, 67136), (6, 67109), (8, 67022), (9, 66983), (10, 66941), (12, 66815), (13, 66794), (14, 66782), (15, 66710), (16, 66596), (17, 66557), (18, 66539),

Gene: Jiminy\_97 Start: 66956, Stop: 66225, Start Num: 4

Candidate Starts for Jiminy\_97:

(Start: 4 @66956 has 252 MA's), (5, 66917), (6, 66890), (8, 66803), (9, 66764), (10, 66722), (12, 66596), (13, 66575), (14, 66563), (15, 66491), (16, 66377), (17, 66338), (18, 66320),

Gene: Jiraiya\_102 Start: 67040, Stop: 66309, Start Num: 4

Candidate Starts for Jiraiya\_102:

(Start: 4 @67040 has 252 MA's), (5, 67001), (6, 66974), (8, 66887), (9, 66848), (10, 66806), (12, 66680), (13, 66659), (14, 66647), (15, 66575), (16, 66461), (17, 66422), (18, 66404),

Gene: KLucky39\_94 Start: 66560, Stop: 65829, Start Num: 4

Candidate Starts for KLucky39\_94:

(Start: 4 @66560 has 252 MA's), (5, 66521), (6, 66494), (8, 66407), (9, 66368), (10, 66326), (12, 66200), (13, 66179), (14, 66167), (15, 66095), (16, 65981), (17, 65942), (18, 65924),

Gene: Kahve\_97 Start: 67456, Stop: 66725, Start Num: 4

Candidate Starts for Kahve\_97:

(Start: 4 @67456 has 252 MA's), (5, 67417), (6, 67390), (8, 67303), (9, 67264), (10, 67222), (12, 67096), (13, 67075), (14, 67063), (15, 66991), (16, 66877), (17, 66838), (18, 66820),

Gene: Kailash\_95 Start: 67155, Stop: 66424, Start Num: 4

Candidate Starts for Kailash\_95:

(2, 67374), (3, 67272), (Start: 4 @67155 has 252 MA's), (5, 67116), (8, 67002), (9, 66963), (12, 66795), (13, 66774), (14, 66762), (15, 66690), (16, 66576), (17, 66537), (18, 66519),

Gene: Katniss\_99 Start: 66872, Stop: 66141, Start Num: 4

Candidate Starts for Katniss\_99:

(Start: 4 @66872 has 252 MA's), (5, 66833), (6, 66806), (8, 66719), (9, 66680), (10, 66638), (12, 66512), (13, 66491), (14, 66479), (15, 66407), (16, 66293), (17, 66254), (18, 66236),

Gene: Keitherie\_100 Start: 67514, Stop: 66783, Start Num: 4

Candidate Starts for Keitherie\_100:

(Start: 4 @67514 has 252 MA's), (5, 67475), (6, 67448), (8, 67361), (9, 67322), (10, 67280), (12, 67154), (13, 67133), (14, 67121), (15, 67049), (16, 66935), (17, 66896), (18, 66878),

Gene: Kikipoo\_99 Start: 67263, Stop: 66532, Start Num: 4

Candidate Starts for Kikipoo\_99:

(2, 67482), (3, 67380), (Start: 4 @67263 has 252 MA's), (5, 67224), (6, 67197), (8, 67110), (9, 67071), (10, 67029), (12, 66903), (13, 66882), (14, 66870), (15, 66798), (16, 66684), (17, 66645), (18, 66627),

Gene: Kimbrough\_98 Start: 67335, Stop: 66604, Start Num: 4

Candidate Starts for Kimbrough\_98:

(Start: 4 @67335 has 252 MA's), (5, 67296), (6, 67269), (8, 67182), (9, 67143), (10, 67101), (12, 66975), (13, 66954), (14, 66942), (15, 66870), (16, 66756), (17, 66717), (18, 66699),

Gene: KingTut\_87 Start: 63252, Stop: 62521, Start Num: 4

Candidate Starts for KingTut\_87:

(Start: 4 @63252 has 252 MA's), (5, 63213), (6, 63186), (8, 63099), (9, 63060), (10, 63018), (12, 62892), (13, 62871), (14, 62859), (15, 62787), (16, 62673), (17, 62634), (18, 62616),

Gene: KingVeVeVe\_95 Start: 66468, Stop: 65737, Start Num: 4

Candidate Starts for KingVeVeVe\_95:

(2, 66687), (3, 66585), (Start: 4 @66468 has 252 MA's), (5, 66429), (6, 66402), (9, 66276), (10, 66234), (12, 66108), (13, 66087), (14, 66075), (16, 65889), (17, 65850), (18, 65832),

Gene: KlimbOn\_96 Start: 66775, Stop: 66044, Start Num: 4

Candidate Starts for KlimbOn\_96:

(Start: 4 @66775 has 252 MA's), (5, 66736), (6, 66709), (8, 66622), (9, 66583), (10, 66541), (12, 66415), (13, 66394), (14, 66382), (15, 66310), (16, 66196), (17, 66157), (18, 66139),

Gene: Kloppinator\_97 Start: 66905, Stop: 66174, Start Num: 4

Candidate Starts for Kloppinator\_97:

(Start: 4 @66905 has 252 MA's), (5, 66866), (6, 66839), (8, 66752), (9, 66713), (12, 66545), (13, 66524), (14, 66512), (15, 66440), (16, 66326), (17, 66287), (18, 66269),

Gene: Kwadwo\_96 Start: 66759, Stop: 66028, Start Num: 4

Candidate Starts for Kwadwo\_96:

(Start: 4 @66759 has 252 MA's), (5, 66720), (6, 66693), (8, 66606), (9, 66567), (10, 66525), (12, 66399), (13, 66378), (14, 66366), (15, 66294), (16, 66180), (17, 66141), (18, 66123),

Gene: Kwksand96\_98 Start: 67025, Stop: 66294, Start Num: 4

Candidate Starts for Kwksand96\_98:

(Start: 4 @67025 has 252 MA's), (5, 66986), (6, 66959), (9, 66833), (10, 66791), (12, 66665), (13, 66644), (14, 66632), (15, 66560), (16, 66446), (17, 66407), (18, 66389),

Gene: Labeouficaum\_97 Start: 66839, Stop: 66108, Start Num: 4

Candidate Starts for Labeouficaum\_97:

(2, 67058), (3, 66956), (Start: 4 @66839 has 252 MA's), (5, 66800), (8, 66686), (9, 66647), (12, 66479), (13, 66458), (14, 66446), (15, 66374), (16, 66260), (17, 66221), (18, 66203),

Gene: LasagnaCat\_98 Start: 67141, Stop: 66410, Start Num: 4

Candidate Starts for LasagnaCat\_98:

(Start: 4 @67141 has 252 MA's), (5, 67102), (6, 67075), (8, 66988), (9, 66949), (10, 66907), (12, 66781), (13, 66760), (14, 66748), (15, 66676), (16, 66562), (17, 66523), (18, 66505),



Gene: Lasso\_96 Start: 67001, Stop: 66270, Start Num: 4

Candidate Starts for Lasso\_96:

(Start: 4 @67001 has 252 MA's), (5, 66962), (6, 66935), (8, 66848), (9, 66809), (10, 66767), (12, 66641), (13, 66620), (14, 66608), (15, 66536), (16, 66422), (17, 66383), (18, 66365),

Gene: LeeLot\_95 Start: 67346, Stop: 66615, Start Num: 4

Candidate Starts for LeeLot\_95:

(Start: 4 @67346 has 252 MA's), (5, 67307), (6, 67280), (8, 67193), (9, 67154), (10, 67112), (12, 66986), (13, 66965), (14, 66953), (15, 66881), (16, 66767), (17, 66728), (18, 66710),

Gene: Lego3393\_95 Start: 67462, Stop: 66731, Start Num: 4

Candidate Starts for Lego3393\_95:

(Start: 4 @67462 has 252 MA's), (5, 67423), (6, 67396), (8, 67309), (9, 67270), (10, 67228), (12, 67102), (13, 67081), (14, 67069), (15, 66997), (16, 66883), (17, 66844), (18, 66826),

Gene: Legolas\_98 Start: 67089, Stop: 66358, Start Num: 4

Candidate Starts for Legolas\_98:

(Start: 4 @67089 has 252 MA's), (5, 67050), (6, 67023), (8, 66936), (9, 66897), (10, 66855), (12, 66729), (13, 66708), (14, 66696), (15, 66624), (16, 66510), (17, 66471), (18, 66453),

Gene: LeiMonet\_99 Start: 67222, Stop: 66491, Start Num: 4

Candidate Starts for LeiMonet\_99:

(Start: 4 @67222 has 252 MA's), (5, 67183), (6, 67156), (8, 67069), (9, 67030), (10, 66988), (12, 66862), (13, 66841), (14, 66829), (15, 66757), (16, 66643), (17, 66604), (18, 66586),

Gene: LemonSlice\_97 Start: 66748, Stop: 66017, Start Num: 4

Candidate Starts for LemonSlice\_97:

(Start: 4 @66748 has 252 MA's), (5, 66709), (6, 66682), (8, 66595), (9, 66556), (10, 66514), (12, 66388), (13, 66367), (14, 66355), (15, 66283), (16, 66169), (17, 66130), (18, 66112),

Gene: Longacauda\_97 Start: 66983, Stop: 66231, Start Num: 4

Candidate Starts for Longacauda\_97:

(Start: 4 @66983 has 252 MA's), (5, 66944), (6, 66917), (8, 66830), (9, 66791), (10, 66749), (12, 66623), (13, 66602), (14, 66590), (15, 66518), (16, 66404), (17, 66365), (18, 66347),

Gene: Lopsy\_93 Start: 66654, Stop: 65923, Start Num: 4

Candidate Starts for Lopsy\_93:

(Start: 4 @66654 has 252 MA's), (5, 66615), (6, 66588), (8, 66501), (9, 66462), (10, 66420), (12, 66294), (13, 66273), (14, 66261), (16, 66075), (17, 66036), (18, 66018),

Gene: LostAndPhound\_96 Start: 67290, Stop: 66559, Start Num: 4

Candidate Starts for LostAndPhound\_96:

(Start: 4 @67290 has 252 MA's), (5, 67251), (6, 67224), (8, 67137), (9, 67098), (10, 67056), (12, 66930), (13, 66909), (14, 66897), (15, 66825), (16, 66711), (17, 66672), (18, 66654),

Gene: LuckyMarjie\_94 Start: 66500, Stop: 65769, Start Num: 4

Candidate Starts for LuckyMarjie\_94:

(Start: 4 @66500 has 252 MA's), (5, 66461), (6, 66434), (8, 66347), (9, 66308), (10, 66266), (12, 66140), (13, 66119), (14, 66107), (15, 66035), (16, 65921), (17, 65882), (18, 65864),

Gene: Lulumae\_92 Start: 66481, Stop: 65750, Start Num: 4

Candidate Starts for Lulumae\_92:

(Start: 4 @66481 has 252 MA's), (5, 66442), (6, 66415), (9, 66289), (10, 66247), (12, 66121), (13, 66100), (14, 66088), (15, 66016), (16, 65902), (17, 65863), (18, 65845),

Gene: Lulwa\_94 Start: 66114, Stop: 65383, Start Num: 4

Candidate Starts for Lulwa\_94:

(Start: 4 @66114 has 252 MA's), (5, 66075), (6, 66048), (8, 65961), (9, 65922), (10, 65880), (12, 65754), (13, 65733), (14, 65721), (15, 65649), (16, 65535), (17, 65496), (18, 65478),

Gene: Lumine\_98 Start: 66938, Stop: 66207, Start Num: 4

Candidate Starts for Lumine\_98:

(Start: 4 @66938 has 252 MA's), (5, 66899), (6, 66872), (8, 66785), (9, 66746), (10, 66704), (12, 66578), (13, 66557), (14, 66545), (15, 66473), (16, 66359), (17, 66320), (18, 66302),

Gene: MRabcd\_97 Start: 67216, Stop: 66485, Start Num: 4

Candidate Starts for MRabcd\_97:

(Start: 4 @67216 has 252 MA's), (5, 67177), (6, 67150), (8, 67063), (9, 67024), (10, 66982), (12, 66856), (13, 66835), (14, 66823), (15, 66751), (16, 66637), (17, 66598), (18, 66580),

Gene: Mag7\_95 Start: 66699, Stop: 65968, Start Num: 4

Candidate Starts for Mag7\_95:

(2, 66918), (3, 66816), (Start: 4 @66699 has 252 MA's), (5, 66660), (8, 66546), (9, 66507), (12, 66339), (13, 66318), (14, 66306), (15, 66234), (16, 66120), (17, 66081), (18, 66063),

Gene: Magic8\_96 Start: 67067, Stop: 66336, Start Num: 4

Candidate Starts for Magic8\_96:

(2, 67286), (3, 67184), (Start: 4 @67067 has 252 MA's), (5, 67028), (8, 66914), (9, 66875), (12, 66707), (13, 66686), (14, 66674), (15, 66602), (16, 66488), (17, 66449), (18, 66431),

Gene: Mana\_94 Start: 66904, Stop: 66173, Start Num: 4

Candidate Starts for Mana\_94:

(Start: 4 @66904 has 252 MA's), (5, 66865), (6, 66838), (8, 66751), (9, 66712), (10, 66670), (12, 66544), (13, 66523), (14, 66511), (15, 66439), (16, 66325), (17, 66286), (18, 66268),

Gene: Manad\_96 Start: 67013, Stop: 66282, Start Num: 4

Candidate Starts for Manad\_96:

(Start: 4 @67013 has 252 MA's), (5, 66974), (6, 66947), (8, 66860), (9, 66821), (10, 66779), (12, 66653), (13, 66632), (14, 66620), (15, 66548), (16, 66434), (17, 66395), (18, 66377),

Gene: Maru\_96 Start: 67109, Stop: 66378, Start Num: 4

Candidate Starts for Maru\_96:

(Start: 4 @67109 has 252 MA's), (5, 67070), (6, 67043), (8, 66956), (9, 66917), (10, 66875), (12, 66749), (13, 66728), (14, 66716), (15, 66644), (16, 66530), (17, 66491), (18, 66473),

Gene: Maskar\_98 Start: 67284, Stop: 66532, Start Num: 4

Candidate Starts for Maskar\_98:

(2, 67503), (3, 67401), (Start: 4 @67284 has 252 MA's), (5, 67245), (8, 67131), (9, 67092), (12, 66924), (13, 66903), (14, 66891), (15, 66819), (16, 66705), (17, 66666), (18, 66648),

Gene: Matalotodo\_95 Start: 67748, Stop: 67017, Start Num: 4

Candidate Starts for Matalotodo\_95:

(Start: 4 @67748 has 252 MA's), (5, 67709), (6, 67682), (8, 67595), (9, 67556), (10, 67514), (12, 67388), (13, 67367), (14, 67355), (15, 67283), (16, 67169), (17, 67130), (18, 67112),

Gene: Mcshane\_99 Start: 67131, Stop: 66400, Start Num: 4

Candidate Starts for Mcshane\_99:

(Start: 4 @67131 has 252 MA's), (5, 67092), (6, 67065), (8, 66978), (9, 66939), (10, 66897), (12, 66771), (13, 66750), (14, 66738), (15, 66666), (16, 66552), (17, 66513), (18, 66495),

Gene: Mecca\_97 Start: 67315, Stop: 66584, Start Num: 4

Candidate Starts for Mecca\_97:

(Start: 4 @67315 has 252 MA's), (5, 67276), (6, 67249), (8, 67162), (9, 67123), (10, 67081), (12, 66955), (13, 66934), (14, 66922), (15, 66850), (16, 66736), (17, 66697), (18, 66679),

Gene: Megamind20\_99 Start: 67095, Stop: 66364, Start Num: 4

Candidate Starts for Megamind20\_99:

(Start: 4 @67095 has 252 MA's), (5, 67056), (6, 67029), (9, 66903), (10, 66861), (12, 66735), (13, 66714), (14, 66702), (15, 66630), (16, 66516), (17, 66477), (18, 66459),

Gene: Megatron\_98 Start: 67434, Stop: 66703, Start Num: 4

Candidate Starts for Megatron\_98:

(Start: 4 @67434 has 252 MA's), (5, 67395), (6, 67368), (8, 67281), (9, 67242), (10, 67200), (12, 67074), (13, 67053), (14, 67041), (15, 66969), (16, 66855), (17, 66816), (18, 66798),

Gene: Melc17\_94 Start: 67384, Stop: 66653, Start Num: 4

Candidate Starts for Melc17\_94:

(Start: 4 @67384 has 252 MA's), (5, 67345), (6, 67318), (8, 67231), (9, 67192), (10, 67150), (12, 67024), (13, 67003), (14, 66991), (15, 66919), (16, 66805), (17, 66766), (18, 66748),

Gene: MelsMeow\_95 Start: 66765, Stop: 66013, Start Num: 4

Candidate Starts for MelsMeow\_95:

(2, 66984), (3, 66882), (Start: 4 @66765 has 252 MA's), (5, 66726), (8, 66612), (9, 66573), (12, 66405), (13, 66384), (14, 66372), (15, 66300), (16, 66186), (17, 66147), (18, 66129),

Gene: Mesh1\_97 Start: 67199, Stop: 66468, Start Num: 4

Candidate Starts for Mesh1\_97:

(Start: 4 @67199 has 252 MA's), (5, 67160), (6, 67133), (8, 67046), (9, 67007), (10, 66965), (12, 66839), (13, 66818), (14, 66806), (15, 66734), (16, 66620), (17, 66581), (18, 66563),

Gene: MichaelPhcott\_95 Start: 66696, Stop: 65965, Start Num: 4

Candidate Starts for MichaelPhcott\_95:

(2, 66915), (3, 66813), (Start: 4 @66696 has 252 MA's), (5, 66657), (8, 66543), (9, 66504), (12, 66336), (13, 66315), (14, 66303), (15, 66231), (16, 66117), (17, 66078), (18, 66060),

Gene: Mikota\_91 Start: 66191, Stop: 65460, Start Num: 4

Candidate Starts for Mikota\_91:

(Start: 4 @66191 has 252 MA's), (5, 66152), (6, 66125), (8, 66038), (9, 65999), (12, 65831), (13, 65810), (14, 65798), (15, 65726), (16, 65612), (17, 65573), (18, 65555),

Gene: MiniBoss\_92 Start: 65812, Stop: 65081, Start Num: 4

Candidate Starts for MiniBoss\_92:

(2, 66031), (3, 65929), (Start: 4 @65812 has 252 MA's), (5, 65773), (6, 65746), (7, 65710), (8, 65659), (9, 65620), (10, 65578), (12, 65452), (13, 65431), (14, 65419), (16, 65233), (17, 65194), (18, 65176),

Gene: MitKao\_97 Start: 66917, Stop: 66186, Start Num: 4

Candidate Starts for MitKao\_97:

(Start: 4 @66917 has 252 MA's), (5, 66878), (6, 66851), (8, 66764), (9, 66725), (10, 66683), (12, 66557), (13, 66536), (14, 66524), (15, 66452), (16, 66338), (17, 66299), (18, 66281),

Gene: Morgushi\_94 Start: 66732, Stop: 66001, Start Num: 4

Candidate Starts for Morgushi\_94:

(Start: 4 @66732 has 252 MA's), (5, 66693), (6, 66666), (8, 66579), (9, 66540), (10, 66498), (12, 66372), (13, 66351), (14, 66339), (15, 66267), (16, 66153), (17, 66114), (18, 66096),

Gene: Morty\_97 Start: 67302, Stop: 66571, Start Num: 4

Candidate Starts for Morty\_97:

(Start: 4 @67302 has 252 MA's), (5, 67263), (6, 67236), (8, 67149), (9, 67110), (10, 67068), (12, 66942), (13, 66921), (14, 66909), (15, 66837), (16, 66723), (17, 66684), (18, 66666),

Gene: Mosaic\_94 Start: 66913, Stop: 66182, Start Num: 4

Candidate Starts for Mosaic\_94:

(Start: 4 @66913 has 252 MA's), (5, 66874), (6, 66847), (8, 66760), (9, 66721), (10, 66679), (12, 66553), (13, 66532), (14, 66520), (15, 66448), (16, 66334), (17, 66295), (18, 66277),

Gene: MrPhizzler\_96 Start: 67212, Stop: 66481, Start Num: 4

Candidate Starts for MrPhizzler\_96:

(Start: 4 @67212 has 252 MA's), (5, 67173), (6, 67146), (9, 67020), (10, 66978), (12, 66852), (13, 66831), (14, 66819), (15, 66747), (16, 66633), (17, 66594), (18, 66576),

Gene: Mulan\_96 Start: 66946, Stop: 66215, Start Num: 4

Candidate Starts for Mulan\_96:

(Start: 4 @66946 has 252 MA's), (5, 66907), (6, 66880), (8, 66793), (9, 66754), (10, 66712), (12, 66586), (13, 66565), (14, 66553), (15, 66481), (16, 66367), (17, 66328), (18, 66310),

Gene: Murdoc\_93 Start: 67025, Stop: 66294, Start Num: 4

Candidate Starts for Murdoc\_93:

(Start: 4 @67025 has 252 MA's), (5, 66986), (6, 66959), (8, 66872), (9, 66833), (10, 66791), (12, 66665), (13, 66644), (14, 66632), (15, 66560), (16, 66446), (17, 66407), (18, 66389),

Gene: Mutante\_98 Start: 66919, Stop: 66188, Start Num: 4

Candidate Starts for Mutante\_98:

(Start: 4 @66919 has 252 MA's), (5, 66880), (6, 66853), (8, 66766), (9, 66727), (10, 66685), (12, 66559), (13, 66538), (14, 66526), (15, 66454), (16, 66340), (17, 66301), (18, 66283),

Gene: Nacho\_0099 Start: 67746, Stop: 67015, Start Num: 4

Candidate Starts for Nacho\_0099:

(Start: 4 @67746 has 252 MA's), (5, 67707), (6, 67680), (8, 67593), (9, 67554), (10, 67512), (12, 67386), (13, 67365), (14, 67353), (15, 67281), (16, 67167), (17, 67128), (18, 67110),

Gene: Newman\_92 Start: 67023, Stop: 66292, Start Num: 4

Candidate Starts for Newman\_92:

(Start: 4 @67023 has 252 MA's), (5, 66984), (6, 66957), (8, 66870), (9, 66831), (10, 66789), (12, 66663), (13, 66642), (14, 66630), (15, 66558), (16, 66444), (17, 66405), (18, 66387),

Gene: Nicole21\_98 Start: 67053, Stop: 66322, Start Num: 4

Candidate Starts for Nicole21\_98:

(Start: 4 @67053 has 252 MA's), (5, 67014), (6, 66987), (8, 66900), (9, 66861), (10, 66819), (12, 66693), (13, 66672), (14, 66660), (15, 66588), (16, 66474), (17, 66435), (18, 66417),

Gene: Numberten\_97 Start: 67032, Stop: 66301, Start Num: 4

Candidate Starts for Numberten\_97:

(Start: 4 @67032 has 252 MA's), (5, 66993), (6, 66966), (8, 66879), (9, 66840), (10, 66798), (12, 66672), (13, 66651), (14, 66639), (15, 66567), (16, 66453), (17, 66414), (18, 66396),

Gene: Nyala\_97 Start: 66768, Stop: 66037, Start Num: 4

Candidate Starts for Nyala\_97:

(Start: 4 @66768 has 252 MA's), (5, 66729), (6, 66702), (8, 66615), (9, 66576), (10, 66534), (12, 66408), (13, 66387), (14, 66375), (15, 66303), (16, 66189), (17, 66150), (18, 66132),

Gene: OSmaximus\_97 Start: 67321, Stop: 66590, Start Num: 4

Candidate Starts for OSmaximus\_97:

(2, 67540), (3, 67438), (Start: 4 @67321 has 252 MA's), (5, 67282), (6, 67255), (7, 67219), (8, 67168), (9, 67129), (12, 66961), (13, 66940), (14, 66928), (15, 66856), (16, 66742), (17, 66703), (18, 66685),

Gene: Olak\_99 Start: 67301, Stop: 66570, Start Num: 4

Candidate Starts for Olak\_99:

(Start: 4 @67301 has 252 MA's), (5, 67262), (6, 67235), (8, 67148), (9, 67109), (10, 67067), (12, 66941), (13, 66920), (14, 66908), (15, 66836), (16, 66722), (17, 66683), (18, 66665),

Gene: Oline\_96 Start: 66923, Stop: 66192, Start Num: 4

Candidate Starts for Oline\_96:

(Start: 4 @66923 has 252 MA's), (5, 66884), (6, 66857), (8, 66770), (9, 66731), (10, 66689), (12, 66563), (13, 66542), (14, 66530), (15, 66458), (16, 66344), (17, 66305), (18, 66287),

Gene: Olive\_93 Start: 67165, Stop: 66434, Start Num: 4

Candidate Starts for Olive\_93:

(Start: 4 @67165 has 252 MA's), (5, 67126), (6, 67099), (8, 67012), (9, 66973), (10, 66931), (12, 66805), (13, 66784), (14, 66772), (15, 66700), (16, 66586), (17, 66547), (18, 66529),

Gene: OliverWalter\_96 Start: 67217, Stop: 66486, Start Num: 4

Candidate Starts for OliverWalter\_96:

(Start: 4 @67217 has 252 MA's), (5, 67178), (6, 67151), (8, 67064), (9, 67025), (10, 66983), (12, 66857), (13, 66836), (14, 66824), (15, 66752), (16, 66638), (17, 66599), (18, 66581),

Gene: Omniscient\_98 Start: 67622, Stop: 66891, Start Num: 4

Candidate Starts for Omniscient\_98:

(Start: 4 @67622 has 252 MA's), (5, 67583), (6, 67556), (8, 67469), (9, 67430), (10, 67388), (12, 67262), (13, 67241), (14, 67229), (15, 67157), (16, 67043), (17, 67004), (18, 66986),

Gene: Oosterbaan\_97 Start: 67160, Stop: 66429, Start Num: 4

Candidate Starts for Oosterbaan\_97:

(Start: 4 @67160 has 252 MA's), (5, 67121), (6, 67094), (8, 67007), (9, 66968), (10, 66926), (12, 66800), (13, 66779), (14, 66767), (15, 66695), (16, 66581), (17, 66542), (18, 66524),

Gene: Orfeu\_97 Start: 67281, Stop: 66550, Start Num: 4

Candidate Starts for Orfeu\_97:

(Start: 4 @67281 has 252 MA's), (5, 67242), (6, 67215), (8, 67128), (9, 67089), (10, 67047), (12, 66921), (13, 66900), (14, 66888), (15, 66816), (16, 66702), (17, 66663), (18, 66645),

Gene: Orion\_95 Start: 66852, Stop: 66121, Start Num: 4

Candidate Starts for Orion\_95:

(Start: 4 @66852 has 252 MA's), (5, 66813), (6, 66786), (8, 66699), (9, 66660), (10, 66618), (12, 66492), (13, 66471), (14, 66459), (15, 66387), (16, 66273), (17, 66234), (18, 66216),

Gene: Orwigg\_99 Start: 67057, Stop: 66326, Start Num: 4

Candidate Starts for Orwigg\_99:

(Start: 4 @67057 has 252 MA's), (5, 67018), (6, 66991), (8, 66904), (9, 66865), (10, 66823), (12, 66697), (13, 66676), (14, 66664), (15, 66592), (16, 66478), (17, 66439), (18, 66421),

Gene: PG1\_95 Start: 67424, Stop: 66693, Start Num: 4

Candidate Starts for PG1\_95:

(Start: 4 @67424 has 252 MA's), (5, 67385), (6, 67358), (8, 67271), (9, 67232), (10, 67190), (12, 67064), (13, 67043), (14, 67031), (15, 66959), (16, 66845), (17, 66806), (18, 66788),

Gene: Pacifista\_99 Start: 67142, Stop: 66411, Start Num: 4

Candidate Starts for Pacifista\_99:

(Start: 4 @67142 has 252 MA's), (5, 67103), (6, 67076), (8, 66989), (9, 66950), (10, 66908), (12, 66782), (13, 66761), (14, 66749), (15, 66677), (16, 66563), (17, 66524), (18, 66506),

Gene: Phamished\_96 Start: 66940, Stop: 66209, Start Num: 4

Candidate Starts for Phamished\_96:

(Start: 4 @66940 has 252 MA's), (5, 66901), (6, 66874), (8, 66787), (9, 66748), (10, 66706), (12, 66580), (13, 66559), (14, 66547), (15, 66475), (16, 66361), (17, 66322), (18, 66304),

Gene: Phareon\_94 Start: 66465, Stop: 65734, Start Num: 4

Candidate Starts for Phareon\_94:

(Start: 4 @66465 has 252 MA's), (5, 66426), (6, 66399), (8, 66312), (9, 66273), (10, 66231), (12, 66105), (13, 66084), (14, 66072), (15, 66000), (16, 65886), (17, 65847), (18, 65829),

Gene: PhatCats2014\_96 Start: 67425, Stop: 66694, Start Num: 4

Candidate Starts for PhatCats2014\_96:

(Start: 4 @67425 has 252 MA's), (5, 67386), (6, 67359), (8, 67272), (9, 67233), (10, 67191), (12, 67065), (13, 67044), (14, 67032), (15, 66960), (16, 66846), (17, 66807), (18, 66789),

Gene: PhatLouie\_99 Start: 67298, Stop: 66567, Start Num: 4

Candidate Starts for PhatLouie\_99:

(Start: 4 @67298 has 252 MA's), (5, 67259), (6, 67232), (8, 67145), (9, 67106), (10, 67064), (12, 66938), (13, 66917), (14, 66905), (15, 66833), (16, 66719), (17, 66680), (18, 66662),

Gene: PhenghisKhan\_97 Start: 66929, Stop: 66198, Start Num: 4

Candidate Starts for PhenghisKhan\_97:

(Start: 4 @66929 has 252 MA's), (5, 66890), (6, 66863), (8, 66776), (9, 66737), (10, 66695), (12, 66569), (13, 66548), (14, 66536), (15, 66464), (16, 66350), (17, 66311), (18, 66293),

Gene: Pherdinand\_98 Start: 67144, Stop: 66413, Start Num: 4

Candidate Starts for Pherdinand\_98:

(Start: 4 @67144 has 252 MA's), (5, 67105), (6, 67078), (8, 66991), (9, 66952), (10, 66910), (12, 66784), (13, 66763), (14, 66751), (15, 66679), (16, 66565), (17, 66526), (18, 66508),

Gene: Phergie\_97 Start: 66918, Stop: 66187, Start Num: 4

Candidate Starts for Phergie\_97:

(Start: 4 @66918 has 252 MA's), (5, 66879), (6, 66852), (8, 66765), (9, 66726), (10, 66684), (12, 66558), (13, 66537), (14, 66525), (15, 66453), (16, 66339), (17, 66300), (18, 66282),

Gene: Phipps\_94 Start: 66718, Stop: 65987, Start Num: 4

Candidate Starts for Phipps\_94:

(Start: 4 @66718 has 252 MA's), (5, 66679), (6, 66652), (8, 66565), (9, 66526), (10, 66484), (12, 66358), (13, 66337), (14, 66325), (15, 66253), (16, 66139), (17, 66100), (18, 66082),

Gene: Phleuron\_94 Start: 66729, Stop: 65998, Start Num: 4

Candidate Starts for Phleuron\_94:

(2, 66948), (3, 66846), (Start: 4 @66729 has 252 MA's), (5, 66690), (8, 66576), (9, 66537), (12, 66369), (13, 66348), (14, 66336), (15, 66264), (16, 66150), (17, 66111), (18, 66093),

Gene: PhrankReynolds\_95 Start: 66923, Stop: 66192, Start Num: 4

Candidate Starts for PhrankReynolds\_95:

(Start: 4 @66923 has 252 MA's), (5, 66884), (6, 66857), (8, 66770), (9, 66731), (10, 66689), (12, 66563), (13, 66542), (14, 66530), (15, 66458), (16, 66344), (17, 66305), (18, 66287),

Gene: PhrodoBaggins\_99 Start: 67298, Stop: 66567, Start Num: 4

Candidate Starts for PhrodoBaggins\_99:

(Start: 4 @67298 has 252 MA's), (5, 67259), (6, 67232), (8, 67145), (9, 67106), (10, 67064), (12, 66938), (13, 66917), (14, 66905), (15, 66833), (16, 66719), (17, 66680), (18, 66662),

Gene: Phunky\_94 Start: 66800, Stop: 66069, Start Num: 4

Candidate Starts for Phunky\_94:

(Start: 4 @66800 has 252 MA's), (5, 66761), (6, 66734), (8, 66647), (9, 66608), (10, 66566), (12, 66440), (13, 66419), (14, 66407), (15, 66335), (16, 66221), (17, 66182), (18, 66164),

Gene: Piglet\_0096 Start: 67417, Stop: 66686, Start Num: 4

Candidate Starts for Piglet\_0096:

(Start: 4 @67417 has 252 MA's), (5, 67378), (6, 67351), (8, 67264), (9, 67225), (10, 67183), (12, 67057), (13, 67036), (14, 67024), (15, 66952), (16, 66838), (17, 66799), (18, 66781),

Gene: PinheadLarry\_96 Start: 67069, Stop: 66338, Start Num: 4

Candidate Starts for PinheadLarry\_96:

(Start: 4 @67069 has 252 MA's), (5, 67030), (6, 67003), (8, 66916), (9, 66877), (10, 66835), (12, 66709), (13, 66688), (14, 66676), (15, 66604), (16, 66490), (17, 66451), (18, 66433),

Gene: Pinkman\_96 Start: 67141, Stop: 66410, Start Num: 4

Candidate Starts for Pinkman\_96:

(Start: 4 @67141 has 252 MA's), (5, 67102), (6, 67075), (9, 66949), (10, 66907), (12, 66781), (13, 66760), (14, 66748), (15, 66676), (16, 66562), (17, 66523), (18, 66505),

Gene: Pipsqueak\_94 Start: 66752, Stop: 66021, Start Num: 4

Candidate Starts for Pipsqueak\_94:

(Start: 4 @66752 has 252 MA's), (5, 66713), (6, 66686), (8, 66599), (9, 66560), (12, 66392), (13, 66371), (14, 66359), (15, 66287), (16, 66173), (17, 66134), (18, 66116),

Gene: Placalicious\_94 Start: 67510, Stop: 66779, Start Num: 4

Candidate Starts for Placalicious\_94:

(Start: 4 @67510 has 252 MA's), (5, 67471), (6, 67444), (8, 67357), (9, 67318), (10, 67276), (12, 67150), (13, 67129), (14, 67117), (15, 67045), (16, 66931), (17, 66892), (18, 66874),

Gene: Plmatters\_94 Start: 66743, Stop: 66012, Start Num: 4

Candidate Starts for Plmatters\_94:

(Start: 4 @66743 has 252 MA's), (5, 66704), (6, 66677), (8, 66590), (9, 66551), (10, 66509), (12, 66383), (13, 66362), (14, 66350), (15, 66278), (16, 66164), (17, 66125), (18, 66107),

Gene: Podrick\_95 Start: 66831, Stop: 66100, Start Num: 4

Candidate Starts for Podrick\_95:

(Start: 4 @66831 has 252 MA's), (5, 66792), (6, 66765), (8, 66678), (9, 66639), (10, 66597), (12, 66471), (13, 66450), (14, 66438), (15, 66366), (16, 66252), (17, 66213), (18, 66195),

Gene: Potter\_91 Start: 66752, Stop: 66021, Start Num: 4

Candidate Starts for Potter\_91:

(Start: 4 @66752 has 252 MA's), (5, 66713), (6, 66686), (8, 66599), (9, 66560), (10, 66518), (12, 66392), (13, 66371), (14, 66359), (15, 66287), (16, 66173), (17, 66134), (18, 66116),

Gene: Prickles\_97 Start: 66878, Stop: 66147, Start Num: 4

Candidate Starts for Prickles\_97:

(Start: 4 @66878 has 252 MA's), (5, 66839), (6, 66812), (8, 66725), (9, 66686), (10, 66644), (12, 66518), (13, 66497), (14, 66485), (15, 66413), (16, 66299), (17, 66260), (18, 66242),

Gene: ProfessorX\_94 Start: 66511, Stop: 65780, Start Num: 4

Candidate Starts for ProfessorX\_94:

(Start: 4 @66511 has 252 MA's), (5, 66472), (6, 66445), (8, 66358), (9, 66319), (10, 66277), (12, 66151), (13, 66130), (14, 66118), (15, 66046), (16, 65932), (17, 65893), (18, 65875),

Gene: Puhltonio\_92 Start: 66748, Stop: 66017, Start Num: 4

Candidate Starts for Puhltonio\_92:

(Start: 4 @66748 has 252 MA's), (5, 66709), (6, 66682), (8, 66595), (9, 66556), (10, 66514), (12, 66388), (13, 66367), (14, 66355), (15, 66283), (16, 66169), (17, 66130), (18, 66112),

Gene: QueenBeane\_97 Start: 67075, Stop: 66344, Start Num: 4

Candidate Starts for QueenBeane\_97:

(Start: 4 @67075 has 252 MA's), (5, 67036), (6, 67009), (8, 66922), (9, 66883), (10, 66841), (12, 66715), (13, 66694), (14, 66682), (15, 66610), (16, 66496), (17, 66457), (18, 66439),

Gene: Quisquilliae\_99 Start: 67086, Stop: 66355, Start Num: 4

Candidate Starts for Quisquilliae\_99:

(Start: 4 @67086 has 252 MA's), (5, 67047), (6, 67020), (8, 66933), (9, 66894), (10, 66852), (12, 66726), (13, 66705), (14, 66693), (15, 66621), (16, 66507), (17, 66468), (18, 66450),

Gene: RedMaple\_95 Start: 67409, Stop: 66678, Start Num: 4

Candidate Starts for RedMaple\_95:

(2, 67628), (3, 67526), (Start: 4 @67409 has 252 MA's), (5, 67370), (6, 67343), (7, 67307), (8, 67256), (9, 67217), (12, 67049), (13, 67028), (14, 67016), (15, 66944), (16, 66830), (17, 66791), (18, 66773),

Gene: Ricotta\_98 Start: 66771, Stop: 66040, Start Num: 4

Candidate Starts for Ricotta\_98:

(Start: 4 @66771 has 252 MA's), (5, 66732), (6, 66705), (8, 66618), (9, 66579), (10, 66537), (12, 66411), (13, 66390), (14, 66378), (15, 66306), (16, 66192), (17, 66153), (18, 66135),

Gene: Riggan\_98 Start: 67256, Stop: 66525, Start Num: 4

Candidate Starts for Riggan\_98:

(Start: 4 @67256 has 252 MA's), (5, 67217), (6, 67190), (8, 67103), (9, 67064), (10, 67022), (12, 66896), (13, 66875), (14, 66863), (15, 66791), (16, 66677), (17, 66638), (18, 66620),



Gene: Rimu\_100 Start: 67235, Stop: 66504, Start Num: 4

Candidate Starts for Rimu\_100:

(Start: 4 @67235 has 252 MA's), (5, 67196), (6, 67169), (9, 67043), (10, 67001), (12, 66875), (13, 66854), (14, 66842), (15, 66770), (16, 66656), (17, 66617), (18, 66599),

Gene: Roliet\_94 Start: 66115, Stop: 65384, Start Num: 4

Candidate Starts for Roliet\_94:

(Start: 4 @66115 has 252 MA's), (5, 66076), (6, 66049), (8, 65962), (9, 65923), (12, 65755), (13, 65734), (14, 65722), (16, 65536), (17, 65497), (18, 65479),

Gene: Roy17\_94 Start: 66481, Stop: 65750, Start Num: 4

Candidate Starts for Roy17\_94:

(Start: 4 @66481 has 252 MA's), (5, 66442), (6, 66415), (9, 66289), (10, 66247), (12, 66121), (13, 66100), (14, 66088), (15, 66016), (16, 65902), (17, 65863), (18, 65845),

Gene: SDcharge11\_95 Start: 66131, Stop: 65400, Start Num: 4

Candidate Starts for SDcharge11\_95:

(2, 66350), (3, 66248), (Start: 4 @66131 has 252 MA's), (5, 66092), (6, 66065), (7, 66029), (8, 65978), (9, 65939), (12, 65771), (13, 65750), (14, 65738), (16, 65552), (17, 65513), (18, 65495),

Gene: Samaymay\_97 Start: 67075, Stop: 66344, Start Num: 4

Candidate Starts for Samaymay\_97:

(Start: 4 @67075 has 252 MA's), (5, 67036), (6, 67009), (8, 66922), (9, 66883), (10, 66841), (12, 66715), (13, 66694), (14, 66682), (15, 66610), (16, 66496), (17, 66457), (18, 66439),

Gene: SassyCat97\_95 Start: 66743, Stop: 66012, Start Num: 4

Candidate Starts for SassyCat97\_95:

(Start: 4 @66743 has 252 MA's), (5, 66704), (6, 66677), (8, 66590), (9, 66551), (10, 66509), (12, 66383), (13, 66362), (14, 66350), (15, 66278), (16, 66164), (17, 66125), (18, 66107),

Gene: Schadenfreude\_97 Start: 66792, Stop: 66061, Start Num: 4

Candidate Starts for Schadenfreude\_97:

(2, 67011), (3, 66909), (Start: 4 @66792 has 252 MA's), (5, 66753), (6, 66726), (7, 66690), (8, 66639), (9, 66600), (12, 66432), (13, 66411), (14, 66399), (15, 66327), (16, 66213), (17, 66174), (18, 66156),

Gene: Schueller\_96 Start: 67016, Stop: 66285, Start Num: 4

Candidate Starts for Schueller\_96:

(2, 67235), (3, 67133), (Start: 4 @67016 has 252 MA's), (5, 66977), (8, 66863), (9, 66824), (12, 66656), (13, 66635), (14, 66623), (15, 66551), (16, 66437), (17, 66398), (18, 66380),

Gene: Scoot17C\_97 Start: 66857, Stop: 66126, Start Num: 4

Candidate Starts for Scoot17C\_97:

(Start: 4 @66857 has 252 MA's), (5, 66818), (6, 66791), (8, 66704), (9, 66665), (10, 66623), (12, 66497), (13, 66476), (14, 66464), (15, 66392), (16, 66278), (17, 66239), (18, 66221),

Gene: Scrick\_98 Start: 67126, Stop: 66395, Start Num: 4

Candidate Starts for Scrick\_98:

(Start: 4 @67126 has 252 MA's), (5, 67087), (6, 67060), (8, 66973), (9, 66934), (10, 66892), (12, 66766), (13, 66745), (14, 66733), (15, 66661), (16, 66547), (17, 66508), (18, 66490),

Gene: Selr12\_101 Start: 67167, Stop: 66436, Start Num: 4

Candidate Starts for Selr12\_101:

(Start: 4 @67167 has 252 MA's), (5, 67128), (6, 67101), (8, 67014), (9, 66975), (10, 66933), (12, 66807), (13, 66786), (14, 66774), (15, 66702), (16, 66588), (17, 66549), (18, 66531),

Gene: Serendipity\_96 Start: 67229, Stop: 66498, Start Num: 4

Candidate Starts for Serendipity\_96:

(Start: 4 @67229 has 252 MA's), (5, 67190), (6, 67163), (8, 67076), (9, 67037), (10, 66995), (12, 66869), (13, 66848), (14, 66836), (15, 66764), (16, 66650), (17, 66611), (18, 66593),

Gene: Serpentine\_0099 Start: 67309, Stop: 66578, Start Num: 4

Candidate Starts for Serpentine\_0099:

(Start: 4 @67309 has 252 MA's), (5, 67270), (6, 67243), (8, 67156), (9, 67117), (10, 67075), (12, 66949), (13, 66928), (14, 66916), (15, 66844), (16, 66730), (17, 66691), (18, 66673),

Gene: Sheila\_91 Start: 66309, Stop: 65578, Start Num: 4

Candidate Starts for Sheila\_91:

(Start: 4 @66309 has 252 MA's), (5, 66270), (6, 66243), (8, 66156), (9, 66117), (10, 66075), (12, 65949), (13, 65928), (14, 65916), (15, 65844), (16, 65730), (17, 65691), (18, 65673),

Gene: ShiVal\_96 Start: 66780, Stop: 66049, Start Num: 4

Candidate Starts for ShiVal\_96:

(Start: 4 @66780 has 252 MA's), (5, 66741), (6, 66714), (8, 66627), (9, 66588), (10, 66546), (12, 66420), (13, 66399), (14, 66387), (15, 66315), (16, 66201), (17, 66162), (18, 66144),

Gene: Sigman\_96 Start: 66736, Stop: 66005, Start Num: 4

Candidate Starts for Sigman\_96:

(Start: 4 @66736 has 252 MA's), (5, 66697), (6, 66670), (8, 66583), (9, 66544), (10, 66502), (12, 66376), (13, 66355), (14, 66343), (15, 66271), (16, 66157), (17, 66118), (18, 66100),

Gene: SilverBell\_98 Start: 67190, Stop: 66459, Start Num: 4

Candidate Starts for SilverBell\_98:

(Start: 4 @67190 has 252 MA's), (5, 67151), (6, 67124), (8, 67037), (9, 66998), (10, 66956), (12, 66830), (13, 66809), (14, 66797), (15, 66725), (16, 66611), (17, 66572), (18, 66554),

Gene: Simielle\_97 Start: 66722, Stop: 65991, Start Num: 4

Candidate Starts for Simielle\_97:

(Start: 4 @66722 has 252 MA's), (5, 66683), (6, 66656), (8, 66569), (9, 66530), (10, 66488), (12, 66362), (13, 66341), (14, 66329), (15, 66257), (16, 66143), (17, 66104), (18, 66086),

Gene: Skippy\_97 Start: 67151, Stop: 66420, Start Num: 4

Candidate Starts for Skippy\_97:

(Start: 4 @67151 has 252 MA's), (5, 67112), (6, 67085), (8, 66998), (9, 66959), (10, 66917), (12, 66791), (13, 66770), (14, 66758), (15, 66686), (16, 66572), (17, 66533), (18, 66515),

Gene: Slatt\_99 Start: 67407, Stop: 66676, Start Num: 4

Candidate Starts for Slatt\_99:

(Start: 4 @67407 has 252 MA's), (5, 67368), (6, 67341), (8, 67254), (9, 67215), (10, 67173), (12, 67047), (13, 67026), (14, 67014), (15, 66942), (16, 66828), (17, 66789), (18, 66771),

Gene: Soile\_98 Start: 67276, Stop: 66545, Start Num: 4

Candidate Starts for Soile\_98:

(Start: 4 @67276 has 252 MA's), (5, 67237), (6, 67210), (8, 67123), (9, 67084), (10, 67042), (12, 66916), (13, 66895), (14, 66883), (15, 66811), (16, 66697), (17, 66658), (18, 66640),

Gene: Solosis\_95 Start: 66744, Stop: 66013, Start Num: 4

Candidate Starts for Solosis\_95:

(Start: 4 @66744 has 252 MA's), (5, 66705), (6, 66678), (8, 66591), (9, 66552), (10, 66510), (12, 66384), (13, 66363), (14, 66351), (15, 66279), (16, 66165), (17, 66126), (18, 66108),

Gene: Sophia\_95 Start: 66731, Stop: 66000, Start Num: 4

Candidate Starts for Sophia\_95:

(Start: 4 @66731 has 252 MA's), (5, 66692), (6, 66665), (8, 66578), (9, 66539), (10, 66497), (12, 66371), (13, 66350), (14, 66338), (15, 66266), (16, 66152), (17, 66113), (18, 66095),

Gene: Soto\_93 Start: 66172, Stop: 65441, Start Num: 4

Candidate Starts for Soto\_93:

(Start: 4 @66172 has 252 MA's), (5, 66133), (6, 66106), (8, 66019), (9, 65980), (12, 65812), (13, 65791), (14, 65779), (15, 65707), (16, 65593), (17, 65554), (18, 65536),

Gene: Spartan300\_96 Start: 66993, Stop: 66262, Start Num: 4

Candidate Starts for Spartan300\_96:

(Start: 4 @66993 has 252 MA's), (5, 66954), (6, 66927), (8, 66840), (9, 66801), (10, 66759), (12, 66633), (13, 66612), (14, 66600), (15, 66528), (16, 66414), (17, 66375), (18, 66357),

Gene: Squid\_96 Start: 67021, Stop: 66290, Start Num: 4

Candidate Starts for Squid\_96:

(Start: 4 @67021 has 252 MA's), (5, 66982), (6, 66955), (8, 66868), (9, 66829), (10, 66787), (12, 66661), (13, 66640), (14, 66628), (15, 66556), (16, 66442), (17, 66403), (18, 66385),

Gene: Squiggle\_96 Start: 66750, Stop: 66019, Start Num: 4

Candidate Starts for Squiggle\_96:

(Start: 4 @66750 has 252 MA's), (5, 66711), (6, 66684), (8, 66597), (9, 66558), (10, 66516), (12, 66390), (13, 66369), (14, 66357), (15, 66285), (16, 66171), (17, 66132), (18, 66114),

Gene: Struggle\_97 Start: 66848, Stop: 66117, Start Num: 4

Candidate Starts for Struggle\_97:

(Start: 4 @66848 has 252 MA's), (5, 66809), (6, 66782), (8, 66695), (9, 66656), (10, 66614), (12, 66488), (13, 66467), (14, 66455), (15, 66383), (16, 66269), (17, 66230), (18, 66212),

Gene: Suffolk\_92 Start: 66677, Stop: 65946, Start Num: 4

Candidate Starts for Suffolk\_92:

(Start: 4 @66677 has 252 MA's), (5, 66638), (6, 66611), (8, 66524), (9, 66485), (10, 66443), (12, 66317), (13, 66296), (14, 66284), (15, 66212), (16, 66098), (17, 66059), (18, 66041),

Gene: Surely\_97 Start: 67313, Stop: 66582, Start Num: 4

Candidate Starts for Surely\_97:

(Start: 4 @67313 has 252 MA's), (5, 67274), (6, 67247), (9, 67121), (10, 67079), (12, 66953), (13, 66932), (14, 66920), (15, 66848), (16, 66734), (17, 66695), (18, 66677),

Gene: Swiphy\_101 Start: 67298, Stop: 66567, Start Num: 4

Candidate Starts for Swiphy\_101:

(Start: 4 @67298 has 252 MA's), (5, 67259), (6, 67232), (8, 67145), (9, 67106), (10, 67064), (12, 66938), (13, 66917), (14, 66905), (15, 66833), (16, 66719), (17, 66680), (18, 66662),

Gene: Swish\_98 Start: 67160, Stop: 66429, Start Num: 4

Candidate Starts for Swish\_98:

(Start: 4 @67160 has 252 MA's), (5, 67121), (6, 67094), (8, 67007), (9, 66968), (10, 66926), (12, 66800), (13, 66779), (14, 66767), (15, 66695), (16, 66581), (17, 66542), (18, 66524),

Gene: TallGrassMM\_96 Start: 66809, Stop: 66078, Start Num: 4

Candidate Starts for TallGrassMM\_96:

(Start: 4 @66809 has 252 MA's), (5, 66770), (6, 66743), (8, 66656), (9, 66617), (10, 66575), (12, 66449), (13, 66428), (14, 66416), (15, 66344), (16, 66230), (17, 66191), (18, 66173),

Gene: Telesworld\_95 Start: 66883, Stop: 66152, Start Num: 4

Candidate Starts for Telesworld\_95:

(Start: 4 @66883 has 252 MA's), (5, 66844), (6, 66817), (8, 66730), (9, 66691), (10, 66649), (12, 66523), (13, 66502), (14, 66490), (15, 66418), (16, 66304), (17, 66265), (18, 66247),

Gene: Thora\_95 Start: 67264, Stop: 66533, Start Num: 4

Candidate Starts for Thora\_95:

(Start: 4 @67264 has 252 MA's), (5, 67225), (6, 67198), (8, 67111), (9, 67072), (10, 67030), (12, 66904), (13, 66883), (14, 66871), (15, 66799), (16, 66685), (17, 66646), (18, 66628),

Gene: ThreeOh3D2\_98 Start: 67417, Stop: 66686, Start Num: 4

Candidate Starts for ThreeOh3D2\_98:

(Start: 4 @67417 has 252 MA's), (5, 67378), (6, 67351), (8, 67264), (9, 67225), (10, 67183), (12, 67057), (13, 67036), (14, 67024), (15, 66952), (16, 66838), (17, 66799), (18, 66781),

Gene: Thunderbird\_97 Start: 67005, Stop: 66274, Start Num: 4

Candidate Starts for Thunderbird\_97:

(Start: 4 @67005 has 252 MA's), (5, 66966), (6, 66939), (8, 66852), (9, 66813), (10, 66771), (12, 66645), (13, 66624), (14, 66612), (15, 66540), (16, 66426), (17, 66387), (18, 66369),

Gene: Timmi\_95 Start: 66780, Stop: 66049, Start Num: 4

Candidate Starts for Timmi\_95:

(Start: 4 @66780 has 252 MA's), (5, 66741), (6, 66714), (8, 66627), (9, 66588), (10, 66546), (12, 66420), (13, 66399), (14, 66387), (15, 66315), (16, 66201), (17, 66162), (18, 66144),

Gene: TomBombadil\_97 Start: 67305, Stop: 66574, Start Num: 4

Candidate Starts for TomBombadil\_97:

(Start: 4 @67305 has 252 MA's), (5, 67266), (6, 67239), (8, 67152), (9, 67113), (10, 67071), (12, 66945), (13, 66924), (14, 66912), (15, 66840), (16, 66726), (17, 66687), (18, 66669),

Gene: Tomlarah\_97 Start: 67613, Stop: 66882, Start Num: 4

Candidate Starts for Tomlarah\_97:

(Start: 4 @67613 has 252 MA's), (5, 67574), (6, 67547), (8, 67460), (9, 67421), (10, 67379), (12, 67253), (13, 67232), (14, 67220), (15, 67148), (16, 67034), (17, 66995), (18, 66977),

Gene: Toni\_96 Start: 67209, Stop: 66478, Start Num: 4

Candidate Starts for Toni\_96:

(Start: 4 @67209 has 252 MA's), (5, 67170), (6, 67143), (8, 67056), (9, 67017), (10, 66975), (12, 66849), (13, 66828), (14, 66816), (15, 66744), (16, 66630), (17, 66591), (18, 66573),

Gene: Tooj\_94 Start: 66423, Stop: 65692, Start Num: 4

Candidate Starts for Tooj\_94:

(Start: 4 @66423 has 252 MA's), (5, 66384), (6, 66357), (8, 66270), (9, 66231), (10, 66189), (12, 66063), (13, 66042), (14, 66030), (16, 65844), (17, 65805), (18, 65787),

Gene: True\_98 Start: 67125, Stop: 66394, Start Num: 4

Candidate Starts for True\_98:

(Start: 4 @67125 has 252 MA's), (5, 67086), (6, 67059), (8, 66972), (9, 66933), (10, 66891), (12, 66765), (13, 66744), (14, 66732), (15, 66660), (16, 66546), (17, 66507), (18, 66489),

Gene: Trypo\_97 Start: 67477, Stop: 66746, Start Num: 4

Candidate Starts for Trypo\_97:

(Start: 4 @67477 has 252 MA's), (5, 67438), (6, 67411), (8, 67324), (9, 67285), (10, 67243), (12, 67117), (13, 67096), (14, 67084), (15, 67012), (16, 66898), (17, 66859), (18, 66841),

Gene: TyrionL\_97 Start: 66839, Stop: 66108, Start Num: 4

Candidate Starts for TyrionL\_97:

(2, 67058), (3, 66956), (Start: 4 @66839 has 252 MA's), (5, 66800), (8, 66686), (9, 66647), (12, 66479), (13, 66458), (14, 66446), (15, 66374), (16, 66260), (17, 66221), (18, 66203),

Gene: UAch1\_97 Start: 66830, Stop: 66099, Start Num: 4

Candidate Starts for UAch1\_97:

(Start: 4 @66830 has 252 MA's), (5, 66791), (6, 66764), (8, 66677), (9, 66638), (10, 66596), (12, 66470), (13, 66449), (14, 66437), (15, 66365), (16, 66251), (17, 66212), (18, 66194),

Gene: UncleHowie\_93 Start: 66441, Stop: 65710, Start Num: 4

Candidate Starts for UncleHowie\_93:

(Start: 4 @66441 has 252 MA's), (5, 66402), (6, 66375), (8, 66288), (9, 66249), (10, 66207), (12, 66081), (13, 66060), (14, 66048), (15, 65976), (16, 65862), (17, 65823), (18, 65805),

Gene: Usavi\_97 Start: 67603, Stop: 66872, Start Num: 4

Candidate Starts for Usavi\_97:

(Start: 4 @67603 has 252 MA's), (5, 67564), (6, 67537), (8, 67450), (9, 67411), (10, 67369), (12, 67243), (13, 67222), (14, 67210), (15, 67138), (16, 67024), (17, 66985), (18, 66967),

Gene: Valjean\_95 Start: 66985, Stop: 66254, Start Num: 4

Candidate Starts for Valjean\_95:

(Start: 4 @66985 has 252 MA's), (5, 66946), (6, 66919), (9, 66793), (10, 66751), (12, 66625), (13, 66604), (14, 66592), (15, 66520), (16, 66406), (17, 66367), (18, 66349),

Gene: Vaticameos\_94 Start: 65312, Stop: 64581, Start Num: 4

Candidate Starts for Vaticameos\_94:

(Start: 4 @65312 has 252 MA's), (5, 65273), (6, 65246), (8, 65159), (9, 65120), (10, 65078), (12, 64952), (13, 64931), (14, 64919), (15, 64847), (16, 64733), (17, 64694), (18, 64676),

Gene: Veritas\_96 Start: 66920, Stop: 66189, Start Num: 4

Candidate Starts for Veritas\_96:

(2, 67139), (3, 67037), (Start: 4 @66920 has 252 MA's), (5, 66881), (8, 66767), (9, 66728), (12, 66560), (13, 66539), (14, 66527), (15, 66455), (16, 66341), (17, 66302), (18, 66284),

Gene: Virapocalypse\_98 Start: 67107, Stop: 66376, Start Num: 4

Candidate Starts for Virapocalypse\_98:

(Start: 4 @67107 has 252 MA's), (5, 67068), (6, 67041), (8, 66954), (9, 66915), (10, 66873), (12, 66747), (13, 66726), (14, 66714), (15, 66642), (16, 66528), (17, 66489), (18, 66471),

Gene: Virgeve\_95 Start: 66725, Stop: 65994, Start Num: 4

Candidate Starts for Virgeve\_95:

(Start: 4 @66725 has 252 MA's), (5, 66686), (6, 66659), (9, 66533), (10, 66491), (12, 66365), (13, 66344), (14, 66332), (15, 66260), (16, 66146), (17, 66107), (18, 66089),

Gene: Vista\_96 Start: 66919, Stop: 66188, Start Num: 4

Candidate Starts for Vista\_96:

(Start: 4 @66919 has 252 MA's), (5, 66880), (6, 66853), (8, 66766), (9, 66727), (10, 66685), (12, 66559), (13, 66538), (14, 66526), (15, 66454), (16, 66340), (17, 66301), (18, 66283),

Gene: Vortex\_95 Start: 67025, Stop: 66294, Start Num: 4

Candidate Starts for Vortex\_95:

(Start: 4 @67025 has 252 MA's), (5, 66986), (6, 66959), (8, 66872), (9, 66833), (10, 66791), (12, 66665), (13, 66644), (14, 66632), (15, 66560), (16, 66446), (17, 66407), (18, 66389),

Gene: Wallhey\_98 Start: 67024, Stop: 66293, Start Num: 4

Candidate Starts for Wallhey\_98:

(Start: 4 @67024 has 252 MA's), (5, 66985), (6, 66958), (9, 66832), (10, 66790), (12, 66664), (13, 66643), (14, 66631), (15, 66559), (16, 66445), (17, 66406), (18, 66388),

Gene: Waterdiva\_98 Start: 67291, Stop: 66560, Start Num: 4

Candidate Starts for Waterdiva\_98:

(Start: 4 @67291 has 252 MA's), (5, 67252), (6, 67225), (8, 67138), (9, 67099), (10, 67057), (12, 66931), (13, 66910), (14, 66898), (15, 66826), (16, 66712), (17, 66673), (18, 66655),

Gene: Weher20\_94 Start: 67363, Stop: 66632, Start Num: 4

Candidate Starts for Weher20\_94:

(Start: 4 @67363 has 252 MA's), (5, 67324), (6, 67297), (8, 67210), (9, 67171), (10, 67129), (12, 67003), (13, 66982), (14, 66970), (15, 66898), (16, 66784), (17, 66745), (18, 66727),

Gene: Windsor\_96 Start: 67050, Stop: 66298, Start Num: 4

Candidate Starts for Windsor\_96:

(2, 67269), (3, 67167), (Start: 4 @67050 has 252 MA's), (5, 67011), (8, 66897), (9, 66858), (12, 66690), (13, 66669), (14, 66657), (15, 66585), (16, 66471), (17, 66432), (18, 66414),

Gene: Xavier\_96 Start: 66918, Stop: 66187, Start Num: 4

Candidate Starts for Xavier\_96:

(Start: 4 @66918 has 252 MA's), (5, 66879), (6, 66852), (8, 66765), (9, 66726), (10, 66684), (12, 66558), (13, 66537), (14, 66525), (15, 66453), (16, 66339), (17, 66300), (18, 66282),

Gene: Yoshand\_98 Start: 67143, Stop: 66412, Start Num: 4

Candidate Starts for Yoshand\_98:

(Start: 4 @67143 has 252 MA's), (5, 67104), (6, 67077), (8, 66990), (9, 66951), (10, 66909), (12, 66783), (13, 66762), (14, 66750), (15, 66678), (16, 66564), (17, 66525), (18, 66507),

Gene: YouGoGlencoco\_97 Start: 67033, Stop: 66302, Start Num: 4

Candidate Starts for YouGoGlencoco\_97:

(Start: 4 @67033 has 252 MA's), (5, 66994), (6, 66967), (8, 66880), (9, 66841), (10, 66799), (12, 66673), (13, 66652), (14, 66640), (15, 66568), (16, 66454), (17, 66415), (18, 66397),

Gene: Zaider\_98 Start: 67408, Stop: 66677, Start Num: 4

Candidate Starts for Zaider\_98:

(Start: 4 @67408 has 252 MA's), (5, 67369), (6, 67342), (8, 67255), (9, 67216), (10, 67174), (12, 67048), (13, 67027), (14, 67015), (15, 66943), (16, 66829), (17, 66790), (18, 66772),

Gene: Zelda\_97 Start: 67364, Stop: 66633, Start Num: 4

Candidate Starts for Zelda\_97:

(Start: 4 @67364 has 252 MA's), (5, 67325), (6, 67298), (8, 67211), (9, 67172), (10, 67130), (12, 67004), (13, 66983), (14, 66971), (15, 66899), (16, 66785), (17, 66746), (18, 66728),

Gene: Zonia\_97 Start: 67474, Stop: 66743, Start Num: 4

Candidate Starts for Zonia\_97:

(Start: 4 @67474 has 252 MA's), (5, 67435), (6, 67408), (9, 67282), (10, 67240), (12, 67114), (13, 67093), (14, 67081), (15, 67009), (16, 66895), (17, 66856), (18, 66838),