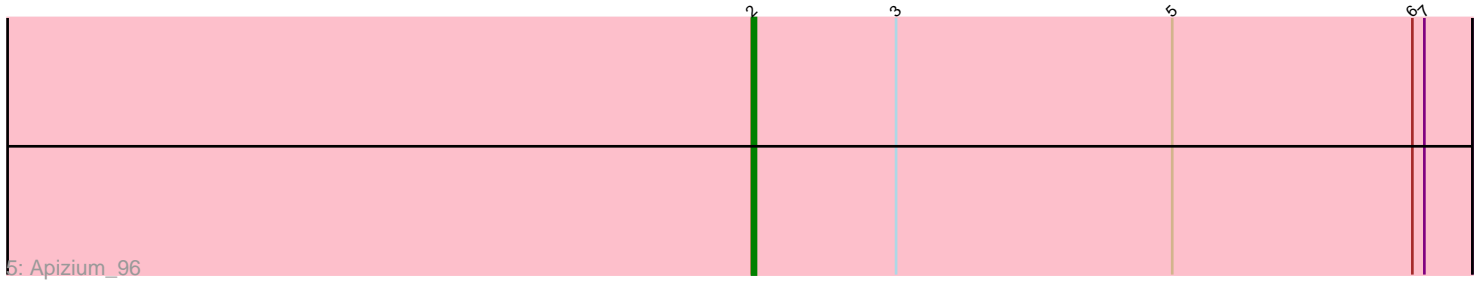
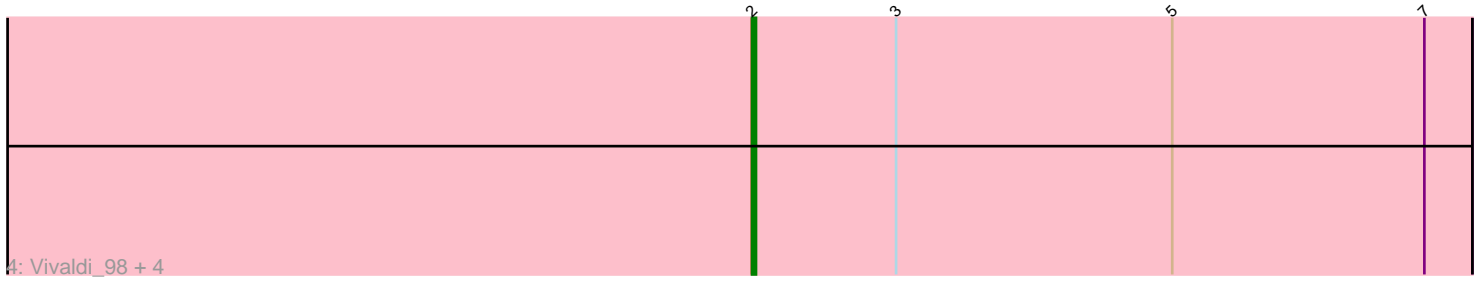
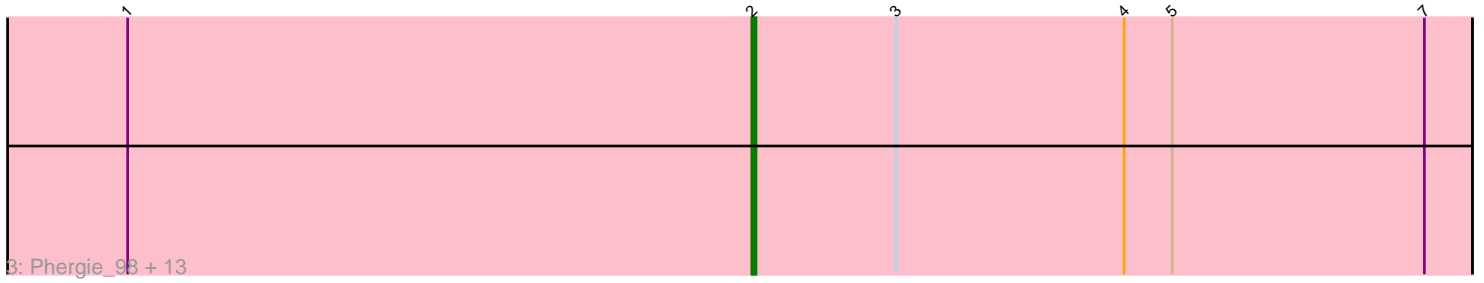
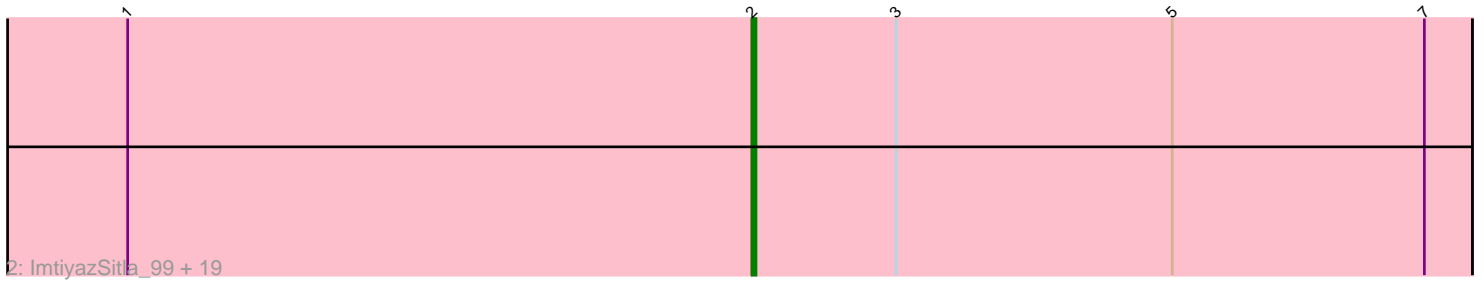
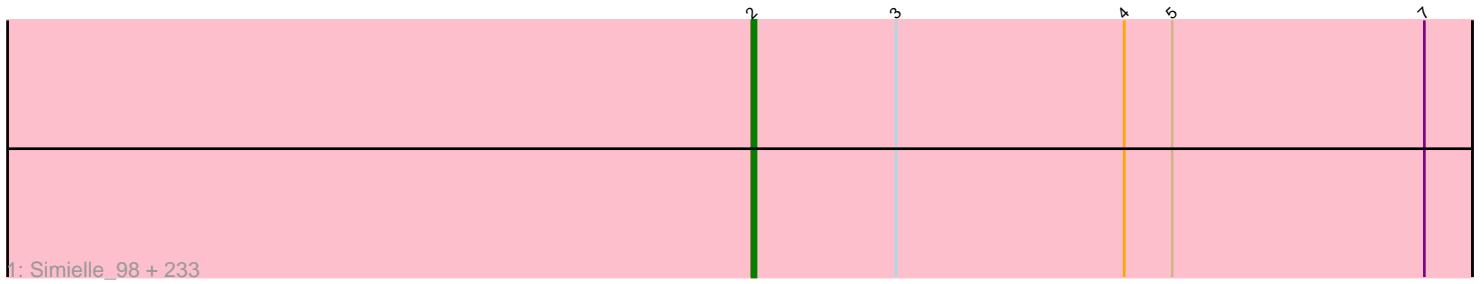


Pham 177409



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 177409 Report

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

Pham number 177409 has 274 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Simielle\_98, Carthage\_98, UAch1\_98, Placalicious\_95, CampRoach\_98, Craff\_99, Chah\_100, Kikipoo\_100, Dione\_96, Oline\_97, Lego3393\_96, Harvey\_95, AbsoluteMadLad\_96, Pherdinand\_99, DelRivs\_97, Puhltonio\_93, Sigman\_97, Pops\_95, Olive\_94, MitKao\_98, Dingo\_94, SilverBell\_99, Thunderbird\_98, Durga\_100, Serpentine\_00100, Riggan\_99, Phunky\_95, Held\_96, BlackStallion\_97, Keitherie\_101, Zaider\_99, Pinkman\_97, Eugenia\_100, Mesh1\_98, Burr\_100, Ricotta\_99, Selr12\_102, Haimas\_95, Cher\_98, Orfeu\_98, Phamished\_97, Roliet\_95, Inverness\_95, Wallhey\_99, Anderson\_99, Cornobble\_96, Andre\_102, Phipps\_95, Emiris\_100, Adriana\_98, Vaishali24\_98, Oosterbaan\_98, Numberten\_98, PG1\_96, Longacauda\_98, Bishoperium\_98, Yoshand\_99, LeiMonet\_100, Lumine\_99, Badfish\_98, Newman\_93, Podrick\_96, Daffy\_97, Hetaeria\_97, Beaglebox\_94, Basato\_96, CamL\_98, Chorkpop\_99, Kwadwo\_97, Cannibal\_98, TomBombadil\_98, Hertubise\_97, Toni\_97, Pacifista\_100, MrPhizzler\_97, GeneCoco\_97, OliverWalter\_97, FugateOSU\_98, Doddsville\_95, Gareth\_98, SDcharge11\_96, Nicole21\_99, Orwigg\_100, FluffyNinja\_99, Phareon\_95, Kimbrough\_99, Waterdiva\_99, DirtJuice\_99, Duggie\_98, Childish\_98, Surely\_98, KlimbOn\_97, Pipsqueak\_95, DonSanchon\_93, Soto\_94, Roy17\_95, Antonia\_97, KLucky39\_95, Robyn\_99, UncleHowie\_94, Coletti\_100, Frankicide\_95, Swiphy\_102, Katniss\_100, Fozzie\_94, Matalotodo\_96, Omniscient\_99, FriarPreacher\_95, Bluephacebaby\_97, OSmaximus\_98, Tomlarah\_98, Dati\_95, Charles1\_101, CheetO\_94, JDog\_97, Kwksand96\_99, Inchworm\_99, Jillium\_98, Melc17\_95, Fringe\_102, LemonSlice\_98, JacAttac\_98, Piglet\_0097, Aelin\_97, Spartan300\_97, Altwerkus\_95, Quisquilliae\_100, Squid\_97, Lopsy\_94, LuckyMarjie\_95, Scoot17C\_98, IsaacEli\_100, Mikota\_92, MRabcd\_98, Buckeye\_96, Tooj\_95, Morty\_98, Struggle\_98, Freya\_94, Jiminy\_98, Nacho\_00100, Haleema\_97, Plmatters\_95, Scrick\_99, Megamind20\_100, Virapocalypse\_99, Zelda\_98, Mecca\_98, Chute\_98, LostAndPhound\_97, Thora\_96, Usavi\_98, Kahve\_98, AltPhacts\_95, Hamish\_95, Grand2040\_95, Mana\_95, Daka\_99, Legolas\_99, Morgushi\_95, DaddyDaniels\_101, Banjo\_94, RedMaple\_96, PhatLouie\_100, Soile\_99, Orion\_96, ABU\_96, ProfessorX\_95, HighStump\_100, Dice\_98, Hartsy\_96, Schadenfreude\_98, Prickles\_98, Lasso\_97, JakeO\_99, Lulumae\_93, Olak\_100, KingTut\_88, Mulan\_97, Sophia\_96, Valjean\_96, Vaticameos\_95, Megatron\_99, DoesntMatter\_95, SassyCat97\_96, Iridoclysis\_97, Trypo\_98, PhatCats2014\_97, Cobra\_98, Slatt\_100, Xavier\_97, Colbert\_96, Skippy\_98, Lulwa\_95, Suffolk\_93, Etaye\_97, Telesworld\_96, Maru\_97, Brilliant\_101, Mosaic\_95, Weher20\_95, Vortex\_96, JangoPhett\_96, PhrodoBaggins\_100, LasagnaCat\_99, EmpTee\_97, Virgeve\_96, ShiVal\_97, Fang\_98, Mutante\_99, True\_99, Cosmolli16\_99, Giraffe\_99, Zonia\_98, HenryJackson\_98, LeeLot\_96,

Swish\_99, Rimu\_101, Serendipity\_97, Potter\_92, Squiggle\_97, ThreeOh3D2\_99, PinheadLarry\_97, Nyala\_98, Jiraiya\_103, Murdoc\_94, Gophee\_97, Samaymay\_98, Vista\_97, Manad\_97, YouGoGlencoco\_98, Timmi\_96, Kloppinator\_98, QueenBeane\_98

- Track 2 : ImtiyazSitla\_99, Boehler\_95, Labeouficaum\_98, Phleuron\_95, Derpp\_97, Maskar\_99, CharlieGBrown\_96, MelsMeow\_96, Gwilliam\_98, Chunky\_96, Roscoe\_96, Mag7\_96, Ashraf\_99, MichaelPhcott\_96, Horchata\_92, Kailash\_96, Veritas\_97, Schueller\_97, TyrionL\_98, BatteryCK\_96

- Track 3 : Phergie\_98, TallGrassMM\_97, DuchessDung\_95, Eremos\_95, Sheila\_92, BlueHusk\_98, MiniBoss\_93, Hocus\_97, Crownjwl\_95, PhenghisKhan\_98, Mcshane\_100, PhrankReynolds\_96, KingVeVeVe\_96, Solosis\_96

- Track 4 : Vivaldi\_98, HSavage\_95, Chaelin\_98, Gyarad\_0096, Windsor\_97

- Track 5 : Apizium\_96

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

The start number called the most often in the published annotations is 2, it was called in 262 of the 262 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU\_96, AbsoluteMadLad\_96, Adriana\_98, Aelin\_97, AltPhacts\_95, Altwerkus\_95, Anderson\_99, Andre\_102, Antonia\_97, Apizium\_96, Ashraf\_99, Badfish\_98, Banjo\_94, Basato\_96, BatteryCK\_96, Beaglebox\_94, Bishoperium\_98, BlackStallion\_97, BlueHusk\_98, Bluephacebaby\_97, Boehler\_95, Brilliant\_101, Buckeye\_96, Burr\_100, CamL\_98, CampRoach\_98, Cannibal\_98, Carthage\_98, Chaelin\_98, Chah\_100, Charles1\_101, CharlieGBrown\_96, CheetO\_94, Cher\_98, Childish\_98, Chorkpop\_99, Chunky\_96, Chute\_98, Cobra\_98, Colbert\_96, Coletti\_100, Cornobble\_96, Cosmolli16\_99, Craff\_99, Crownjwl\_95, DaddyDaniels\_101, Daffy\_97, Daka\_99, Dati\_95, DelRivs\_97, Derpp\_97, Dice\_98, Dingo\_94, Dione\_96, DirtJuice\_99, Doddsville\_95, DoesntMatter\_95, DonSanchon\_93, DuchessDung\_95, Duggie\_98, Durga\_100, Emiris\_100, EmpTee\_97, Eremos\_95, Etaye\_97, Eugenia\_100, Fang\_98, FluffyNinja\_99, Fozzie\_94, Frankicide\_95, Freya\_94, FriarPreacher\_95, Fringe\_102, FugateOSU\_98, Gareth\_98, GeneCoco\_97, Giraffe\_99, Gophee\_97, Grand2040\_95, Gwilliam\_98, Gyarad\_0096, HSavage\_95, Haimas\_95, Haleema\_97, Hamish\_95, Hartsy\_96, Harvey\_95, Held\_96, HenryJackson\_98, Hertubise\_97, Hetaeria\_97, HighStump\_100, Hocus\_97, Horchata\_92, ImtiyazSitla\_99, Inchworm\_99, Inverness\_95, Iridoclysis\_97, IsaacEli\_100, JDog\_97, JacAttac\_98, JakeO\_99, JangoPhett\_96, Jillium\_98, Jiminy\_98, Jiraiya\_103, KLucky39\_95, Kahve\_98, Kailash\_96, Katniss\_100, Keitherie\_101, Kikipoo\_100, Kimbrough\_99, KingTut\_88, KingVeVeVe\_96, KlimbOn\_97, Kloppinator\_98, Kwadwo\_97, Kwksand96\_99, Labeouficaum\_98, LasagnaCat\_99, Lasso\_97, LeeLot\_96, Lego3393\_96, Legolas\_99, LeiMonet\_100, LemonSlice\_98, Longacauda\_98, Lopsy\_94, LostAndPhound\_97, LuckyMarjie\_95, Lulumae\_93, Lulwa\_95, Lumine\_99, MRabcd\_98, Mag7\_96, Mana\_95, Manad\_97, Maru\_97, Maskar\_99, Matalotodo\_96, Mcshane\_100, Mecca\_98, Megamind20\_100, Megatron\_99, Melc17\_95, MelsMeow\_96, Mesh1\_98, MichaelPhcott\_96, Mikota\_92, MiniBoss\_93, MitKao\_98, Morgushi\_95, Morty\_98, Mosaic\_95, MrPhizzler\_97, Mulan\_97, Murdoc\_94, Mutante\_99, Nacho\_00100, Newman\_93, Nicole21\_99, Numberten\_98, Nyala\_98, OSmaximus\_98, Olak\_100, Oline\_97, Olive\_94, OliverWalter\_97, Omniscient\_99,

Oosterbaan\_98, Orfeu\_98, Orion\_96, Orwigg\_100, PG1\_96, Pacifista\_100, Phamished\_97, Phareon\_95, PhatCats2014\_97, PhatLouie\_100, PhenghisKhan\_98, Pherdinand\_99, Phergie\_98, Phipps\_95, Phleuron\_95, PhrankReynolds\_96, PhrodoBaggins\_100, Phunky\_95, Piglet\_0097, PinheadLarry\_97, Pinkman\_97, Pipsqueak\_95, Placalicious\_95, Plmatters\_95, Podrick\_96, Pops\_95, Potter\_92, Prickles\_98, ProfessorX\_95, Puhltonio\_93, QueenBeane\_98, Quisquillae\_100, RedMaple\_96, Ricotta\_99, Riggan\_99, Rimu\_101, Robyn\_99, Roliet\_95, Roscoe\_96, Roy17\_95, SDcharge11\_96, Samaymay\_98, SassyCat97\_96, Schadenfreude\_98, Schueller\_97, Scoot17C\_98, Scrick\_99, Selr12\_102, Serendipity\_97, Serpentine\_00100, Sheila\_92, ShiVal\_97, Sigman\_97, SilverBell\_99, Simielle\_98, Skippy\_98, Slatt\_100, Soile\_99, Solosis\_96, Sophia\_96, Soto\_94, Spartan300\_97, Squid\_97, Squiggle\_97, Struggle\_98, Suffolk\_93, Surely\_98, Swiphy\_102, Swish\_99, TallGrassMM\_97, Telesworld\_96, Thora\_96, ThreeOh3D2\_99, Thunderbird\_98, Timmi\_96, TomBombadil\_98, Tomlarah\_98, Toni\_97, Tooj\_95, True\_99, Trypo\_98, TyrionL\_98, UAch1\_98, UncleHowie\_94, Usavi\_98, Vaishali24\_98, Valjean\_96, Vaticameos\_95, Veritas\_97, Virapocalypse\_99, Virgeve\_96, Vista\_97, Vivaldi\_98, Vortex\_96, Wallhey\_99, Waterdiva\_99, Weher20\_95, Windsor\_97, Xavier\_97, Yoshand\_99, YouGoGlencoco\_98, Zaider\_99, Zelda\_98, Zonia\_98,

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 2:

- Found in 274 of 274 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 262 of 262
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ABU\_96 (B1), AbsoluteMadLad\_96 (B1), Adriana\_98 (B1), Aelin\_97 (B1), AltPhacts\_95 (B1), Altwerkus\_95 (B1), Anderson\_99 (B1), Andre\_102 (B1), Antonia\_97 (B1), Apizium\_96 (B1), Ashraf\_99 (B1), Badfish\_98 (B1), Banjo\_94 (B1), Basato\_96 (B1), BatteryCK\_96 (B1), Beaglebox\_94 (B1), Bishoperium\_98 (B1), BlackStallion\_97 (B1), BlueHusk\_98 (B1), Bluephacebaby\_97 (B1), Boehler\_95 (B1), Brilliant\_101 (B1), Buckeye\_96 (B1), Burr\_100 (B1), CamL\_98 (B1), CampRoach\_98 (B1), Cannibal\_98 (B1), Carthage\_98 (B1), Chaelin\_98 (B1), Chah\_100 (B1), Charles1\_101 (B1), CharlieGBrown\_96 (B1), CheetO\_94 (B1), Cher\_98 (B1), Childish\_98 (B1), Chorkpop\_99 (B1), Chunky\_96 (B1), Chute\_98 (B1), Cobra\_98 (B1), Colbert\_96 (B1), Coletti\_100 (B1), Cornobble\_96 (B1), Cosmolli16\_99 (B1), Craff\_99 (B1), Crownjwl\_95 (B1), DaddyDaniels\_101 (B1), Daffy\_97 (B1), Daka\_99 (B1), Dati\_95 (B1), DelRivs\_97 (B1), Derpp\_97 (B1), Dice\_98 (B1), Dingo\_94 (B1), Dione\_96 (B1), DirtJuice\_99 (B1), Doddsville\_95 (B1), DoesntMatter\_95 (B1), DonSanchon\_93 (B1), DuchessDung\_95 (B1), Duggie\_98 (B1), Durga\_100 (B1), Emiris\_100 (B1), EmpTee\_97 (B1), Eremos\_95 (B1), Etaye\_97 (B1), Eugenia\_100 (B1), Fang\_98 (B1), FluffyNinja\_99 (B1), Fozzie\_94 (B1), Frankicide\_95 (B1), Freya\_94 (B1), FriarPreacher\_95 (B1), Fringe\_102 (B1), FugateOSU\_98 (B1), Gareth\_98 (B1), GeneCoco\_97 (B1), Giraffe\_99 (B1), Gophee\_97 (B1), Grand2040\_95 (B1), Gwilliam\_98 (B1), Gyarad\_0096 (B1), HSavage\_95 (B1), Haimas\_95 (B1), Haleema\_97 (B1), Hamish\_95 (B1), Hartsy\_96 (B1), Harvey\_95 (B1), Held\_96 (B1), HenryJackson\_98 (B1), Hertubise\_97 (B1), Hetaeria\_97 (B1), HighStump\_100 (B1), Hocus\_97 (B1),

Horchata\_92 (B1), ImtiyazSitla\_99 (B1), Inchworm\_99 (B1), Inverness\_95 (B1), Iridoclysis\_97 (B1), IsaacEli\_100 (B1), JDog\_97 (B1), JacAttac\_98 (B1), JakeO\_99 (B1), JangoPhett\_96 (B1), Jillium\_98 (B1), Jiminy\_98 (B1), Jiraiya\_103 (B1), KLucky39\_95 (B1), Kahve\_98 (B1), Kailash\_96 (B1), Katniss\_100 (B1), Keitherie\_101 (B1), Kikipoo\_100 (B1), Kimbrough\_99 (B1), KingTut\_88 (B1), KingVeVeVe\_96 (B1), KlimbOn\_97 (B1), Kloppinator\_98 (B1), Kwadwo\_97 (B1), Kwksand96\_99 (B1), Labeouficaum\_98 (B1), LasagnaCat\_99 (B1), Lasso\_97 (B1), LeeLot\_96 (B1), Lego3393\_96 (B1), Legolas\_99 (B1), LeiMonet\_100 (B1), LemonSlice\_98 (B1), Longacauda\_98 (B1), Lopsy\_94 (B1), LostAndPhound\_97 (B1), LuckyMarjie\_95 (B1), Lulumae\_93 (B1), Lulwa\_95 (B1), Lumine\_99 (B1), MRabcd\_98 (B1), Mag7\_96 (B1), Mana\_95 (B1), Manad\_97 (B1), Maru\_97 (B1), Maskar\_99 (B1), Matalotodo\_96 (B1), Mcshane\_100 (B1), Mecca\_98 (B1), Megamind20\_100 (B1), Megatron\_99 (B1), Melc17\_95 (B1), MelsMeow\_96 (B1), Mesh1\_98 (B1), MichaelPhcott\_96 (B1), Mikota\_92 (B1), MiniBoss\_93 (B1), MitKao\_98 (B1), Morgushi\_95 (B1), Morty\_98 (B1), Mosaic\_95 (B1), MrPhizzler\_97 (B1), Mulan\_97 (B1), Murdoc\_94 (B1), Mutante\_99 (B1), Nacho\_00100 (B1), Newman\_93 (B1), Nicole21\_99 (B1), Numberten\_98 (B1), Nyala\_98 (B1), OSmaximus\_98 (B1), Olak\_100 (B1), Oline\_97 (B1), Olive\_94 (B1), OliverWalter\_97 (B1), Omniscient\_99 (B1), Oosterbaan\_98 (B1), Orfeu\_98 (B1), Orion\_96 (B1), Orwigg\_100 (B1), PG1\_96 (B1), Pacifista\_100 (B1), Phamished\_97 (B1), Phareon\_95 (B1), PhatCats2014\_97 (B1), PhatLouie\_100 (B1), PhenghisKhan\_98 (B1), Pherdinand\_99 (B1), Phergie\_98 (B1), Phipps\_95 (B1), Phleuron\_95 (B1), PhrankReynolds\_96 (B1), PhrodoBaggins\_100 (B1), Phunky\_95 (B1), Piglet\_0097 (B1), PinheadLarry\_97 (B1), Pinkman\_97 (B1), Pipsqueak\_95 (B1), Placalicious\_95 (B1), Plmatters\_95 (B1), Podrick\_96 (B1), Pops\_95 (B1), Potter\_92 (B1), Prickles\_98 (B1), ProfessorX\_95 (B1), Puhltonio\_93 (B1), QueenBeane\_98 (B1), Quisquilliae\_100 (B1), RedMaple\_96 (B1), Ricotta\_99 (B1), Riggan\_99 (B1), Rimu\_101 (B1), Robyn\_99 (B1), Roliet\_95 (B1), Roscoe\_96 (B1), Roy17\_95 (B1), SDcharge11\_96 (B1), Samaymay\_98 (B1), SassyCat97\_96 (B1), Schadenfreude\_98 (B1), Schueller\_97 (B1), Scoot17C\_98 (B1), Scrick\_99 (B1), Selr12\_102 (B1), Serendipity\_97 (B1), Serpentine\_00100 (B1), Sheila\_92 (B1), ShiVal\_97 (B1), Sigman\_97 (B1), SilverBell\_99 (B1), Simielle\_98 (B1), Skippy\_98 (B1), Slatt\_100 (B1), Soile\_99 (B1), Solosis\_96 (B1), Sophia\_96 (B1), Soto\_94 (B1), Spartan300\_97 (B1), Squid\_97 (B1), Squiggle\_97 (B1), Struggle\_98 (B1), Suffolk\_93 (B1), Surely\_98 (B1), Swiphy\_102 (B1), Swish\_99 (B1), TallGrassMM\_97 (B1), Telesworld\_96 (B1), Thora\_96 (B1), ThreeOh3D2\_99 (B1), Thunderbird\_98 (B1), Timmi\_96 (B1), TomBombadil\_98 (B1), Tomlarah\_98 (B1), Toni\_97 (B1), Tooj\_95 (B1), True\_99 (B1), Trypo\_98 (B1), TyrionL\_98 (B1), UAch1\_98 (B1), UncleHowie\_94 (B1), Usavi\_98 (B1), Vaishali24\_98 (B1), Valjean\_96 (B1), Vaticameos\_95 (B1), Veritas\_97 (B1), Virapocalypse\_99 (B1), Virgeve\_96 (B1), Vista\_97 (B1), Vivaldi\_98 (B1), Vortex\_96 (B1), Wallhey\_99 (B1), Waterdiva\_99 (B1), Weher20\_95 (B1), Windsor\_97 (B1), Xavier\_97 (B1), Yoshand\_99 (B1), YouGoGlencoco\_98 (B1), Zaider\_99 (B1), Zelda\_98 (B1), Zonia\_98 (B1),

### Summary by clusters:

There is one cluster represented in this pham: B1

Info for manual annotations of cluster B1:

- Start number 2 was manually annotated 262 times for cluster B1.

**Gene Information:**

Gene: ABU\_96 Start: 67451, Stop: 67272, Start Num: 2

Candidate Starts for ABU\_96:

(Start: 2 @67451 has 262 MA's), (3, 67415), (4, 67358), (5, 67346), (7, 67283),

Gene: AbsoluteMadLad\_96 Start: 67404, Stop: 67225, Start Num: 2

Candidate Starts for AbsoluteMadLad\_96:

(Start: 2 @67404 has 262 MA's), (3, 67368), (4, 67311), (5, 67299), (7, 67236),

Gene: Adriana\_98 Start: 67723, Stop: 67544, Start Num: 2

Candidate Starts for Adriana\_98:

(Start: 2 @67723 has 262 MA's), (3, 67687), (4, 67630), (5, 67618), (7, 67555),

Gene: Aelin\_97 Start: 67084, Stop: 66905, Start Num: 2

Candidate Starts for Aelin\_97:

(Start: 2 @67084 has 262 MA's), (3, 67048), (4, 66991), (5, 66979), (7, 66916),

Gene: AltPhacts\_95 Start: 66657, Stop: 66478, Start Num: 2

Candidate Starts for AltPhacts\_95:

(Start: 2 @66657 has 262 MA's), (3, 66621), (4, 66564), (5, 66552), (7, 66489),

Gene: Altwerkus\_95 Start: 66780, Stop: 66601, Start Num: 2

Candidate Starts for Altwerkus\_95:

(Start: 2 @66780 has 262 MA's), (3, 66744), (4, 66687), (5, 66675), (7, 66612),

Gene: Anderson\_99 Start: 67327, Stop: 67148, Start Num: 2

Candidate Starts for Anderson\_99:

(Start: 2 @67327 has 262 MA's), (3, 67291), (4, 67234), (5, 67222), (7, 67159),

Gene: Andre\_102 Start: 67718, Stop: 67539, Start Num: 2

Candidate Starts for Andre\_102:

(Start: 2 @67718 has 262 MA's), (3, 67682), (4, 67625), (5, 67613), (7, 67550),

Gene: Antonia\_97 Start: 66952, Stop: 66773, Start Num: 2

Candidate Starts for Antonia\_97:

(Start: 2 @66952 has 262 MA's), (3, 66916), (4, 66859), (5, 66847), (7, 66784),

Gene: Apizium\_96 Start: 66605, Stop: 66426, Start Num: 2

Candidate Starts for Apizium\_96:

(Start: 2 @66605 has 262 MA's), (3, 66569), (5, 66500), (6, 66440), (7, 66437),

Gene: Ashraf\_99 Start: 67460, Stop: 67281, Start Num: 2

Candidate Starts for Ashraf\_99:

(1, 67616), (Start: 2 @67460 has 262 MA's), (3, 67424), (5, 67355), (7, 67292),

Gene: Badfish\_98 Start: 67631, Stop: 67452, Start Num: 2

Candidate Starts for Badfish\_98:

(Start: 2 @67631 has 262 MA's), (3, 67595), (4, 67538), (5, 67526), (7, 67463),

Gene: Banjo\_94 Start: 66897, Stop: 66718, Start Num: 2

Candidate Starts for Banjo\_94:

(Start: 2 @66897 has 262 MA's), (3, 66861), (4, 66804), (5, 66792), (7, 66729),

Gene: Basato\_96 Start: 67117, Stop: 66938, Start Num: 2  
Candidate Starts for Basato\_96:  
(Start: 2 @67117 has 262 MA's), (3, 67081), (4, 67024), (5, 67012), (7, 66949),

Gene: BatteryCK\_96 Start: 66887, Stop: 66708, Start Num: 2  
Candidate Starts for BatteryCK\_96:  
(1, 67043), (Start: 2 @66887 has 262 MA's), (3, 66851), (5, 66782), (7, 66719),

Gene: Beaglebox\_94 Start: 67019, Stop: 66840, Start Num: 2  
Candidate Starts for Beaglebox\_94:  
(Start: 2 @67019 has 262 MA's), (3, 66983), (4, 66926), (5, 66914), (7, 66851),

Gene: Bishoperium\_98 Start: 67466, Stop: 67287, Start Num: 2  
Candidate Starts for Bishoperium\_98:  
(Start: 2 @67466 has 262 MA's), (3, 67430), (4, 67373), (5, 67361), (7, 67298),

Gene: BlackStallion\_97 Start: 67315, Stop: 67136, Start Num: 2  
Candidate Starts for BlackStallion\_97:  
(Start: 2 @67315 has 262 MA's), (3, 67279), (4, 67222), (5, 67210), (7, 67147),

Gene: BlueHusk\_98 Start: 66801, Stop: 66622, Start Num: 2  
Candidate Starts for BlueHusk\_98:  
(1, 66957), (Start: 2 @66801 has 262 MA's), (3, 66765), (4, 66708), (5, 66696), (7, 66633),

Gene: Bluephacebaby\_97 Start: 67500, Stop: 67321, Start Num: 2  
Candidate Starts for Bluephacebaby\_97:  
(Start: 2 @67500 has 262 MA's), (3, 67464), (4, 67407), (5, 67395), (7, 67332),

Gene: Boehler\_95 Start: 66941, Stop: 66762, Start Num: 2  
Candidate Starts for Boehler\_95:  
(1, 67097), (Start: 2 @66941 has 262 MA's), (3, 66905), (5, 66836), (7, 66773),

Gene: Brilliant\_101 Start: 67479, Stop: 67300, Start Num: 2  
Candidate Starts for Brilliant\_101:  
(Start: 2 @67479 has 262 MA's), (3, 67443), (4, 67386), (5, 67374), (7, 67311),

Gene: Buckeye\_96 Start: 67775, Stop: 67596, Start Num: 2  
Candidate Starts for Buckeye\_96:  
(Start: 2 @67775 has 262 MA's), (3, 67739), (4, 67682), (5, 67670), (7, 67607),

Gene: Burr\_100 Start: 67321, Stop: 67142, Start Num: 2  
Candidate Starts for Burr\_100:  
(Start: 2 @67321 has 262 MA's), (3, 67285), (4, 67228), (5, 67216), (7, 67153),

Gene: CamL\_98 Start: 67251, Stop: 67072, Start Num: 2  
Candidate Starts for CamL\_98:  
(Start: 2 @67251 has 262 MA's), (3, 67215), (4, 67158), (5, 67146), (7, 67083),

Gene: CampRoach\_98 Start: 67347, Stop: 67168, Start Num: 2  
Candidate Starts for CampRoach\_98:  
(Start: 2 @67347 has 262 MA's), (3, 67311), (4, 67254), (5, 67242), (7, 67179),

Gene: Cannibal\_98 Start: 67354, Stop: 67175, Start Num: 2  
Candidate Starts for Cannibal\_98:  
(Start: 2 @67354 has 262 MA's), (3, 67318), (4, 67261), (5, 67249), (7, 67186),

Gene: Carthage\_98 Start: 66809, Stop: 66630, Start Num: 2  
Candidate Starts for Carthage\_98:  
(Start: 2 @66809 has 262 MA's), (3, 66773), (4, 66716), (5, 66704), (7, 66641),

Gene: Chaelin\_98 Start: 67223, Stop: 67044, Start Num: 2  
Candidate Starts for Chaelin\_98:  
(Start: 2 @67223 has 262 MA's), (3, 67187), (5, 67118), (7, 67055),

Gene: Chah\_100 Start: 67051, Stop: 66872, Start Num: 2  
Candidate Starts for Chah\_100:  
(Start: 2 @67051 has 262 MA's), (3, 67015), (4, 66958), (5, 66946), (7, 66883),

Gene: Charles1\_101 Start: 67629, Stop: 67450, Start Num: 2  
Candidate Starts for Charles1\_101:  
(Start: 2 @67629 has 262 MA's), (3, 67593), (4, 67536), (5, 67524), (7, 67461),

Gene: CharlieGBrown\_96 Start: 66982, Stop: 66803, Start Num: 2  
Candidate Starts for CharlieGBrown\_96:  
(1, 67138), (Start: 2 @66982 has 262 MA's), (3, 66946), (5, 66877), (7, 66814),

Gene: CheetO\_94 Start: 67101, Stop: 66922, Start Num: 2  
Candidate Starts for CheetO\_94:  
(Start: 2 @67101 has 262 MA's), (3, 67065), (4, 67008), (5, 66996), (7, 66933),

Gene: Cher\_98 Start: 67455, Stop: 67276, Start Num: 2  
Candidate Starts for Cher\_98:  
(Start: 2 @67455 has 262 MA's), (3, 67419), (4, 67362), (5, 67350), (7, 67287),

Gene: Childish\_98 Start: 67645, Stop: 67466, Start Num: 2  
Candidate Starts for Childish\_98:  
(Start: 2 @67645 has 262 MA's), (3, 67609), (4, 67552), (5, 67540), (7, 67477),

Gene: Chorkpop\_99 Start: 67107, Stop: 66928, Start Num: 2  
Candidate Starts for Chorkpop\_99:  
(Start: 2 @67107 has 262 MA's), (3, 67071), (4, 67014), (5, 67002), (7, 66939),

Gene: Chunky\_96 Start: 66603, Stop: 66424, Start Num: 2  
Candidate Starts for Chunky\_96:  
(1, 66759), (Start: 2 @66603 has 262 MA's), (3, 66567), (5, 66498), (7, 66435),

Gene: Chute\_98 Start: 67646, Stop: 67467, Start Num: 2  
Candidate Starts for Chute\_98:  
(Start: 2 @67646 has 262 MA's), (3, 67610), (4, 67553), (5, 67541), (7, 67478),

Gene: Cobra\_98 Start: 67476, Stop: 67297, Start Num: 2  
Candidate Starts for Cobra\_98:  
(Start: 2 @67476 has 262 MA's), (3, 67440), (4, 67383), (5, 67371), (7, 67308),

Gene: Colbert\_96 Start: 66375, Stop: 66196, Start Num: 2



Candidate Starts for Colbert\_96:

(Start: 2 @66375 has 262 MA's), (3, 66339), (4, 66282), (5, 66270), (7, 66207),

Gene: Coletti\_100 Start: 68002, Stop: 67823, Start Num: 2

Candidate Starts for Coletti\_100:

(Start: 2 @68002 has 262 MA's), (3, 67966), (4, 67909), (5, 67897), (7, 67834),

Gene: Cornobble\_96 Start: 67103, Stop: 66924, Start Num: 2

Candidate Starts for Cornobble\_96:

(Start: 2 @67103 has 262 MA's), (3, 67067), (4, 67010), (5, 66998), (7, 66935),

Gene: Cosmolli16\_99 Start: 67579, Stop: 67400, Start Num: 2

Candidate Starts for Cosmolli16\_99:

(Start: 2 @67579 has 262 MA's), (3, 67543), (4, 67486), (5, 67474), (7, 67411),

Gene: Craff\_99 Start: 67864, Stop: 67685, Start Num: 2

Candidate Starts for Craff\_99:

(Start: 2 @67864 has 262 MA's), (3, 67828), (4, 67771), (5, 67759), (7, 67696),

Gene: Crownjwl\_95 Start: 67119, Stop: 66940, Start Num: 2

Candidate Starts for Crownjwl\_95:

(1, 67275), (Start: 2 @67119 has 262 MA's), (3, 67083), (4, 67026), (5, 67014), (7, 66951),

Gene: DaddyDaniels\_101 Start: 67598, Stop: 67419, Start Num: 2

Candidate Starts for DaddyDaniels\_101:

(Start: 2 @67598 has 262 MA's), (3, 67562), (4, 67505), (5, 67493), (7, 67430),

Gene: Daffy\_97 Start: 67092, Stop: 66913, Start Num: 2

Candidate Starts for Daffy\_97:

(Start: 2 @67092 has 262 MA's), (3, 67056), (4, 66999), (5, 66987), (7, 66924),

Gene: Daka\_99 Start: 67055, Stop: 66876, Start Num: 2

Candidate Starts for Daka\_99:

(Start: 2 @67055 has 262 MA's), (3, 67019), (4, 66962), (5, 66950), (7, 66887),

Gene: Dati\_95 Start: 67277, Stop: 67098, Start Num: 2

Candidate Starts for Dati\_95:

(Start: 2 @67277 has 262 MA's), (3, 67241), (4, 67184), (5, 67172), (7, 67109),

Gene: DelRivs\_97 Start: 66906, Stop: 66727, Start Num: 2

Candidate Starts for DelRivs\_97:

(Start: 2 @66906 has 262 MA's), (3, 66870), (4, 66813), (5, 66801), (7, 66738),

Gene: Derpp\_97 Start: 67015, Stop: 66836, Start Num: 2

Candidate Starts for Derpp\_97:

(1, 67171), (Start: 2 @67015 has 262 MA's), (3, 66979), (5, 66910), (7, 66847),

Gene: Dice\_98 Start: 66938, Stop: 66759, Start Num: 2

Candidate Starts for Dice\_98:

(Start: 2 @66938 has 262 MA's), (3, 66902), (4, 66845), (5, 66833), (7, 66770),

Gene: Dingo\_94 Start: 66380, Stop: 66201, Start Num: 2

Candidate Starts for Dingo\_94:

(Start: 2 @66380 has 262 MA's), (3, 66344), (4, 66287), (5, 66275), (7, 66212),

Gene: Dione\_96 Start: 66658, Stop: 66479, Start Num: 2

Candidate Starts for Dione\_96:

(Start: 2 @66658 has 262 MA's), (3, 66622), (4, 66565), (5, 66553), (7, 66490),

Gene: DirtJuice\_99 Start: 67767, Stop: 67588, Start Num: 2

Candidate Starts for DirtJuice\_99:

(Start: 2 @67767 has 262 MA's), (3, 67731), (4, 67674), (5, 67662), (7, 67599),

Gene: Doddsville\_95 Start: 67098, Stop: 66919, Start Num: 2

Candidate Starts for Doddsville\_95:

(Start: 2 @67098 has 262 MA's), (3, 67062), (4, 67005), (5, 66993), (7, 66930),

Gene: DoesntMatter\_95 Start: 66932, Stop: 66753, Start Num: 2

Candidate Starts for DoesntMatter\_95:

(Start: 2 @66932 has 262 MA's), (3, 66896), (4, 66839), (5, 66827), (7, 66764),

Gene: DonSanchon\_93 Start: 66616, Stop: 66437, Start Num: 2

Candidate Starts for DonSanchon\_93:

(Start: 2 @66616 has 262 MA's), (3, 66580), (4, 66523), (5, 66511), (7, 66448),

Gene: DuchessDung\_95 Start: 66613, Stop: 66434, Start Num: 2

Candidate Starts for DuchessDung\_95:

(1, 66769), (Start: 2 @66613 has 262 MA's), (3, 66577), (4, 66520), (5, 66508), (7, 66445),

Gene: Duggie\_98 Start: 67240, Stop: 67061, Start Num: 2

Candidate Starts for Duggie\_98:

(Start: 2 @67240 has 262 MA's), (3, 67204), (4, 67147), (5, 67135), (7, 67072),

Gene: Durga\_100 Start: 67721, Stop: 67542, Start Num: 2

Candidate Starts for Durga\_100:

(Start: 2 @67721 has 262 MA's), (3, 67685), (4, 67628), (5, 67616), (7, 67553),

Gene: Emiris\_100 Start: 67628, Stop: 67449, Start Num: 2

Candidate Starts for Emiris\_100:

(Start: 2 @67628 has 262 MA's), (3, 67592), (4, 67535), (5, 67523), (7, 67460),

Gene: EmpTee\_97 Start: 67029, Stop: 66850, Start Num: 2

Candidate Starts for EmpTee\_97:

(Start: 2 @67029 has 262 MA's), (3, 66993), (4, 66936), (5, 66924), (7, 66861),

Gene: Eremos\_95 Start: 67076, Stop: 66897, Start Num: 2

Candidate Starts for Eremos\_95:

(1, 67232), (Start: 2 @67076 has 262 MA's), (3, 67040), (4, 66983), (5, 66971), (7, 66908),

Gene: Etabe\_97 Start: 67805, Stop: 67626, Start Num: 2

Candidate Starts for Etabe\_97:

(Start: 2 @67805 has 262 MA's), (3, 67769), (4, 67712), (5, 67700), (7, 67637),

Gene: Eugenia\_100 Start: 67740, Stop: 67561, Start Num: 2

Candidate Starts for Eugenia\_100:

(Start: 2 @67740 has 262 MA's), (3, 67704), (4, 67647), (5, 67635), (7, 67572),

Gene: Fang\_98 Start: 67170, Stop: 66991, Start Num: 2  
Candidate Starts for Fang\_98:  
(Start: 2 @67170 has 262 MA's), (3, 67134), (4, 67077), (5, 67065), (7, 67002),

Gene: FluffyNinja\_99 Start: 67317, Stop: 67138, Start Num: 2  
Candidate Starts for FluffyNinja\_99:  
(Start: 2 @67317 has 262 MA's), (3, 67281), (4, 67224), (5, 67212), (7, 67149),

Gene: Fozzie\_94 Start: 67366, Stop: 67187, Start Num: 2  
Candidate Starts for Fozzie\_94:  
(Start: 2 @67366 has 262 MA's), (3, 67330), (4, 67273), (5, 67261), (7, 67198),

Gene: Frankicide\_95 Start: 66866, Stop: 66687, Start Num: 2  
Candidate Starts for Frankicide\_95:  
(Start: 2 @66866 has 262 MA's), (3, 66830), (4, 66773), (5, 66761), (7, 66698),

Gene: Freya\_94 Start: 66636, Stop: 66457, Start Num: 2  
Candidate Starts for Freya\_94:  
(Start: 2 @66636 has 262 MA's), (3, 66600), (4, 66543), (5, 66531), (7, 66468),

Gene: FriarPreacher\_95 Start: 67015, Stop: 66836, Start Num: 2  
Candidate Starts for FriarPreacher\_95:  
(Start: 2 @67015 has 262 MA's), (3, 66979), (4, 66922), (5, 66910), (7, 66847),

Gene: Fringe\_102 Start: 67792, Stop: 67613, Start Num: 2  
Candidate Starts for Fringe\_102:  
(Start: 2 @67792 has 262 MA's), (3, 67756), (4, 67699), (5, 67687), (7, 67624),

Gene: FugateOSU\_98 Start: 68077, Stop: 67898, Start Num: 2  
Candidate Starts for FugateOSU\_98:  
(Start: 2 @68077 has 262 MA's), (3, 68041), (4, 67984), (5, 67972), (7, 67909),

Gene: Gareth\_98 Start: 67466, Stop: 67287, Start Num: 2  
Candidate Starts for Gareth\_98:  
(Start: 2 @67466 has 262 MA's), (3, 67430), (4, 67373), (5, 67361), (7, 67298),

Gene: GeneCoco\_97 Start: 67402, Stop: 67223, Start Num: 2  
Candidate Starts for GeneCoco\_97:  
(Start: 2 @67402 has 262 MA's), (3, 67366), (4, 67309), (5, 67297), (7, 67234),

Gene: Giraffe\_99 Start: 67470, Stop: 67291, Start Num: 2  
Candidate Starts for Giraffe\_99:  
(Start: 2 @67470 has 262 MA's), (3, 67434), (4, 67377), (5, 67365), (7, 67302),

Gene: Gophee\_97 Start: 67457, Stop: 67278, Start Num: 2  
Candidate Starts for Gophee\_97:  
(Start: 2 @67457 has 262 MA's), (3, 67421), (4, 67364), (5, 67352), (7, 67289),

Gene: Grand2040\_95 Start: 67192, Stop: 67013, Start Num: 2  
Candidate Starts for Grand2040\_95:  
(Start: 2 @67192 has 262 MA's), (3, 67156), (4, 67099), (5, 67087), (7, 67024),

Gene: Gwilliam\_98 Start: 68000, Stop: 67821, Start Num: 2  
Candidate Starts for Gwilliam\_98:  
(1, 68156), (Start: 2 @68000 has 262 MA's), (3, 67964), (5, 67895), (7, 67832),

Gene: Gyarad\_0096 Start: 66605, Stop: 66426, Start Num: 2  
Candidate Starts for Gyarad\_0096:  
(Start: 2 @66605 has 262 MA's), (3, 66569), (5, 66500), (7, 66437),

Gene: HSavage\_95 Start: 66588, Stop: 66409, Start Num: 2  
Candidate Starts for HSavage\_95:  
(Start: 2 @66588 has 262 MA's), (3, 66552), (5, 66483), (7, 66420),

Gene: Haimas\_95 Start: 66897, Stop: 66718, Start Num: 2  
Candidate Starts for Haimas\_95:  
(Start: 2 @66897 has 262 MA's), (3, 66861), (4, 66804), (5, 66792), (7, 66729),

Gene: Haleema\_97 Start: 67016, Stop: 66837, Start Num: 2  
Candidate Starts for Haleema\_97:  
(Start: 2 @67016 has 262 MA's), (3, 66980), (4, 66923), (5, 66911), (7, 66848),

Gene: Hamish\_95 Start: 67185, Stop: 67006, Start Num: 2  
Candidate Starts for Hamish\_95:  
(Start: 2 @67185 has 262 MA's), (3, 67149), (4, 67092), (5, 67080), (7, 67017),

Gene: Hartsy\_96 Start: 67134, Stop: 66955, Start Num: 2  
Candidate Starts for Hartsy\_96:  
(Start: 2 @67134 has 262 MA's), (3, 67098), (4, 67041), (5, 67029), (7, 66966),

Gene: Harvey\_95 Start: 66793, Stop: 66614, Start Num: 2  
Candidate Starts for Harvey\_95:  
(Start: 2 @66793 has 262 MA's), (3, 66757), (4, 66700), (5, 66688), (7, 66625),

Gene: Held\_96 Start: 66914, Stop: 66735, Start Num: 2  
Candidate Starts for Held\_96:  
(Start: 2 @66914 has 262 MA's), (3, 66878), (4, 66821), (5, 66809), (7, 66746),

Gene: HenryJackson\_98 Start: 67634, Stop: 67455, Start Num: 2  
Candidate Starts for HenryJackson\_98:  
(Start: 2 @67634 has 262 MA's), (3, 67598), (4, 67541), (5, 67529), (7, 67466),

Gene: Hertubise\_97 Start: 67276, Stop: 67097, Start Num: 2  
Candidate Starts for Hertubise\_97:  
(Start: 2 @67276 has 262 MA's), (3, 67240), (4, 67183), (5, 67171), (7, 67108),

Gene: Hetaeria\_97 Start: 67006, Stop: 66827, Start Num: 2  
Candidate Starts for Hetaeria\_97:  
(Start: 2 @67006 has 262 MA's), (3, 66970), (4, 66913), (5, 66901), (7, 66838),

Gene: HighStump\_100 Start: 67421, Stop: 67242, Start Num: 2  
Candidate Starts for HighStump\_100:  
(Start: 2 @67421 has 262 MA's), (3, 67385), (4, 67328), (5, 67316), (7, 67253),

Gene: Hocus\_97 Start: 66935, Stop: 66756, Start Num: 2

Candidate Starts for Hocus\_97:

(1, 67091), (Start: 2 @66935 has 262 MA's), (3, 66899), (4, 66842), (5, 66830), (7, 66767),

Gene: Horchata\_92 Start: 66773, Stop: 66594, Start Num: 2

Candidate Starts for Horchata\_92:

(1, 66929), (Start: 2 @66773 has 262 MA's), (3, 66737), (5, 66668), (7, 66605),

Gene: ImtiyazSitla\_99 Start: 67460, Stop: 67281, Start Num: 2

Candidate Starts for ImtiyazSitla\_99:

(1, 67616), (Start: 2 @67460 has 262 MA's), (3, 67424), (5, 67355), (7, 67292),

Gene: Inchworm\_99 Start: 67308, Stop: 67129, Start Num: 2

Candidate Starts for Inchworm\_99:

(Start: 2 @67308 has 262 MA's), (3, 67272), (4, 67215), (5, 67203), (7, 67140),

Gene: Inverness\_95 Start: 66865, Stop: 66686, Start Num: 2

Candidate Starts for Inverness\_95:

(Start: 2 @66865 has 262 MA's), (3, 66829), (4, 66772), (5, 66760), (7, 66697),

Gene: Iridoclysis\_97 Start: 67198, Stop: 67019, Start Num: 2

Candidate Starts for Iridoclysis\_97:

(Start: 2 @67198 has 262 MA's), (3, 67162), (4, 67105), (5, 67093), (7, 67030),

Gene: IsaacEli\_100 Start: 67439, Stop: 67260, Start Num: 2

Candidate Starts for IsaacEli\_100:

(Start: 2 @67439 has 262 MA's), (3, 67403), (4, 67346), (5, 67334), (7, 67271),

Gene: JDog\_97 Start: 67468, Stop: 67289, Start Num: 2

Candidate Starts for JDog\_97:

(Start: 2 @67468 has 262 MA's), (3, 67432), (4, 67375), (5, 67363), (7, 67300),

Gene: JacAttac\_98 Start: 66912, Stop: 66733, Start Num: 2

Candidate Starts for JacAttac\_98:

(Start: 2 @66912 has 262 MA's), (3, 66876), (4, 66819), (5, 66807), (7, 66744),

Gene: JakeO\_99 Start: 67196, Stop: 67017, Start Num: 2

Candidate Starts for JakeO\_99:

(Start: 2 @67196 has 262 MA's), (3, 67160), (4, 67103), (5, 67091), (7, 67028),

Gene: JangoPhett\_96 Start: 67274, Stop: 67095, Start Num: 2

Candidate Starts for JangoPhett\_96:

(Start: 2 @67274 has 262 MA's), (3, 67238), (4, 67181), (5, 67169), (7, 67106),

Gene: Jillium\_98 Start: 67351, Stop: 67172, Start Num: 2

Candidate Starts for Jillium\_98:

(Start: 2 @67351 has 262 MA's), (3, 67315), (4, 67258), (5, 67246), (7, 67183),

Gene: Jiminy\_98 Start: 67132, Stop: 66953, Start Num: 2

Candidate Starts for Jiminy\_98:

(Start: 2 @67132 has 262 MA's), (3, 67096), (4, 67039), (5, 67027), (7, 66964),

Gene: Jiraiya\_103 Start: 67216, Stop: 67037, Start Num: 2

Candidate Starts for Jiraiya\_103:

(Start: 2 @67216 has 262 MA's), (3, 67180), (4, 67123), (5, 67111), (7, 67048),

Gene: KLucky39\_95 Start: 66736, Stop: 66557, Start Num: 2

Candidate Starts for KLucky39\_95:

(Start: 2 @66736 has 262 MA's), (3, 66700), (4, 66643), (5, 66631), (7, 66568),

Gene: Kahve\_98 Start: 67632, Stop: 67453, Start Num: 2

Candidate Starts for Kahve\_98:

(Start: 2 @67632 has 262 MA's), (3, 67596), (4, 67539), (5, 67527), (7, 67464),

Gene: Kailash\_96 Start: 67331, Stop: 67152, Start Num: 2

Candidate Starts for Kailash\_96:

(1, 67487), (Start: 2 @67331 has 262 MA's), (3, 67295), (5, 67226), (7, 67163),

Gene: Katniss\_100 Start: 67048, Stop: 66869, Start Num: 2

Candidate Starts for Katniss\_100:

(Start: 2 @67048 has 262 MA's), (3, 67012), (4, 66955), (5, 66943), (7, 66880),

Gene: Keitherie\_101 Start: 67690, Stop: 67511, Start Num: 2

Candidate Starts for Keitherie\_101:

(Start: 2 @67690 has 262 MA's), (3, 67654), (4, 67597), (5, 67585), (7, 67522),

Gene: Kikipoo\_100 Start: 67439, Stop: 67260, Start Num: 2

Candidate Starts for Kikipoo\_100:

(Start: 2 @67439 has 262 MA's), (3, 67403), (4, 67346), (5, 67334), (7, 67271),

Gene: Kimbrough\_99 Start: 67511, Stop: 67332, Start Num: 2

Candidate Starts for Kimbrough\_99:

(Start: 2 @67511 has 262 MA's), (3, 67475), (4, 67418), (5, 67406), (7, 67343),

Gene: KingTut\_88 Start: 63428, Stop: 63249, Start Num: 2

Candidate Starts for KingTut\_88:

(Start: 2 @63428 has 262 MA's), (3, 63392), (4, 63335), (5, 63323), (7, 63260),

Gene: KingVeVeVe\_96 Start: 66644, Stop: 66465, Start Num: 2

Candidate Starts for KingVeVeVe\_96:

(1, 66800), (Start: 2 @66644 has 262 MA's), (3, 66608), (4, 66551), (5, 66539), (7, 66476),

Gene: KlimbOn\_97 Start: 66951, Stop: 66772, Start Num: 2

Candidate Starts for KlimbOn\_97:

(Start: 2 @66951 has 262 MA's), (3, 66915), (4, 66858), (5, 66846), (7, 66783),

Gene: Kloppinator\_98 Start: 67081, Stop: 66902, Start Num: 2

Candidate Starts for Kloppinator\_98:

(Start: 2 @67081 has 262 MA's), (3, 67045), (4, 66988), (5, 66976), (7, 66913),

Gene: Kwadwo\_97 Start: 66935, Stop: 66756, Start Num: 2

Candidate Starts for Kwadwo\_97:

(Start: 2 @66935 has 262 MA's), (3, 66899), (4, 66842), (5, 66830), (7, 66767),

Gene: Kwksand96\_99 Start: 67201, Stop: 67022, Start Num: 2

Candidate Starts for Kwksand96\_99:

(Start: 2 @67201 has 262 MA's), (3, 67165), (4, 67108), (5, 67096), (7, 67033),

Gene: Labeouficaum\_98 Start: 67015, Stop: 66836, Start Num: 2  
Candidate Starts for Labeouficaum\_98:  
(1, 67171), (Start: 2 @67015 has 262 MA's), (3, 66979), (5, 66910), (7, 66847),

Gene: LasagnaCat\_99 Start: 67317, Stop: 67138, Start Num: 2  
Candidate Starts for LasagnaCat\_99:  
(Start: 2 @67317 has 262 MA's), (3, 67281), (4, 67224), (5, 67212), (7, 67149),

Gene: Lasso\_97 Start: 67177, Stop: 66998, Start Num: 2  
Candidate Starts for Lasso\_97:  
(Start: 2 @67177 has 262 MA's), (3, 67141), (4, 67084), (5, 67072), (7, 67009),

Gene: LeeLot\_96 Start: 67522, Stop: 67343, Start Num: 2  
Candidate Starts for LeeLot\_96:  
(Start: 2 @67522 has 262 MA's), (3, 67486), (4, 67429), (5, 67417), (7, 67354),

Gene: Lego3393\_96 Start: 67638, Stop: 67459, Start Num: 2  
Candidate Starts for Lego3393\_96:  
(Start: 2 @67638 has 262 MA's), (3, 67602), (4, 67545), (5, 67533), (7, 67470),

Gene: Legolas\_99 Start: 67265, Stop: 67086, Start Num: 2  
Candidate Starts for Legolas\_99:  
(Start: 2 @67265 has 262 MA's), (3, 67229), (4, 67172), (5, 67160), (7, 67097),

Gene: LeiMonet\_100 Start: 67398, Stop: 67219, Start Num: 2  
Candidate Starts for LeiMonet\_100:  
(Start: 2 @67398 has 262 MA's), (3, 67362), (4, 67305), (5, 67293), (7, 67230),

Gene: LemonSlice\_98 Start: 66924, Stop: 66745, Start Num: 2  
Candidate Starts for LemonSlice\_98:  
(Start: 2 @66924 has 262 MA's), (3, 66888), (4, 66831), (5, 66819), (7, 66756),

Gene: Longacauda\_98 Start: 67159, Stop: 66980, Start Num: 2  
Candidate Starts for Longacauda\_98:  
(Start: 2 @67159 has 262 MA's), (3, 67123), (4, 67066), (5, 67054), (7, 66991),

Gene: Lopsy\_94 Start: 66830, Stop: 66651, Start Num: 2  
Candidate Starts for Lopsy\_94:  
(Start: 2 @66830 has 262 MA's), (3, 66794), (4, 66737), (5, 66725), (7, 66662),

Gene: LostAndPhound\_97 Start: 67466, Stop: 67287, Start Num: 2  
Candidate Starts for LostAndPhound\_97:  
(Start: 2 @67466 has 262 MA's), (3, 67430), (4, 67373), (5, 67361), (7, 67298),

Gene: LuckyMarjie\_95 Start: 66676, Stop: 66497, Start Num: 2  
Candidate Starts for LuckyMarjie\_95:  
(Start: 2 @66676 has 262 MA's), (3, 66640), (4, 66583), (5, 66571), (7, 66508),

Gene: Lulumae\_93 Start: 66657, Stop: 66478, Start Num: 2  
Candidate Starts for Lulumae\_93:  
(Start: 2 @66657 has 262 MA's), (3, 66621), (4, 66564), (5, 66552), (7, 66489),

Gene: Lulwa\_95 Start: 66290, Stop: 66111, Start Num: 2  
Candidate Starts for Lulwa\_95:  
(Start: 2 @66290 has 262 MA's), (3, 66254), (4, 66197), (5, 66185), (7, 66122),

Gene: Lumine\_99 Start: 67114, Stop: 66935, Start Num: 2  
Candidate Starts for Lumine\_99:  
(Start: 2 @67114 has 262 MA's), (3, 67078), (4, 67021), (5, 67009), (7, 66946),

Gene: MRabcd\_98 Start: 67392, Stop: 67213, Start Num: 2  
Candidate Starts for MRabcd\_98:  
(Start: 2 @67392 has 262 MA's), (3, 67356), (4, 67299), (5, 67287), (7, 67224),

Gene: Mag7\_96 Start: 66875, Stop: 66696, Start Num: 2  
Candidate Starts for Mag7\_96:  
(1, 67031), (Start: 2 @66875 has 262 MA's), (3, 66839), (5, 66770), (7, 66707),

Gene: Mana\_95 Start: 67080, Stop: 66901, Start Num: 2  
Candidate Starts for Mana\_95:  
(Start: 2 @67080 has 262 MA's), (3, 67044), (4, 66987), (5, 66975), (7, 66912),

Gene: Manad\_97 Start: 67189, Stop: 67010, Start Num: 2  
Candidate Starts for Manad\_97:  
(Start: 2 @67189 has 262 MA's), (3, 67153), (4, 67096), (5, 67084), (7, 67021),

Gene: Maru\_97 Start: 67285, Stop: 67106, Start Num: 2  
Candidate Starts for Maru\_97:  
(Start: 2 @67285 has 262 MA's), (3, 67249), (4, 67192), (5, 67180), (7, 67117),

Gene: Maskar\_99 Start: 67460, Stop: 67281, Start Num: 2  
Candidate Starts for Maskar\_99:  
(1, 67616), (Start: 2 @67460 has 262 MA's), (3, 67424), (5, 67355), (7, 67292),

Gene: Matalotodo\_96 Start: 67924, Stop: 67745, Start Num: 2  
Candidate Starts for Matalotodo\_96:  
(Start: 2 @67924 has 262 MA's), (3, 67888), (4, 67831), (5, 67819), (7, 67756),

Gene: Mcshane\_100 Start: 67307, Stop: 67128, Start Num: 2  
Candidate Starts for Mcshane\_100:  
(1, 67463), (Start: 2 @67307 has 262 MA's), (3, 67271), (4, 67214), (5, 67202), (7, 67139),

Gene: Mecca\_98 Start: 67491, Stop: 67312, Start Num: 2  
Candidate Starts for Mecca\_98:  
(Start: 2 @67491 has 262 MA's), (3, 67455), (4, 67398), (5, 67386), (7, 67323),

Gene: Megamind20\_100 Start: 67271, Stop: 67092, Start Num: 2  
Candidate Starts for Megamind20\_100:  
(Start: 2 @67271 has 262 MA's), (3, 67235), (4, 67178), (5, 67166), (7, 67103),

Gene: Megatron\_99 Start: 67610, Stop: 67431, Start Num: 2  
Candidate Starts for Megatron\_99:  
(Start: 2 @67610 has 262 MA's), (3, 67574), (4, 67517), (5, 67505), (7, 67442),

Gene: Melc17\_95 Start: 67560, Stop: 67381, Start Num: 2



Candidate Starts for Melc17\_95:

(Start: 2 @67560 has 262 MA's), (3, 67524), (4, 67467), (5, 67455), (7, 67392),

Gene: MelsMeow\_96 Start: 66941, Stop: 66762, Start Num: 2

Candidate Starts for MelsMeow\_96:

(1, 67097), (Start: 2 @66941 has 262 MA's), (3, 66905), (5, 66836), (7, 66773),

Gene: Mesh1\_98 Start: 67375, Stop: 67196, Start Num: 2

Candidate Starts for Mesh1\_98:

(Start: 2 @67375 has 262 MA's), (3, 67339), (4, 67282), (5, 67270), (7, 67207),

Gene: MichaelPhcott\_96 Start: 66872, Stop: 66693, Start Num: 2

Candidate Starts for MichaelPhcott\_96:

(1, 67028), (Start: 2 @66872 has 262 MA's), (3, 66836), (5, 66767), (7, 66704),

Gene: Mikota\_92 Start: 66367, Stop: 66188, Start Num: 2

Candidate Starts for Mikota\_92:

(Start: 2 @66367 has 262 MA's), (3, 66331), (4, 66274), (5, 66262), (7, 66199),

Gene: MiniBoss\_93 Start: 65988, Stop: 65809, Start Num: 2

Candidate Starts for MiniBoss\_93:

(1, 66144), (Start: 2 @65988 has 262 MA's), (3, 65952), (4, 65895), (5, 65883), (7, 65820),

Gene: MitKao\_98 Start: 67093, Stop: 66914, Start Num: 2

Candidate Starts for MitKao\_98:

(Start: 2 @67093 has 262 MA's), (3, 67057), (4, 67000), (5, 66988), (7, 66925),

Gene: Morgushi\_95 Start: 66908, Stop: 66729, Start Num: 2

Candidate Starts for Morgushi\_95:

(Start: 2 @66908 has 262 MA's), (3, 66872), (4, 66815), (5, 66803), (7, 66740),

Gene: Morty\_98 Start: 67478, Stop: 67299, Start Num: 2

Candidate Starts for Morty\_98:

(Start: 2 @67478 has 262 MA's), (3, 67442), (4, 67385), (5, 67373), (7, 67310),

Gene: Mosaic\_95 Start: 67089, Stop: 66910, Start Num: 2

Candidate Starts for Mosaic\_95:

(Start: 2 @67089 has 262 MA's), (3, 67053), (4, 66996), (5, 66984), (7, 66921),

Gene: MrPhizzler\_97 Start: 67388, Stop: 67209, Start Num: 2

Candidate Starts for MrPhizzler\_97:

(Start: 2 @67388 has 262 MA's), (3, 67352), (4, 67295), (5, 67283), (7, 67220),

Gene: Mulan\_97 Start: 67122, Stop: 66943, Start Num: 2

Candidate Starts for Mulan\_97:

(Start: 2 @67122 has 262 MA's), (3, 67086), (4, 67029), (5, 67017), (7, 66954),

Gene: Murdoc\_94 Start: 67201, Stop: 67022, Start Num: 2

Candidate Starts for Murdoc\_94:

(Start: 2 @67201 has 262 MA's), (3, 67165), (4, 67108), (5, 67096), (7, 67033),

Gene: Mutante\_99 Start: 67095, Stop: 66916, Start Num: 2

Candidate Starts for Mutante\_99:

(Start: 2 @67095 has 262 MA's), (3, 67059), (4, 67002), (5, 66990), (7, 66927),

Gene: Nacho\_00100 Start: 67922, Stop: 67743, Start Num: 2

Candidate Starts for Nacho\_00100:

(Start: 2 @67922 has 262 MA's), (3, 67886), (4, 67829), (5, 67817), (7, 67754),

Gene: Newman\_93 Start: 67199, Stop: 67020, Start Num: 2

Candidate Starts for Newman\_93:

(Start: 2 @67199 has 262 MA's), (3, 67163), (4, 67106), (5, 67094), (7, 67031),

Gene: Nicole21\_99 Start: 67229, Stop: 67050, Start Num: 2

Candidate Starts for Nicole21\_99:

(Start: 2 @67229 has 262 MA's), (3, 67193), (4, 67136), (5, 67124), (7, 67061),

Gene: Numberten\_98 Start: 67208, Stop: 67029, Start Num: 2

Candidate Starts for Numberten\_98:

(Start: 2 @67208 has 262 MA's), (3, 67172), (4, 67115), (5, 67103), (7, 67040),

Gene: Nyala\_98 Start: 66944, Stop: 66765, Start Num: 2

Candidate Starts for Nyala\_98:

(Start: 2 @66944 has 262 MA's), (3, 66908), (4, 66851), (5, 66839), (7, 66776),

Gene: OSmaximus\_98 Start: 67497, Stop: 67318, Start Num: 2

Candidate Starts for OSmaximus\_98:

(Start: 2 @67497 has 262 MA's), (3, 67461), (4, 67404), (5, 67392), (7, 67329),

Gene: Olak\_100 Start: 67477, Stop: 67298, Start Num: 2

Candidate Starts for Olak\_100:

(Start: 2 @67477 has 262 MA's), (3, 67441), (4, 67384), (5, 67372), (7, 67309),

Gene: Oline\_97 Start: 67099, Stop: 66920, Start Num: 2

Candidate Starts for Oline\_97:

(Start: 2 @67099 has 262 MA's), (3, 67063), (4, 67006), (5, 66994), (7, 66931),

Gene: Olive\_94 Start: 67341, Stop: 67162, Start Num: 2

Candidate Starts for Olive\_94:

(Start: 2 @67341 has 262 MA's), (3, 67305), (4, 67248), (5, 67236), (7, 67173),

Gene: OliverWalter\_97 Start: 67393, Stop: 67214, Start Num: 2

Candidate Starts for OliverWalter\_97:

(Start: 2 @67393 has 262 MA's), (3, 67357), (4, 67300), (5, 67288), (7, 67225),

Gene: Omniscient\_99 Start: 67798, Stop: 67619, Start Num: 2

Candidate Starts for Omniscient\_99:

(Start: 2 @67798 has 262 MA's), (3, 67762), (4, 67705), (5, 67693), (7, 67630),

Gene: Oosterbaan\_98 Start: 67336, Stop: 67157, Start Num: 2

Candidate Starts for Oosterbaan\_98:

(Start: 2 @67336 has 262 MA's), (3, 67300), (4, 67243), (5, 67231), (7, 67168),

Gene: Orfeu\_98 Start: 67457, Stop: 67278, Start Num: 2

Candidate Starts for Orfeu\_98:

(Start: 2 @67457 has 262 MA's), (3, 67421), (4, 67364), (5, 67352), (7, 67289),

Gene: Orion\_96 Start: 67028, Stop: 66849, Start Num: 2

Candidate Starts for Orion\_96:

(Start: 2 @67028 has 262 MA's), (3, 66992), (4, 66935), (5, 66923), (7, 66860),

Gene: Orwigg\_100 Start: 67233, Stop: 67054, Start Num: 2

Candidate Starts for Orwigg\_100:

(Start: 2 @67233 has 262 MA's), (3, 67197), (4, 67140), (5, 67128), (7, 67065),

Gene: PG1\_96 Start: 67600, Stop: 67421, Start Num: 2

Candidate Starts for PG1\_96:

(Start: 2 @67600 has 262 MA's), (3, 67564), (4, 67507), (5, 67495), (7, 67432),

Gene: Pacifista\_100 Start: 67318, Stop: 67139, Start Num: 2

Candidate Starts for Pacifista\_100:

(Start: 2 @67318 has 262 MA's), (3, 67282), (4, 67225), (5, 67213), (7, 67150),

Gene: Phamished\_97 Start: 67116, Stop: 66937, Start Num: 2

Candidate Starts for Phamished\_97:

(Start: 2 @67116 has 262 MA's), (3, 67080), (4, 67023), (5, 67011), (7, 66948),

Gene: Phareon\_95 Start: 66641, Stop: 66462, Start Num: 2

Candidate Starts for Phareon\_95:

(Start: 2 @66641 has 262 MA's), (3, 66605), (4, 66548), (5, 66536), (7, 66473),

Gene: PhatCats2014\_97 Start: 67601, Stop: 67422, Start Num: 2

Candidate Starts for PhatCats2014\_97:

(Start: 2 @67601 has 262 MA's), (3, 67565), (4, 67508), (5, 67496), (7, 67433),

Gene: PhatLouie\_100 Start: 67474, Stop: 67295, Start Num: 2

Candidate Starts for PhatLouie\_100:

(Start: 2 @67474 has 262 MA's), (3, 67438), (4, 67381), (5, 67369), (7, 67306),

Gene: PhenghisKhan\_98 Start: 67105, Stop: 66926, Start Num: 2

Candidate Starts for PhenghisKhan\_98:

(1, 67261), (Start: 2 @67105 has 262 MA's), (3, 67069), (4, 67012), (5, 67000), (7, 66937),

Gene: Pherdinand\_99 Start: 67320, Stop: 67141, Start Num: 2

Candidate Starts for Pherdinand\_99:

(Start: 2 @67320 has 262 MA's), (3, 67284), (4, 67227), (5, 67215), (7, 67152),

Gene: Phergie\_98 Start: 67094, Stop: 66915, Start Num: 2

Candidate Starts for Phergie\_98:

(1, 67250), (Start: 2 @67094 has 262 MA's), (3, 67058), (4, 67001), (5, 66989), (7, 66926),

Gene: Phipps\_95 Start: 66894, Stop: 66715, Start Num: 2

Candidate Starts for Phipps\_95:

(Start: 2 @66894 has 262 MA's), (3, 66858), (4, 66801), (5, 66789), (7, 66726),

Gene: Phleuron\_95 Start: 66905, Stop: 66726, Start Num: 2

Candidate Starts for Phleuron\_95:

(1, 67061), (Start: 2 @66905 has 262 MA's), (3, 66869), (5, 66800), (7, 66737),

Gene: PhrankReynolds\_96 Start: 67099, Stop: 66920, Start Num: 2  
Candidate Starts for PhrankReynolds\_96:  
(1, 67255), (Start: 2 @67099 has 262 MA's), (3, 67063), (4, 67006), (5, 66994), (7, 66931),

Gene: PhrodoBaggins\_100 Start: 67474, Stop: 67295, Start Num: 2  
Candidate Starts for PhrodoBaggins\_100:  
(Start: 2 @67474 has 262 MA's), (3, 67438), (4, 67381), (5, 67369), (7, 67306),

Gene: Phunky\_95 Start: 66976, Stop: 66797, Start Num: 2  
Candidate Starts for Phunky\_95:  
(Start: 2 @66976 has 262 MA's), (3, 66940), (4, 66883), (5, 66871), (7, 66808),

Gene: Piglet\_0097 Start: 67593, Stop: 67414, Start Num: 2  
Candidate Starts for Piglet\_0097:  
(Start: 2 @67593 has 262 MA's), (3, 67557), (4, 67500), (5, 67488), (7, 67425),

Gene: PinheadLarry\_97 Start: 67245, Stop: 67066, Start Num: 2  
Candidate Starts for PinheadLarry\_97:  
(Start: 2 @67245 has 262 MA's), (3, 67209), (4, 67152), (5, 67140), (7, 67077),

Gene: Pinkman\_97 Start: 67317, Stop: 67138, Start Num: 2  
Candidate Starts for Pinkman\_97:  
(Start: 2 @67317 has 262 MA's), (3, 67281), (4, 67224), (5, 67212), (7, 67149),

Gene: Pipsqueak\_95 Start: 66928, Stop: 66749, Start Num: 2  
Candidate Starts for Pipsqueak\_95:  
(Start: 2 @66928 has 262 MA's), (3, 66892), (4, 66835), (5, 66823), (7, 66760),

Gene: Placalicious\_95 Start: 67686, Stop: 67507, Start Num: 2  
Candidate Starts for Placalicious\_95:  
(Start: 2 @67686 has 262 MA's), (3, 67650), (4, 67593), (5, 67581), (7, 67518),

Gene: Plmatters\_95 Start: 66919, Stop: 66740, Start Num: 2  
Candidate Starts for Plmatters\_95:  
(Start: 2 @66919 has 262 MA's), (3, 66883), (4, 66826), (5, 66814), (7, 66751),

Gene: Podrick\_96 Start: 67007, Stop: 66828, Start Num: 2  
Candidate Starts for Podrick\_96:  
(Start: 2 @67007 has 262 MA's), (3, 66971), (4, 66914), (5, 66902), (7, 66839),

Gene: Pops\_95 Start: 66967, Stop: 66788, Start Num: 2  
Candidate Starts for Pops\_95:  
(Start: 2 @66967 has 262 MA's), (3, 66931), (4, 66874), (5, 66862), (7, 66799),

Gene: Potter\_92 Start: 66928, Stop: 66749, Start Num: 2  
Candidate Starts for Potter\_92:  
(Start: 2 @66928 has 262 MA's), (3, 66892), (4, 66835), (5, 66823), (7, 66760),

Gene: Prickles\_98 Start: 67054, Stop: 66875, Start Num: 2  
Candidate Starts for Prickles\_98:  
(Start: 2 @67054 has 262 MA's), (3, 67018), (4, 66961), (5, 66949), (7, 66886),

Gene: ProfessorX\_95 Start: 66687, Stop: 66508, Start Num: 2

Candidate Starts for ProfessorX\_95:

(Start: 2 @66687 has 262 MA's), (3, 66651), (4, 66594), (5, 66582), (7, 66519),

Gene: Puhltonio\_93 Start: 66924, Stop: 66745, Start Num: 2

Candidate Starts for Puhltonio\_93:

(Start: 2 @66924 has 262 MA's), (3, 66888), (4, 66831), (5, 66819), (7, 66756),

Gene: QueenBeane\_98 Start: 67251, Stop: 67072, Start Num: 2

Candidate Starts for QueenBeane\_98:

(Start: 2 @67251 has 262 MA's), (3, 67215), (4, 67158), (5, 67146), (7, 67083),

Gene: Quisquilliae\_100 Start: 67262, Stop: 67083, Start Num: 2

Candidate Starts for Quisquilliae\_100:

(Start: 2 @67262 has 262 MA's), (3, 67226), (4, 67169), (5, 67157), (7, 67094),

Gene: RedMaple\_96 Start: 67585, Stop: 67406, Start Num: 2

Candidate Starts for RedMaple\_96:

(Start: 2 @67585 has 262 MA's), (3, 67549), (4, 67492), (5, 67480), (7, 67417),

Gene: Ricotta\_99 Start: 66947, Stop: 66768, Start Num: 2

Candidate Starts for Ricotta\_99:

(Start: 2 @66947 has 262 MA's), (3, 66911), (4, 66854), (5, 66842), (7, 66779),

Gene: Riggan\_99 Start: 67432, Stop: 67253, Start Num: 2

Candidate Starts for Riggan\_99:

(Start: 2 @67432 has 262 MA's), (3, 67396), (4, 67339), (5, 67327), (7, 67264),

Gene: Rimu\_101 Start: 67411, Stop: 67232, Start Num: 2

Candidate Starts for Rimu\_101:

(Start: 2 @67411 has 262 MA's), (3, 67375), (4, 67318), (5, 67306), (7, 67243),

Gene: Robyn\_99 Start: 67323, Stop: 67144, Start Num: 2

Candidate Starts for Robyn\_99:

(Start: 2 @67323 has 262 MA's), (3, 67287), (4, 67230), (5, 67218), (7, 67155),

Gene: Roliet\_95 Start: 66291, Stop: 66112, Start Num: 2

Candidate Starts for Roliet\_95:

(Start: 2 @66291 has 262 MA's), (3, 66255), (4, 66198), (5, 66186), (7, 66123),

Gene: Roscoe\_96 Start: 67203, Stop: 67024, Start Num: 2

Candidate Starts for Roscoe\_96:

(1, 67359), (Start: 2 @67203 has 262 MA's), (3, 67167), (5, 67098), (7, 67035),

Gene: Roy17\_95 Start: 66657, Stop: 66478, Start Num: 2

Candidate Starts for Roy17\_95:

(Start: 2 @66657 has 262 MA's), (3, 66621), (4, 66564), (5, 66552), (7, 66489),

Gene: SDcharge11\_96 Start: 66307, Stop: 66128, Start Num: 2

Candidate Starts for SDcharge11\_96:

(Start: 2 @66307 has 262 MA's), (3, 66271), (4, 66214), (5, 66202), (7, 66139),

Gene: Samaymay\_98 Start: 67251, Stop: 67072, Start Num: 2

Candidate Starts for Samaymay\_98:

(Start: 2 @67251 has 262 MA's), (3, 67215), (4, 67158), (5, 67146), (7, 67083),

Gene: SassyCat97\_96 Start: 66919, Stop: 66740, Start Num: 2

Candidate Starts for SassyCat97\_96:

(Start: 2 @66919 has 262 MA's), (3, 66883), (4, 66826), (5, 66814), (7, 66751),

Gene: Schadenfreude\_98 Start: 66968, Stop: 66789, Start Num: 2

Candidate Starts for Schadenfreude\_98:

(Start: 2 @66968 has 262 MA's), (3, 66932), (4, 66875), (5, 66863), (7, 66800),

Gene: Schueller\_97 Start: 67192, Stop: 67013, Start Num: 2

Candidate Starts for Schueller\_97:

(1, 67348), (Start: 2 @67192 has 262 MA's), (3, 67156), (5, 67087), (7, 67024),

Gene: Scoot17C\_98 Start: 67033, Stop: 66854, Start Num: 2

Candidate Starts for Scoot17C\_98:

(Start: 2 @67033 has 262 MA's), (3, 66997), (4, 66940), (5, 66928), (7, 66865),

Gene: Scrick\_99 Start: 67302, Stop: 67123, Start Num: 2

Candidate Starts for Scrick\_99:

(Start: 2 @67302 has 262 MA's), (3, 67266), (4, 67209), (5, 67197), (7, 67134),

Gene: Selr12\_102 Start: 67343, Stop: 67164, Start Num: 2

Candidate Starts for Selr12\_102:

(Start: 2 @67343 has 262 MA's), (3, 67307), (4, 67250), (5, 67238), (7, 67175),

Gene: Serendipity\_97 Start: 67405, Stop: 67226, Start Num: 2

Candidate Starts for Serendipity\_97:

(Start: 2 @67405 has 262 MA's), (3, 67369), (4, 67312), (5, 67300), (7, 67237),

Gene: Serpentine\_00100 Start: 67485, Stop: 67306, Start Num: 2

Candidate Starts for Serpentine\_00100:

(Start: 2 @67485 has 262 MA's), (3, 67449), (4, 67392), (5, 67380), (7, 67317),

Gene: Sheila\_92 Start: 66485, Stop: 66306, Start Num: 2

Candidate Starts for Sheila\_92:

(1, 66641), (Start: 2 @66485 has 262 MA's), (3, 66449), (4, 66392), (5, 66380), (7, 66317),

Gene: ShiVal\_97 Start: 66956, Stop: 66777, Start Num: 2

Candidate Starts for ShiVal\_97:

(Start: 2 @66956 has 262 MA's), (3, 66920), (4, 66863), (5, 66851), (7, 66788),

Gene: Sigman\_97 Start: 66912, Stop: 66733, Start Num: 2

Candidate Starts for Sigman\_97:

(Start: 2 @66912 has 262 MA's), (3, 66876), (4, 66819), (5, 66807), (7, 66744),

Gene: SilverBell\_99 Start: 67366, Stop: 67187, Start Num: 2

Candidate Starts for SilverBell\_99:

(Start: 2 @67366 has 262 MA's), (3, 67330), (4, 67273), (5, 67261), (7, 67198),

Gene: Simielle\_98 Start: 66898, Stop: 66719, Start Num: 2

Candidate Starts for Simielle\_98:

(Start: 2 @66898 has 262 MA's), (3, 66862), (4, 66805), (5, 66793), (7, 66730),

Gene: Skippy\_98 Start: 67327, Stop: 67148, Start Num: 2  
Candidate Starts for Skippy\_98:  
(Start: 2 @67327 has 262 MA's), (3, 67291), (4, 67234), (5, 67222), (7, 67159),

Gene: Slatt\_100 Start: 67583, Stop: 67404, Start Num: 2  
Candidate Starts for Slatt\_100:  
(Start: 2 @67583 has 262 MA's), (3, 67547), (4, 67490), (5, 67478), (7, 67415),

Gene: Soile\_99 Start: 67452, Stop: 67273, Start Num: 2  
Candidate Starts for Soile\_99:  
(Start: 2 @67452 has 262 MA's), (3, 67416), (4, 67359), (5, 67347), (7, 67284),

Gene: Solosis\_96 Start: 66920, Stop: 66741, Start Num: 2  
Candidate Starts for Solosis\_96:  
(1, 67076), (Start: 2 @66920 has 262 MA's), (3, 66884), (4, 66827), (5, 66815), (7, 66752),

Gene: Sophia\_96 Start: 66907, Stop: 66728, Start Num: 2  
Candidate Starts for Sophia\_96:  
(Start: 2 @66907 has 262 MA's), (3, 66871), (4, 66814), (5, 66802), (7, 66739),

Gene: Soto\_94 Start: 66348, Stop: 66169, Start Num: 2  
Candidate Starts for Soto\_94:  
(Start: 2 @66348 has 262 MA's), (3, 66312), (4, 66255), (5, 66243), (7, 66180),

Gene: Spartan300\_97 Start: 67169, Stop: 66990, Start Num: 2  
Candidate Starts for Spartan300\_97:  
(Start: 2 @67169 has 262 MA's), (3, 67133), (4, 67076), (5, 67064), (7, 67001),

Gene: Squid\_97 Start: 67197, Stop: 67018, Start Num: 2  
Candidate Starts for Squid\_97:  
(Start: 2 @67197 has 262 MA's), (3, 67161), (4, 67104), (5, 67092), (7, 67029),

Gene: Squiggle\_97 Start: 66926, Stop: 66747, Start Num: 2  
Candidate Starts for Squiggle\_97:  
(Start: 2 @66926 has 262 MA's), (3, 66890), (4, 66833), (5, 66821), (7, 66758),

Gene: Struggle\_98 Start: 67024, Stop: 66845, Start Num: 2  
Candidate Starts for Struggle\_98:  
(Start: 2 @67024 has 262 MA's), (3, 66988), (4, 66931), (5, 66919), (7, 66856),

Gene: Suffolk\_93 Start: 66853, Stop: 66674, Start Num: 2  
Candidate Starts for Suffolk\_93:  
(Start: 2 @66853 has 262 MA's), (3, 66817), (4, 66760), (5, 66748), (7, 66685),

Gene: Surely\_98 Start: 67489, Stop: 67310, Start Num: 2  
Candidate Starts for Surely\_98:  
(Start: 2 @67489 has 262 MA's), (3, 67453), (4, 67396), (5, 67384), (7, 67321),

Gene: Swiphy\_102 Start: 67474, Stop: 67295, Start Num: 2  
Candidate Starts for Swiphy\_102:  
(Start: 2 @67474 has 262 MA's), (3, 67438), (4, 67381), (5, 67369), (7, 67306),

Gene: Swish\_99 Start: 67336, Stop: 67157, Start Num: 2  
Candidate Starts for Swish\_99:  
(Start: 2 @67336 has 262 MA's), (3, 67300), (4, 67243), (5, 67231), (7, 67168),

Gene: TallGrassMM\_97 Start: 66985, Stop: 66806, Start Num: 2  
Candidate Starts for TallGrassMM\_97:  
(1, 67141), (Start: 2 @66985 has 262 MA's), (3, 66949), (4, 66892), (5, 66880), (7, 66817),

Gene: Telesworld\_96 Start: 67059, Stop: 66880, Start Num: 2  
Candidate Starts for Telesworld\_96:  
(Start: 2 @67059 has 262 MA's), (3, 67023), (4, 66966), (5, 66954), (7, 66891),

Gene: Thora\_96 Start: 67440, Stop: 67261, Start Num: 2  
Candidate Starts for Thora\_96:  
(Start: 2 @67440 has 262 MA's), (3, 67404), (4, 67347), (5, 67335), (7, 67272),

Gene: ThreeOh3D2\_99 Start: 67593, Stop: 67414, Start Num: 2  
Candidate Starts for ThreeOh3D2\_99:  
(Start: 2 @67593 has 262 MA's), (3, 67557), (4, 67500), (5, 67488), (7, 67425),

Gene: Thunderbird\_98 Start: 67181, Stop: 67002, Start Num: 2  
Candidate Starts for Thunderbird\_98:  
(Start: 2 @67181 has 262 MA's), (3, 67145), (4, 67088), (5, 67076), (7, 67013),

Gene: Timmi\_96 Start: 66956, Stop: 66777, Start Num: 2  
Candidate Starts for Timmi\_96:  
(Start: 2 @66956 has 262 MA's), (3, 66920), (4, 66863), (5, 66851), (7, 66788),

Gene: TomBombadil\_98 Start: 67481, Stop: 67302, Start Num: 2  
Candidate Starts for TomBombadil\_98:  
(Start: 2 @67481 has 262 MA's), (3, 67445), (4, 67388), (5, 67376), (7, 67313),

Gene: Tomlarah\_98 Start: 67789, Stop: 67610, Start Num: 2  
Candidate Starts for Tomlarah\_98:  
(Start: 2 @67789 has 262 MA's), (3, 67753), (4, 67696), (5, 67684), (7, 67621),

Gene: Toni\_97 Start: 67385, Stop: 67206, Start Num: 2  
Candidate Starts for Toni\_97:  
(Start: 2 @67385 has 262 MA's), (3, 67349), (4, 67292), (5, 67280), (7, 67217),

Gene: Tooj\_95 Start: 66599, Stop: 66420, Start Num: 2  
Candidate Starts for Tooj\_95:  
(Start: 2 @66599 has 262 MA's), (3, 66563), (4, 66506), (5, 66494), (7, 66431),

Gene: True\_99 Start: 67301, Stop: 67122, Start Num: 2  
Candidate Starts for True\_99:  
(Start: 2 @67301 has 262 MA's), (3, 67265), (4, 67208), (5, 67196), (7, 67133),

Gene: Trypo\_98 Start: 67653, Stop: 67474, Start Num: 2  
Candidate Starts for Trypo\_98:  
(Start: 2 @67653 has 262 MA's), (3, 67617), (4, 67560), (5, 67548), (7, 67485),

Gene: TyrionL\_98 Start: 67015, Stop: 66836, Start Num: 2



Candidate Starts for TyrionL\_98:

(1, 67171), (Start: 2 @67015 has 262 MA's), (3, 66979), (5, 66910), (7, 66847),

Gene: UAch1\_98 Start: 67006, Stop: 66827, Start Num: 2

Candidate Starts for UAch1\_98:

(Start: 2 @67006 has 262 MA's), (3, 66970), (4, 66913), (5, 66901), (7, 66838),

Gene: UncleHowie\_94 Start: 66617, Stop: 66438, Start Num: 2

Candidate Starts for UncleHowie\_94:

(Start: 2 @66617 has 262 MA's), (3, 66581), (4, 66524), (5, 66512), (7, 66449),

Gene: Usavi\_98 Start: 67779, Stop: 67600, Start Num: 2

Candidate Starts for Usavi\_98:

(Start: 2 @67779 has 262 MA's), (3, 67743), (4, 67686), (5, 67674), (7, 67611),

Gene: Vaishali24\_98 Start: 66996, Stop: 66817, Start Num: 2

Candidate Starts for Vaishali24\_98:

(Start: 2 @66996 has 262 MA's), (3, 66960), (4, 66903), (5, 66891), (7, 66828),

Gene: Valjean\_96 Start: 67161, Stop: 66982, Start Num: 2

Candidate Starts for Valjean\_96:

(Start: 2 @67161 has 262 MA's), (3, 67125), (4, 67068), (5, 67056), (7, 66993),

Gene: Vaticameos\_95 Start: 65488, Stop: 65309, Start Num: 2

Candidate Starts for Vaticameos\_95:

(Start: 2 @65488 has 262 MA's), (3, 65452), (4, 65395), (5, 65383), (7, 65320),

Gene: Veritas\_97 Start: 67096, Stop: 66917, Start Num: 2

Candidate Starts for Veritas\_97:

(1, 67252), (Start: 2 @67096 has 262 MA's), (3, 67060), (5, 66991), (7, 66928),

Gene: Virapocalypse\_99 Start: 67283, Stop: 67104, Start Num: 2

Candidate Starts for Virapocalypse\_99:

(Start: 2 @67283 has 262 MA's), (3, 67247), (4, 67190), (5, 67178), (7, 67115),

Gene: Virgeve\_96 Start: 66901, Stop: 66722, Start Num: 2

Candidate Starts for Virgeve\_96:

(Start: 2 @66901 has 262 MA's), (3, 66865), (4, 66808), (5, 66796), (7, 66733),

Gene: Vista\_97 Start: 67095, Stop: 66916, Start Num: 2

Candidate Starts for Vista\_97:

(Start: 2 @67095 has 262 MA's), (3, 67059), (4, 67002), (5, 66990), (7, 66927),

Gene: Vivaldi\_98 Start: 67255, Stop: 67076, Start Num: 2

Candidate Starts for Vivaldi\_98:

(Start: 2 @67255 has 262 MA's), (3, 67219), (5, 67150), (7, 67087),

Gene: Vortex\_96 Start: 67201, Stop: 67022, Start Num: 2

Candidate Starts for Vortex\_96:

(Start: 2 @67201 has 262 MA's), (3, 67165), (4, 67108), (5, 67096), (7, 67033),

Gene: Wallhey\_99 Start: 67200, Stop: 67021, Start Num: 2

Candidate Starts for Wallhey\_99:

(Start: 2 @67200 has 262 MA's), (3, 67164), (4, 67107), (5, 67095), (7, 67032),

Gene: Waterdiva\_99 Start: 67467, Stop: 67288, Start Num: 2

Candidate Starts for Waterdiva\_99:

(Start: 2 @67467 has 262 MA's), (3, 67431), (4, 67374), (5, 67362), (7, 67299),

Gene: Weher20\_95 Start: 67539, Stop: 67360, Start Num: 2

Candidate Starts for Weher20\_95:

(Start: 2 @67539 has 262 MA's), (3, 67503), (4, 67446), (5, 67434), (7, 67371),

Gene: Windsor\_97 Start: 67226, Stop: 67047, Start Num: 2

Candidate Starts for Windsor\_97:

(Start: 2 @67226 has 262 MA's), (3, 67190), (5, 67121), (7, 67058),

Gene: Xavier\_97 Start: 67094, Stop: 66915, Start Num: 2

Candidate Starts for Xavier\_97:

(Start: 2 @67094 has 262 MA's), (3, 67058), (4, 67001), (5, 66989), (7, 66926),

Gene: Yoshand\_99 Start: 67319, Stop: 67140, Start Num: 2

Candidate Starts for Yoshand\_99:

(Start: 2 @67319 has 262 MA's), (3, 67283), (4, 67226), (5, 67214), (7, 67151),

Gene: YouGoGlencoco\_98 Start: 67209, Stop: 67030, Start Num: 2

Candidate Starts for YouGoGlencoco\_98:

(Start: 2 @67209 has 262 MA's), (3, 67173), (4, 67116), (5, 67104), (7, 67041),

Gene: Zaider\_99 Start: 67584, Stop: 67405, Start Num: 2

Candidate Starts for Zaider\_99:

(Start: 2 @67584 has 262 MA's), (3, 67548), (4, 67491), (5, 67479), (7, 67416),

Gene: Zelda\_98 Start: 67540, Stop: 67361, Start Num: 2

Candidate Starts for Zelda\_98:

(Start: 2 @67540 has 262 MA's), (3, 67504), (4, 67447), (5, 67435), (7, 67372),

Gene: Zonia\_98 Start: 67650, Stop: 67471, Start Num: 2

Candidate Starts for Zonia\_98:

(Start: 2 @67650 has 262 MA's), (3, 67614), (4, 67557), (5, 67545), (7, 67482),