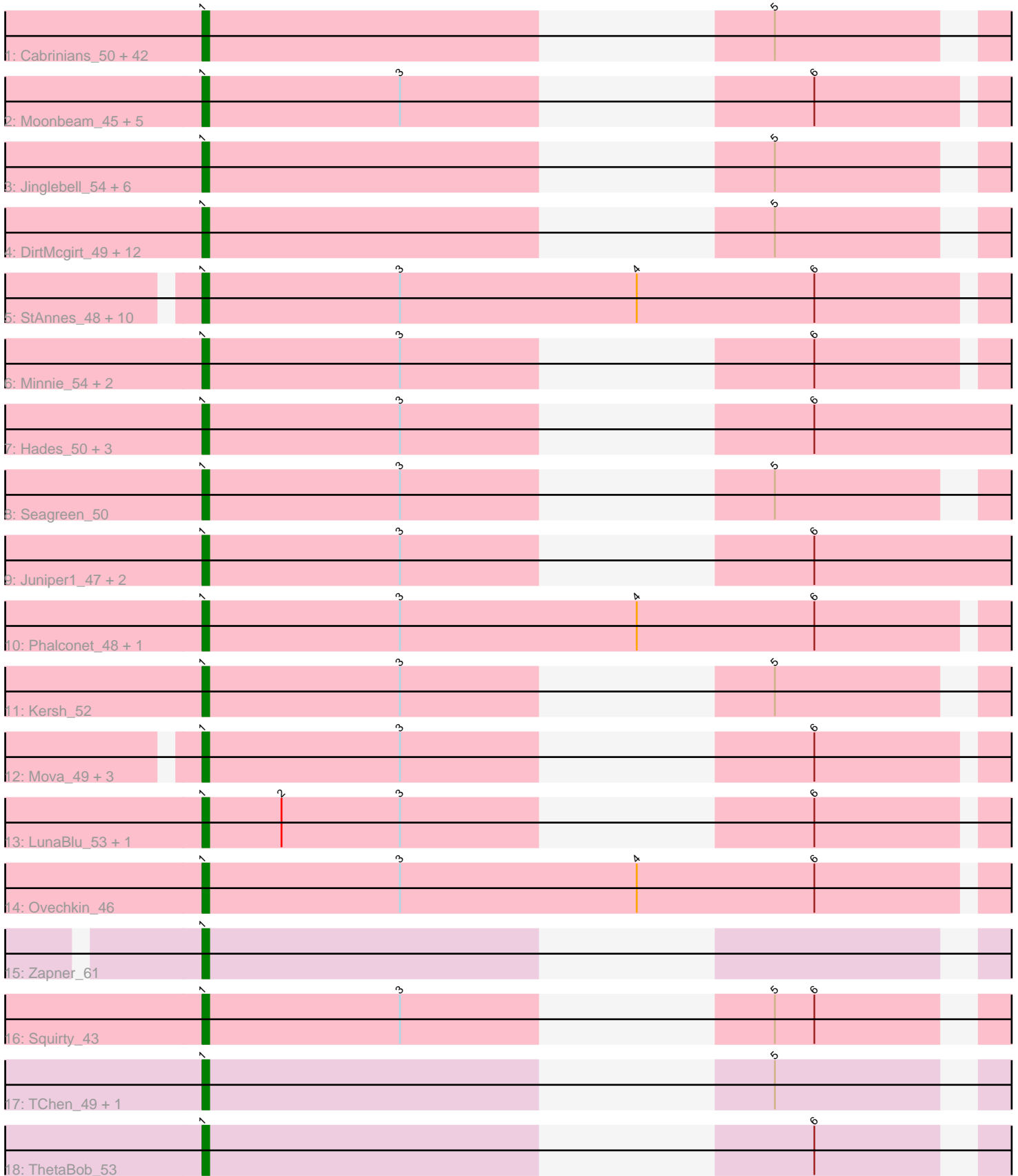


Pham 196417



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 196417 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196417 has 106 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Cabrinians\_50, Fancypants\_50, Dorothy\_46, Gandolph\_50, Martik\_49, Cornie\_42, Demsculpinboyz\_58, Jarcob\_49, Lizziana\_55, RedBird\_46, Kimberlium\_52, Karhdo\_48, Blexus\_47, QuickMath\_51, GigiOuiOui\_46, Latretium\_52, Koella\_43, OwlsT2W\_48, ShowerHandel\_51, Chevrolet\_55, Nitzel\_44, Renaud18\_54, Maravista\_51, Stap\_48, Rockne\_47, Phasih\_47, Totinger\_49, Zerg\_48, ArcusAngelus\_52, Madiba\_45, Priscilla\_49, FreddyB\_49, Radiance\_49, Krakatau\_47, LittleShirley\_49, BodEinwohner17\_49, Crumble\_44, Doug\_51, Hamulus\_50, MulchExplorer\_56, Che8\_114, BuzzLyseyear\_54, Plumbus\_51
- Track 2 : Moonbeam\_45, Sarma624\_47, Kingsley\_46, Emma\_49, Coco12\_48, Whatsapiecost\_48
- Track 3 : Jinglebell\_54, Llama\_54, Modragons\_53, AlpineSix\_54, Seabastian\_54, Ochi17\_52, OfUltron\_54
- Track 4 : DirtMcgirt\_49, Leozinho\_50, Starcevich\_49, LilMoolah\_48, TDanisky\_53, Royals2015\_51, Sabbb\_55, Mahavrat\_47, Aubs\_48, Tootsieroll\_52, Sparkdehliily\_53, MisterCuddles\_49, Phatniss\_48
- Track 5 : StAnnes\_48, XFactor\_47, Melissauren88\_47, CaptainTrips\_46, Beakin\_51, Hegedechwinu\_49, MinionDave\_48, Ms6\_42, Mandlovu\_46, Hlubikazi\_46, Bobi\_51
- Track 6 : Minnie\_54, ShroomBoi\_49, Filuzino\_47
- Track 7 : Hades\_50, Phanphagia\_44, Bipolar\_46, Byougenkin\_47
- Track 8 : Seagreen\_50
- Track 9 : Juniper1\_47, Rita\_51, Guppsters\_49
- Track 10 : Phalconet\_48, PhesterPhotato\_51
- Track 11 : Kersh\_52
- Track 12 : Mova\_49, VRedHorse\_49, Enby\_50, Lorde\_50
- Track 13 : LunaBlu\_53, Galactic\_50
- Track 14 : Ovechkin\_46
- Track 15 : Zapner\_61
- Track 16 : Squirty\_43
- Track 17 : TChen\_49, LunaStella\_47
- Track 18 : ThetaBob\_53

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

The start number called the most often in the published annotations is 1, it was called in 104 of the 104 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AlpineSix\_54, ArcusAngelus\_52, Aubs\_48, Beakin\_51, Bipolar\_46, Blexus\_47, Bobi\_51, BodEinwohner17\_49, BuzzLyseyear\_54, Byougenkin\_47, Cabrinians\_50, CaptainTrips\_46, Che8\_114, Chevrolet\_55, Coco12\_48, Cornie\_42, Crumble\_44, Demsculpinboyz\_58, DirtMcgirt\_49, Dorothy\_46, Doug\_51, Emma\_49, Enby\_50, Fancypants\_50, Filuzino\_47, FreddyB\_49, Galactic\_50, Gandalph\_50, GigiOuiOui\_46, Guppsters\_49, Hades\_50, Hamulus\_50, Hegedechwinu\_49, Hlubikazi\_46, Jarcob\_49, Jinglebell\_54, Juniper1\_47, Karhdo\_48, Kersh\_52, Kimberlium\_52, Kingsley\_46, Koella\_43, Krakatau\_47, Latretium\_52, Leozinho\_50, LilMoolah\_48, LittleShirley\_49, Lizziana\_55, Llama\_54, Lorde\_50, LunaBlu\_53, LunaStella\_47, Madiba\_45, Mahavrat\_47, Mandlovu\_46, Maravista\_51, Martik\_49, Melissauren88\_47, MinionDave\_48, Minnie\_54, MisterCuddles\_49, Modragons\_53, Moonbeam\_45, Mova\_49, Ms6\_42, MulchExplorer\_56, Nitzel\_44, Ochi17\_52, OfUltron\_54, Ovechkin\_46, OwlsT2W\_48, Phalconet\_48, Phanphagia\_44, Phasih\_47, Phatniss\_48, PhesterPhotato\_51, Plumbus\_51, Priscilla\_49, QuickMath\_51, Radiance\_49, RedBird\_46, Renaud18\_54, Rita\_51, Rockne\_47, Royals2015\_51, Sabbb\_55, Sarma624\_47, Seabastian\_54, Seagreen\_50, ShowerHandel\_51, ShroomBoi\_49, Sparkdehlily\_53, Squirty\_43, StAnnes\_48, Stap\_48, Starcevich\_49, TChen\_49, TDanisky\_53, ThetaBob\_53, Tootsieroll\_52, Totinger\_49, VRedHorse\_49, Whatsapiecost\_48, XFactor\_47, Zapner\_61, Zerg\_48,

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 1:

- Found in 106 of 106 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 104 of 104
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlpineSix\_54 (F1), ArcusAngelus\_52 (F1), Aubs\_48 (F1), Beakin\_51 (F1), Bipolar\_46 (F1), Blexus\_47 (F1), Bobi\_51 (F1), BodEinwohner17\_49 (F1), BuzzLyseyear\_54 (F1), Byougenkin\_47 (F1), Cabrinians\_50 (F1), CaptainTrips\_46 (F1), Che8\_114 (F1), Chevrolet\_55 (F1), Coco12\_48 (F1), Cornie\_42 (F5), Crumble\_44 (F1), Demsculpinboyz\_58 (F2), DirtMcgirt\_49 (F1), Dorothy\_46 (F1), Doug\_51 (F1), Emma\_49 (F1), Enby\_50 (F1), Fancypants\_50 (F1), Filuzino\_47 (F1), FreddyB\_49 (F1), Galactic\_50 (F1), Gandalph\_50 (F1), GigiOuiOui\_46 (F1), Guppsters\_49 (F1), Hades\_50 (F1), Hamulus\_50 (F1), Hegedechwinu\_49 (F1), Hlubikazi\_46 (F1), Jarcob\_49 (F1), Jinglebell\_54 (F1), Juniper1\_47 (F1), Karhdo\_48 (F1), Kersh\_52 (F1), Kimberlium\_52 (F1), Kingsley\_46 (F1), Koella\_43 (F1), Krakatau\_47 (F1), Latretium\_52 (F1), Leozinho\_50 (F1), LilMoolah\_48 (F1), LittleShirley\_49 (F1), Lizziana\_55 (F1), Llama\_54 (F1), Lorde\_50 (F1), LunaBlu\_53 (F1), LunaStella\_47 (F4), Madiba\_45 (F1), Mahavrat\_47 (F1), Mandlovu\_46 (F1), Maravista\_51 (F1), Martik\_49 (F1), Melissauren88\_47 (F1), MinionDave\_48 (F1), Minnie\_54 (F1), MisterCuddles\_49 (F1), Modragons\_53 (F1), Moonbeam\_45 (F1), Mova\_49 (F1), Ms6\_42 (F1), MulchExplorer\_56 (F1), Nitzel\_44 (F1), Ochi17\_52 (F1), OfUltron\_54 (F1),

Ovechkin\_46 (F1), OwlsT2W\_48 (F1), Phalconet\_48 (F1), Phanphagia\_44 (F1), Phasih\_47 (F1), Phatniss\_48 (F1), PhesterPhotato\_51 (F1), Plumbus\_51 (F1), Priscilla\_49 (F1), QuickMath\_51 (F1), Radiance\_49 (F1), RedBird\_46 (F1), Renaud18\_54 (F4), Rita\_51 (F1), Rockne\_47 (F1), Royals2015\_51 (F1), Sabbb\_55 (F1), Sarma624\_47 (F1), Seabastian\_54 (F1), Seagreen\_50 (F1), ShowerHandel\_51 (F1), ShroomBoi\_49 (F1), Sparkdehlily\_53 (F1), Squirty\_43 (F3), StAnnes\_48 (F1), Stap\_48 (F1), Starcevich\_49 (F1), TChen\_49 (F4), TDanisky\_53 (F1), ThetaBob\_53 (F4), Tootsieroll\_52 (F1), Totinger\_49 (F1), VRedHorse\_49 (F1), Whatsapiecost\_48 (F1), XFactor\_47 (F1), Zapner\_61 (F2), Zerg\_48 (F1),

### **Summary by clusters:**

There are 5 clusters represented in this pham: F1, F2, F3, F4, F5,

Info for manual annotations of cluster F1:

- Start number 1 was manually annotated 96 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 1 was manually annotated 2 times for cluster F2.

Info for manual annotations of cluster F3:

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

Info for manual annotations of cluster F4:

- Start number 1 was manually annotated 4 times for cluster F4.

Info for manual annotations of cluster F5:

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

### **Gene Information:**

Gene: AlpineSix\_54 Start: 38574, Stop: 38666, Start Num: 1

Candidate Starts for AlpineSix\_54:

(Start: 1 @38574 has 104 MA's), (5, 38634),

Gene: ArcusAngelus\_52 Start: 37690, Stop: 37782, Start Num: 1

Candidate Starts for ArcusAngelus\_52:

(Start: 1 @37690 has 104 MA's), (5, 37750),

Gene: Aubs\_48 Start: 36257, Stop: 36349, Start Num: 1

Candidate Starts for Aubs\_48:

(Start: 1 @36257 has 104 MA's), (5, 36317),

Gene: Beakin\_51 Start: 36341, Stop: 36463, Start Num: 1

Candidate Starts for Beakin\_51:

(Start: 1 @36341 has 104 MA's), (3, 36371), (4, 36407), (6, 36434),

Gene: Bipolar\_46 Start: 36279, Stop: 36377, Start Num: 1

Candidate Starts for Bipolar\_46:

(Start: 1 @36279 has 104 MA's), (3, 36309), (6, 36345),

Gene: Blexus\_47 Start: 36344, Stop: 36436, Start Num: 1  
Candidate Starts for Blexus\_47:  
(Start: 1 @36344 has 104 MA's), (5, 36404),

Gene: Bobi\_51 Start: 37108, Stop: 37230, Start Num: 1  
Candidate Starts for Bobi\_51:  
(Start: 1 @37108 has 104 MA's), (3, 37138), (4, 37174), (6, 37201),

Gene: BodEinwohner17\_49 Start: 36286, Stop: 36378, Start Num: 1  
Candidate Starts for BodEinwohner17\_49:  
(Start: 1 @36286 has 104 MA's), (5, 36346),

Gene: BuzzLyseyear\_54 Start: 37896, Stop: 37988, Start Num: 1  
Candidate Starts for BuzzLyseyear\_54:  
(Start: 1 @37896 has 104 MA's), (5, 37956),

Gene: Byougenkin\_47 Start: 36363, Stop: 36461, Start Num: 1  
Candidate Starts for Byougenkin\_47:  
(Start: 1 @36363 has 104 MA's), (3, 36393), (6, 36429),

Gene: Cabrinians\_50 Start: 36706, Stop: 36798, Start Num: 1  
Candidate Starts for Cabrinians\_50:  
(Start: 1 @36706 has 104 MA's), (5, 36766),

Gene: CaptainTrips\_46 Start: 35541, Stop: 35663, Start Num: 1  
Candidate Starts for CaptainTrips\_46:  
(Start: 1 @35541 has 104 MA's), (3, 35571), (4, 35607), (6, 35634),

Gene: Che8\_114 Start: 37515, Stop: 37607, Start Num: 1  
Candidate Starts for Che8\_114:  
(Start: 1 @37515 has 104 MA's), (5, 37575),

Gene: Chevrolet\_55 Start: 37691, Stop: 37783, Start Num: 1  
Candidate Starts for Chevrolet\_55:  
(Start: 1 @37691 has 104 MA's), (5, 37751),

Gene: Coco12\_48 Start: 36903, Stop: 36998, Start Num: 1  
Candidate Starts for Coco12\_48:  
(Start: 1 @36903 has 104 MA's), (3, 36933), (6, 36969),

Gene: Cornie\_42 Start: 34406, Stop: 34498, Start Num: 1  
Candidate Starts for Cornie\_42:  
(Start: 1 @34406 has 104 MA's), (5, 34466),

Gene: Crumble\_44 Start: 32642, Stop: 32734, Start Num: 1  
Candidate Starts for Crumble\_44:  
(Start: 1 @32642 has 104 MA's), (5, 32702),

Gene: Demsculpinboyz\_58 Start: 35990, Stop: 36082, Start Num: 1  
Candidate Starts for Demsculpinboyz\_58:  
(Start: 1 @35990 has 104 MA's), (5, 36050),

Gene: DirtMcgirt\_49 Start: 35747, Stop: 35839, Start Num: 1

Candidate Starts for DirtMcgirt\_49:  
(Start: 1 @35747 has 104 MA's), (5, 35807),

Gene: Dorothy\_46 Start: 36083, Stop: 36175, Start Num: 1  
Candidate Starts for Dorothy\_46:  
(Start: 1 @36083 has 104 MA's), (5, 36143),

Gene: Doug\_51 Start: 37402, Stop: 37494, Start Num: 1  
Candidate Starts for Doug\_51:  
(Start: 1 @37402 has 104 MA's), (5, 37462),

Gene: Emma\_49 Start: 35880, Stop: 35975, Start Num: 1  
Candidate Starts for Emma\_49:  
(Start: 1 @35880 has 104 MA's), (3, 35910), (6, 35946),

Gene: Enby\_50 Start: 35054, Stop: 35149, Start Num: 1  
Candidate Starts for Enby\_50:  
(Start: 1 @35054 has 104 MA's), (3, 35084), (6, 35120),

Gene: Fancypants\_50 Start: 37239, Stop: 37331, Start Num: 1  
Candidate Starts for Fancypants\_50:  
(Start: 1 @37239 has 104 MA's), (5, 37299),

Gene: Filuzino\_47 Start: 35460, Stop: 35555, Start Num: 1  
Candidate Starts for Filuzino\_47:  
(Start: 1 @35460 has 104 MA's), (3, 35490), (6, 35526),

Gene: FreddyB\_49 Start: 35554, Stop: 35646, Start Num: 1  
Candidate Starts for FreddyB\_49:  
(Start: 1 @35554 has 104 MA's), (5, 35614),

Gene: Galactic\_50 Start: 37079, Stop: 37174, Start Num: 1  
Candidate Starts for Galactic\_50:  
(Start: 1 @37079 has 104 MA's), (2, 37091), (3, 37109), (6, 37145),

Gene: Gandalph\_50 Start: 36216, Stop: 36308, Start Num: 1  
Candidate Starts for Gandalph\_50:  
(Start: 1 @36216 has 104 MA's), (5, 36276),

Gene: GigiOuiOui\_46 Start: 35886, Stop: 35978, Start Num: 1  
Candidate Starts for GigiOuiOui\_46:  
(Start: 1 @35886 has 104 MA's), (5, 35946),

Gene: Guppsters\_49 Start: 35939, Stop: 36034, Start Num: 1  
Candidate Starts for Guppsters\_49:  
(Start: 1 @35939 has 104 MA's), (3, 35969), (6, 36005),

Gene: Hades\_50 Start: 36830, Stop: 36928, Start Num: 1  
Candidate Starts for Hades\_50:  
(Start: 1 @36830 has 104 MA's), (3, 36860), (6, 36896),

Gene: Hamulus\_50 Start: 37328, Stop: 37420, Start Num: 1  
Candidate Starts for Hamulus\_50:

(Start: 1 @37328 has 104 MA's), (5, 37388),

Gene: Hegedechwinu\_49 Start: 35233, Stop: 35355, Start Num: 1  
Candidate Starts for Hegedechwinu\_49:  
(Start: 1 @35233 has 104 MA's), (3, 35263), (4, 35299), (6, 35326),

Gene: Hlubikazi\_46 Start: 34993, Stop: 35115, Start Num: 1  
Candidate Starts for Hlubikazi\_46:  
(Start: 1 @34993 has 104 MA's), (3, 35023), (4, 35059), (6, 35086),

Gene: Jarcob\_49 Start: 36674, Stop: 36766, Start Num: 1  
Candidate Starts for Jarcob\_49:  
(Start: 1 @36674 has 104 MA's), (5, 36734),

Gene: Jinglebell\_54 Start: 38573, Stop: 38665, Start Num: 1  
Candidate Starts for Jinglebell\_54:  
(Start: 1 @38573 has 104 MA's), (5, 38633),

Gene: Juniper1\_47 Start: 36051, Stop: 36149, Start Num: 1  
Candidate Starts for Juniper1\_47:  
(Start: 1 @36051 has 104 MA's), (3, 36081), (6, 36117),

Gene: Karhdo\_48 Start: 36768, Stop: 36860, Start Num: 1  
Candidate Starts for Karhdo\_48:  
(Start: 1 @36768 has 104 MA's), (5, 36828),

Gene: Kersh\_52 Start: 38718, Stop: 38810, Start Num: 1  
Candidate Starts for Kersh\_52:  
(Start: 1 @38718 has 104 MA's), (3, 38748), (5, 38778),

Gene: Kimberlium\_52 Start: 38580, Stop: 38672, Start Num: 1  
Candidate Starts for Kimberlium\_52:  
(Start: 1 @38580 has 104 MA's), (5, 38640),

Gene: Kingsley\_46 Start: 35636, Stop: 35731, Start Num: 1  
Candidate Starts for Kingsley\_46:  
(Start: 1 @35636 has 104 MA's), (3, 35666), (6, 35702),

Gene: Koella\_43 Start: 32604, Stop: 32696, Start Num: 1  
Candidate Starts for Koella\_43:  
(Start: 1 @32604 has 104 MA's), (5, 32664),

Gene: Krakatau\_47 Start: 36439, Stop: 36507, Start Num: 1  
Candidate Starts for Krakatau\_47:  
(Start: 1 @36439 has 104 MA's), (5, 36475),

Gene: Latretium\_52 Start: 37557, Stop: 37649, Start Num: 1  
Candidate Starts for Latretium\_52:  
(Start: 1 @37557 has 104 MA's), (5, 37617),

Gene: Leozinho\_50 Start: 36518, Stop: 36610, Start Num: 1  
Candidate Starts for Leozinho\_50:  
(Start: 1 @36518 has 104 MA's), (5, 36578),

Gene: LilMoolah\_48 Start: 36335, Stop: 36427, Start Num: 1  
Candidate Starts for LilMoolah\_48:  
(Start: 1 @36335 has 104 MA's), (5, 36395),

Gene: LittleShirley\_49 Start: 37366, Stop: 37458, Start Num: 1  
Candidate Starts for LittleShirley\_49:  
(Start: 1 @37366 has 104 MA's), (5, 37426),

Gene: Lizziana\_55 Start: 37677, Stop: 37769, Start Num: 1  
Candidate Starts for Lizziana\_55:  
(Start: 1 @37677 has 104 MA's), (5, 37737),

Gene: Llama\_54 Start: 38571, Stop: 38663, Start Num: 1  
Candidate Starts for Llama\_54:  
(Start: 1 @38571 has 104 MA's), (5, 38631),

Gene: Lorde\_50 Start: 35029, Stop: 35124, Start Num: 1  
Candidate Starts for Lorde\_50:  
(Start: 1 @35029 has 104 MA's), (3, 35059), (6, 35095),

Gene: LunaBlu\_53 Start: 37738, Stop: 37833, Start Num: 1  
Candidate Starts for LunaBlu\_53:  
(Start: 1 @37738 has 104 MA's), (2, 37750), (3, 37768), (6, 37804),

Gene: LunaStella\_47 Start: 35193, Stop: 35285, Start Num: 1  
Candidate Starts for LunaStella\_47:  
(Start: 1 @35193 has 104 MA's), (5, 35253),

Gene: Madiba\_45 Start: 34677, Stop: 34769, Start Num: 1  
Candidate Starts for Madiba\_45:  
(Start: 1 @34677 has 104 MA's), (5, 34737),

Gene: Mahavrat\_47 Start: 35865, Stop: 35957, Start Num: 1  
Candidate Starts for Mahavrat\_47:  
(Start: 1 @35865 has 104 MA's), (5, 35925),

Gene: Mandlovu\_46 Start: 34935, Stop: 35057, Start Num: 1  
Candidate Starts for Mandlovu\_46:  
(Start: 1 @34935 has 104 MA's), (3, 34965), (4, 35001), (6, 35028),

Gene: Maravista\_51 Start: 38339, Stop: 38431, Start Num: 1  
Candidate Starts for Maravista\_51:  
(Start: 1 @38339 has 104 MA's), (5, 38399),

Gene: Martik\_49 Start: 36630, Stop: 36722, Start Num: 1  
Candidate Starts for Martik\_49:  
(Start: 1 @36630 has 104 MA's), (5, 36690),

Gene: Melissauren88\_47 Start: 35779, Stop: 35901, Start Num: 1  
Candidate Starts for Melissauren88\_47:  
(Start: 1 @35779 has 104 MA's), (3, 35809), (4, 35845), (6, 35872),



Gene: MinionDave\_48 Start: 36316, Stop: 36438, Start Num: 1  
Candidate Starts for MinionDave\_48:  
(Start: 1 @36316 has 104 MA's), (3, 36346), (4, 36382), (6, 36409),

Gene: Minnie\_54 Start: 38682, Stop: 38777, Start Num: 1  
Candidate Starts for Minnie\_54:  
(Start: 1 @38682 has 104 MA's), (3, 38712), (6, 38748),

Gene: MisterCuddles\_49 Start: 36945, Stop: 37037, Start Num: 1  
Candidate Starts for MisterCuddles\_49:  
(Start: 1 @36945 has 104 MA's), (5, 37005),

Gene: Modragons\_53 Start: 38417, Stop: 38509, Start Num: 1  
Candidate Starts for Modragons\_53:  
(Start: 1 @38417 has 104 MA's), (5, 38477),

Gene: Moonbeam\_45 Start: 35836, Stop: 35931, Start Num: 1  
Candidate Starts for Moonbeam\_45:  
(Start: 1 @35836 has 104 MA's), (3, 35866), (6, 35902),

Gene: Mova\_49 Start: 35599, Stop: 35694, Start Num: 1  
Candidate Starts for Mova\_49:  
(Start: 1 @35599 has 104 MA's), (3, 35629), (6, 35665),

Gene: Ms6\_42 Start: 30845, Stop: 30967, Start Num: 1  
Candidate Starts for Ms6\_42:  
(Start: 1 @30845 has 104 MA's), (3, 30875), (4, 30911), (6, 30938),

Gene: MulchExplorer\_56 Start: 38579, Stop: 38671, Start Num: 1  
Candidate Starts for MulchExplorer\_56:  
(Start: 1 @38579 has 104 MA's), (5, 38639),

Gene: Nitzel\_44 Start: 35104, Stop: 35196, Start Num: 1  
Candidate Starts for Nitzel\_44:  
(Start: 1 @35104 has 104 MA's), (5, 35164),

Gene: Ochi17\_52 Start: 38024, Stop: 38116, Start Num: 1  
Candidate Starts for Ochi17\_52:  
(Start: 1 @38024 has 104 MA's), (5, 38084),

Gene: OfUltron\_54 Start: 38573, Stop: 38665, Start Num: 1  
Candidate Starts for OfUltron\_54:  
(Start: 1 @38573 has 104 MA's), (5, 38633),

Gene: Ovechkin\_46 Start: 36166, Stop: 36288, Start Num: 1  
Candidate Starts for Ovechkin\_46:  
(Start: 1 @36166 has 104 MA's), (3, 36196), (4, 36232), (6, 36259),

Gene: OwlsT2W\_48 Start: 36546, Stop: 36638, Start Num: 1  
Candidate Starts for OwlsT2W\_48:  
(Start: 1 @36546 has 104 MA's), (5, 36606),

Gene: Phalconet\_48 Start: 36086, Stop: 36208, Start Num: 1

Candidate Starts for Phalconet\_48:  
(Start: 1 @36086 has 104 MA's), (3, 36116), (4, 36152), (6, 36179),

Gene: Phanphagia\_44 Start: 35938, Stop: 36036, Start Num: 1  
Candidate Starts for Phanphagia\_44:  
(Start: 1 @35938 has 104 MA's), (3, 35968), (6, 36004),

Gene: Phasih\_47 Start: 36301, Stop: 36393, Start Num: 1  
Candidate Starts for Phasih\_47:  
(Start: 1 @36301 has 104 MA's), (5, 36361),

Gene: Phatniss\_48 Start: 36999, Stop: 37091, Start Num: 1  
Candidate Starts for Phatniss\_48:  
(Start: 1 @36999 has 104 MA's), (5, 37059),

Gene: PhesterPhotato\_51 Start: 37041, Stop: 37163, Start Num: 1  
Candidate Starts for PhesterPhotato\_51:  
(Start: 1 @37041 has 104 MA's), (3, 37071), (4, 37107), (6, 37134),

Gene: Plumbus\_51 Start: 36746, Stop: 36838, Start Num: 1  
Candidate Starts for Plumbus\_51:  
(Start: 1 @36746 has 104 MA's), (5, 36806),

Gene: Priscilla\_49 Start: 36716, Stop: 36808, Start Num: 1  
Candidate Starts for Priscilla\_49:  
(Start: 1 @36716 has 104 MA's), (5, 36776),

Gene: QuickMath\_51 Start: 38803, Stop: 38895, Start Num: 1  
Candidate Starts for QuickMath\_51:  
(Start: 1 @38803 has 104 MA's), (5, 38863),

Gene: Radiance\_49 Start: 36871, Stop: 36963, Start Num: 1  
Candidate Starts for Radiance\_49:  
(Start: 1 @36871 has 104 MA's), (5, 36931),

Gene: RedBird\_46 Start: 36095, Stop: 36187, Start Num: 1  
Candidate Starts for RedBird\_46:  
(Start: 1 @36095 has 104 MA's), (5, 36155),

Gene: Renaud18\_54 Start: 37134, Stop: 37226, Start Num: 1  
Candidate Starts for Renaud18\_54:  
(Start: 1 @37134 has 104 MA's), (5, 37194),

Gene: Rita\_51 Start: 35944, Stop: 36042, Start Num: 1  
Candidate Starts for Rita\_51:  
(Start: 1 @35944 has 104 MA's), (3, 35974), (6, 36010),

Gene: Rockne\_47 Start: 35755, Stop: 35847, Start Num: 1  
Candidate Starts for Rockne\_47:  
(Start: 1 @35755 has 104 MA's), (5, 35815),

Gene: Royals2015\_51 Start: 36564, Stop: 36656, Start Num: 1  
Candidate Starts for Royals2015\_51:

(Start: 1 @36564 has 104 MA's), (5, 36624),

Gene: Sabbb\_55 Start: 37994, Stop: 38086, Start Num: 1

Candidate Starts for Sabbb\_55:

(Start: 1 @37994 has 104 MA's), (5, 38054),

Gene: Sarma624\_47 Start: 32828, Stop: 32923, Start Num: 1

Candidate Starts for Sarma624\_47:

(Start: 1 @32828 has 104 MA's), (3, 32858), (6, 32894),

Gene: Seabastian\_54 Start: 38574, Stop: 38666, Start Num: 1

Candidate Starts for Seabastian\_54:

(Start: 1 @38574 has 104 MA's), (5, 38634),

Gene: Seagreen\_50 Start: 36498, Stop: 36590, Start Num: 1

Candidate Starts for Seagreen\_50:

(Start: 1 @36498 has 104 MA's), (3, 36528), (5, 36558),

Gene: ShowerHandel\_51 Start: 36630, Stop: 36722, Start Num: 1

Candidate Starts for ShowerHandel\_51:

(Start: 1 @36630 has 104 MA's), (5, 36690),

Gene: ShroomBoi\_49 Start: 36421, Stop: 36516, Start Num: 1

Candidate Starts for ShroomBoi\_49:

(Start: 1 @36421 has 104 MA's), (3, 36451), (6, 36487),

Gene: Sparkdehlily\_53 Start: 37316, Stop: 37408, Start Num: 1

Candidate Starts for Sparkdehlily\_53:

(Start: 1 @37316 has 104 MA's), (5, 37376),

Gene: Squirty\_43 Start: 33707, Stop: 33799, Start Num: 1

Candidate Starts for Squirty\_43:

(Start: 1 @33707 has 104 MA's), (3, 33737), (5, 33767), (6, 33773),

Gene: StAnnes\_48 Start: 36758, Stop: 36880, Start Num: 1

Candidate Starts for StAnnes\_48:

(Start: 1 @36758 has 104 MA's), (3, 36788), (4, 36824), (6, 36851),

Gene: Stap\_48 Start: 36057, Stop: 36149, Start Num: 1

Candidate Starts for Stap\_48:

(Start: 1 @36057 has 104 MA's), (5, 36117),

Gene: Starcevich\_49 Start: 36950, Stop: 37042, Start Num: 1

Candidate Starts for Starcevich\_49:

(Start: 1 @36950 has 104 MA's), (5, 37010),

Gene: TChen\_49 Start: 37144, Stop: 37236, Start Num: 1

Candidate Starts for TChen\_49:

(Start: 1 @37144 has 104 MA's), (5, 37204),

Gene: TDanisky\_53 Start: 37316, Stop: 37408, Start Num: 1

Candidate Starts for TDanisky\_53:

(Start: 1 @37316 has 104 MA's), (5, 37376),

Gene: ThetaBob\_53 Start: 36797, Stop: 36889, Start Num: 1  
Candidate Starts for ThetaBob\_53:  
(Start: 1 @36797 has 104 MA's), (6, 36863),

Gene: Tootsieroll\_52 Start: 36507, Stop: 36599, Start Num: 1  
Candidate Starts for Tootsieroll\_52:  
(Start: 1 @36507 has 104 MA's), (5, 36567),

Gene: Totinger\_49 Start: 36092, Stop: 36184, Start Num: 1  
Candidate Starts for Totinger\_49:  
(Start: 1 @36092 has 104 MA's), (5, 36152),

Gene: VRedHorse\_49 Start: 36027, Stop: 36122, Start Num: 1  
Candidate Starts for VRedHorse\_49:  
(Start: 1 @36027 has 104 MA's), (3, 36057), (6, 36093),

Gene: Whatsapiecost\_48 Start: 35696, Stop: 35791, Start Num: 1  
Candidate Starts for Whatsapiecost\_48:  
(Start: 1 @35696 has 104 MA's), (3, 35726), (6, 35762),

Gene: XFactor\_47 Start: 35487, Stop: 35609, Start Num: 1  
Candidate Starts for XFactor\_47:  
(Start: 1 @35487 has 104 MA's), (3, 35517), (4, 35553), (6, 35580),

Gene: Zapner\_61 Start: 37500, Stop: 37592, Start Num: 1  
Candidate Starts for Zapner\_61:  
(Start: 1 @37500 has 104 MA's),

Gene: Zerg\_48 Start: 36268, Stop: 36360, Start Num: 1  
Candidate Starts for Zerg\_48:  
(Start: 1 @36268 has 104 MA's), (5, 36328),