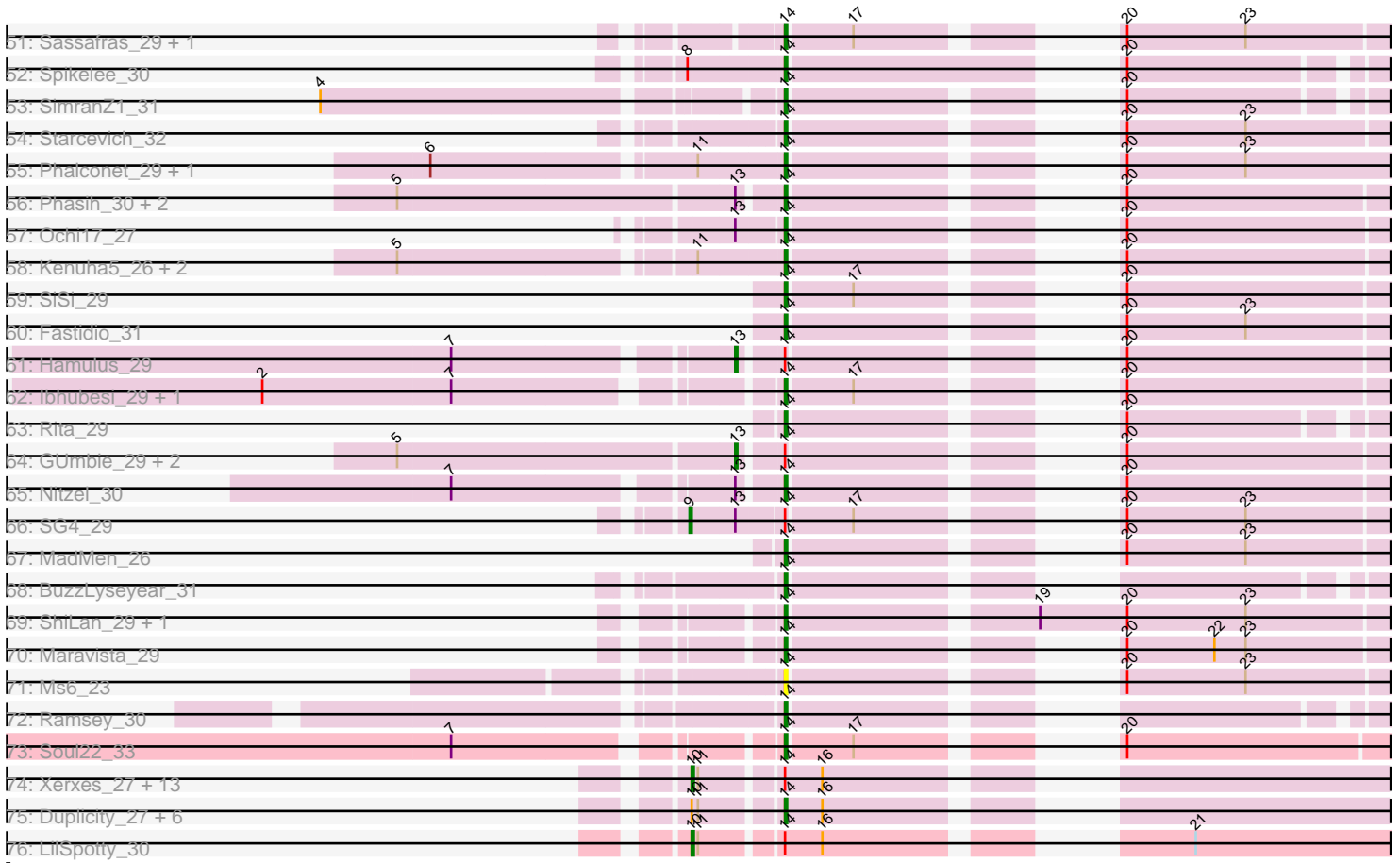


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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. 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 210783 Report

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

Pham number 210783 has 268 members, 32 are drafts.

Phages represented in each track:

- Track 1 : Blarby\_37, Mova\_30, PopTart\_29, Minnie\_30, SassyB\_29, NewHope4\_32
- Track 2 : MulchSalad\_26
- Track 3 : Shauna1\_26, Wee\_30, Tweety\_29, Taj\_29, Ardmore\_28
- Track 4 : Fruitloop\_28, Doug\_30, Filuzino\_29, Eish\_29, Dorothy\_29, Batiatus\_29, Hlubikazi\_29, Mandlovu\_29, Melissauren88\_29, Ovechkin\_29, DaddyRickover\_29, Strokeseat\_29, Marker\_30, DLane\_29, KristaRAM\_30, Aubs\_29, Flathead\_29
- Track 5 : Gorge\_29, Sparkdehlily\_29, Renaud18\_29, BobaPhett\_29, TDanisky\_29, Daenerys\_29, Saal\_29, OlympiaSaint\_29, Empress\_30, Sandalphon\_30, James\_29, Mattes\_29, KingMidas\_30, Dante\_29, CheesePuff\_32, Cabrinians\_29, FreddyB\_29, Mutaforma13\_29, RitaG\_29, OldBen\_29, Scottish\_30, DRBy19\_29, Whatsapiecost\_29, Philus\_29, Wachhund\_29, JoeyJr\_29, BlueCrab\_29, Priscilla\_29, Piper2020\_31, Radiance\_29, Spoonbill\_29, Chuckly\_29
- Track 6 : Karhdo\_29, Alexphander\_31, BodEinwohner17\_29, Estave1\_27, ThetaBob\_28, Nimbo\_29, Stap\_30, Mantra\_29, Totinger\_30, GigiOuiOui\_29, DirtMcgirt\_30
- Track 7 : ByChance\_29, Zizzle\_29, Nivrat\_29, ShowerHandel\_29, Burwell21\_29, Yorick\_29, Lizziana\_29, Martik\_29, LilMoolah\_29, NormanBulbieJr\_29, SwagPigglett\_29
- Track 8 : PMC\_29, MulchExplorer\_32, Phatniss\_30, Llij\_29, QuickMath\_30, Kimberlium\_31
- Track 9 : Slim\_32, Emmaloid\_32, LittleShirley\_31, EmiMonkey\_30, Mahavrat\_29, PhilipPhlop\_30, PHappiness\_29
- Track 10 : Chevrolet\_29, Grimmer\_31, Eradicator\_29, Juniper1\_29, Cornie\_29, ArcusAngelus\_29
- Track 11 : LastJedi\_23, Clifton\_23, Brocalys\_24, Koella\_23, Pippy\_23, Crumble\_23
- Track 12 : Vivum\_29, Galactic\_29, DillTech15\_29
- Track 13 : Bobi\_31
- Track 14 : Akhila\_23, MilanaBonita\_23
- Track 15 : SuperGrey\_29
- Track 16 : Krakatau\_30
- Track 17 : DoRead\_30
- Track 18 : XFactor\_29, IbOuu\_31, Royals2015\_29, Jant\_30, Polka14\_30, MilleniumForce\_30, Coco12\_28, Aloeri\_31, Seagreen\_30, Brushbloom\_31, Beakin\_30, Kingsley\_27, Polo2Bam\_33, DaWorst\_31, DocMcStuffins\_31, Moonbeam\_30, Cornucopia\_30, DeadP\_29, Violac\_31, ChickenDinner\_31, JalFarm20\_31, Brookers\_27, VRedHorse\_29, Phanphagia\_26
- Track 19 : Leperchaun\_29, Pacc40\_29

- Track 20 : Che8\_31
- Track 21 : Byougenkin\_29, ShroomBoi\_26, SilverChicken\_36, RedBird\_29, RockyHorror\_30, Zerg\_29, Tootsieroll\_30
- Track 22 : BigPhil\_24, Cerasum\_24, Sarma624\_24, Velveteen\_24
- Track 23 : Sabbb\_30
- Track 24 : Job42\_32, Mozy\_30, DosHalletts\_30, EleanorGeorge\_29, Gandalph\_29
- Track 25 : Modragons\_29, Llama\_29, Seabastian\_29, Jinglebell\_28, AlpineSix\_30, OfUltron\_29, Oksu\_30
- Track 26 : Enby\_30, Lorde\_30
- Track 27 : LunaBlu\_30
- Track 28 : Rockne\_29, UncleRicky\_32, Drago\_30
- Track 29 : Ruby\_29, MisterCuddles\_29, Girr\_29
- Track 30 : Blexus\_29
- Track 31 : Florinda\_29, Girafales\_30, Quico\_30
- Track 32 : Awesomesauce\_30, IMpilo\_28, TootsiePop\_30, Misha28\_30
- Track 33 : Emma\_31
- Track 34 : StAnnes\_27
- Track 35 : Guppsters\_30, Pollywog\_29
- Track 36 : WillSterrel\_30, Bubbles123\_30, Spartacus\_30, IrishSherpFalk\_30
- Track 37 : Rialto\_32, Ogopogo\_29
- Track 38 : CaptainTrips\_30
- Track 39 : Madiba\_27
- Track 40 : Bipolar\_26
- Track 41 : Donkeykong\_29
- Track 42 : MinionDave\_30
- Track 43 : Firehouse51\_30
- Track 44 : Juice456\_30, Hegedechwinu\_30
- Track 45 : Kersh\_28
- Track 46 : Deb65\_29, KingJulian\_29, Geralt\_29, Leozinho\_30, Corium\_29
- Track 47 : Fancypants\_29
- Track 48 : Tchotchke\_28
- Track 49 : OwlsT2W\_30
- Track 50 : Latretium\_30
- Track 51 : Sassafras\_29, Inventum\_29
- Track 52 : Spikelee\_30
- Track 53 : SimranZ1\_31
- Track 54 : Starcevich\_32
- Track 55 : Phalconet\_29, PhesterPhotato\_29
- Track 56 : Phasih\_30, Poenanya\_29, Veteran\_29
- Track 57 : Ochi17\_27
- Track 58 : Kenuha5\_26, Boomer\_30, Whouxphf\_29
- Track 59 : SiSi\_29
- Track 60 : Fastidio\_31
- Track 61 : Hamulus\_29
- Track 62 : Ibhubesi\_29, Harley\_29
- Track 63 : Rita\_29
- Track 64 : GUmbie\_29, DotProduct\_29, Doomphist\_29
- Track 65 : Nitzel\_30
- Track 66 : SG4\_29
- Track 67 : MadMen\_26
- Track 68 : BuzzLyseyear\_31
- Track 69 : ShiLan\_29, Jarcob\_29
- Track 70 : Maravista\_29

- Track 71 : Ms6\_23
- Track 72 : Ramsey\_30
- Track 73 : Soul22\_33
- Track 74 : Xerxes\_27, Parmesanjohn\_27, Schnauzer\_27, Charlie\_27, Melville\_27, Gex\_27, Smurph\_27, Journey\_27, Pipsqueaks\_27, Magsby\_27, Carcharodon\_27, Aggie\_27, Philonius\_27, Chewbacca\_27
- Track 75 : Duplicity\_27, Silvy\_27, Tortoise12\_27, Bosection6\_27, EGUnicorn\_28, Tapioca\_27, Silvafighter\_27
- Track 76 : LilSpotty\_30

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

The start number called the most often in the published annotations is 14, it was called in 203 of the 236 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Akhila\_23, Alexphander\_31, Aloeri\_31, AlpineSix\_30, ArcusAngelus\_29, Aubs\_29, Awesomesauce\_30, Batiatus\_29, Beakin\_30, BigPhil\_24, Blarby\_37, BlueCrab\_29, BobaPhett\_29, BodEinwohner17\_29, Boomer\_30, Bosection6\_27, Brocalys\_24, Brookers\_27, Brushbloom\_31, Bubbles123\_30, Burwell21\_29, BuzzLyseyear\_31, ByChance\_29, Byougenkin\_29, Cabrinians\_29, CaptainTrips\_30, Cerasum\_24, Che8\_31, CheesePuff\_32, Chevrolet\_29, ChickenDinner\_31, Chuckly\_29, Clifton\_23, Coco12\_28, Corium\_29, Cornie\_29, Cornucopia\_30, Crumble\_23, DLane\_29, DRBy19\_29, DaWorst\_31, DaddyRickover\_29, Daenerys\_29, Dante\_29, DeadP\_29, Deb65\_29, DillTech15\_29, DirtMcGirt\_30, DoRead\_30, DocMcStuffins\_31, Donkeykong\_29, Dorothy\_29, DosHalletts\_30, Doug\_30, Duplicity\_27, EGUnicorn\_28, Eish\_29, EleanorGeorge\_29, EmiMonkey\_30, Emma\_31, Emmaloid\_32, Empress\_30, Enby\_30, Eradicator\_29, Estave1\_27, Fancypants\_29, Fastidio\_31, Filuzino\_29, Flathead\_29, Florinda\_29, FreddyB\_29, Fruitloop\_28, Galactic\_29, Gandolph\_29, Geralt\_29, GigiOuiOui\_29, Girafales\_30, Girr\_29, Gorge\_29, Grimmer\_31, Guppsters\_30, Harley\_29, Hegedechwinu\_30, Hlubikazi\_29, IMpilo\_28, IbOuu\_31, Ibhubesi\_29, Inventum\_29, IrishSherpFalk\_30, JalFarm20\_31, James\_29, Jant\_30, Jarcob\_29, Jinglebell\_28, Job42\_32, JoeyJr\_29, Juice456\_30, Juniper1\_29, Karhdo\_29, Kenuha5\_26, Kersh\_28, Kimberlium\_31, KingJulian\_29, KingMidas\_30, Kingsley\_27, Koella\_23, Krakatau\_30, KristaRAM\_30, LastJedi\_23, Latretium\_30, Leozinho\_30, Leperchaun\_29, LilMoolah\_29, LittleShirley\_31, Lizziana\_29, Llama\_29, Llij\_29, Lorde\_30, LunaBlu\_30, MadMen\_26, Madiba\_27, Mahavrat\_29, Mandlovu\_29, Mantra\_29, Maravista\_29, Marker\_30, Martik\_29, Mattes\_29, Melissauren88\_29, MilanaBonita\_23, MilleniumForce\_30, MinionDave\_30, Minnie\_30, Misha28\_30, MisterCuddles\_29, Modragons\_29, Moonbeam\_30, Mova\_30, Mozy\_30, Ms6\_23, MulchExplorer\_32, MulchSalad\_26, Mutaforma13\_29, NewHope4\_32, Nimbo\_29, Nitzel\_30, Nivrat\_29, NormanBulbieJr\_29, Ochi17\_27, OfUltron\_29, Oksu\_30, OldBen\_29, OlympiaSaint\_29, Ovechkin\_29, OwlsT2W\_30, PHappiness\_29, PMC\_29, Pacc40\_29, Phalconet\_29, Phanphagia\_26, Phasih\_30, Phatniss\_30, PhesterPotato\_29, Philus\_29, PhilipPhlop\_30, Piper2020\_31, Pippy\_23, Poenanya\_29, Polka14\_30, Pollywog\_29, Polo2Bam\_33, PopTart\_29, Priscilla\_29, QuickMath\_30, Quico\_30, Radiance\_29, Ramsey\_30, RedBird\_29, Renaud18\_29, RitaG\_29, Rita\_29, RockyHorror\_30, Royals2015\_29, Ruby\_29, Saal\_29, Sabbb\_30, Sandalphon\_30, Sarma624\_24, Sassafras\_29, SassyB\_29, Scottish\_30,

Sebastian\_29, Seagreen\_30, ShiLan\_29, ShowerHandel\_29, ShroomBoi\_26, SiSi\_29, Silvafighter\_27, SilverChicken\_36, Silvy\_27, SimranZ1\_31, Slim\_32, Soul22\_33, Sparkdehlily\_29, Spartacus\_30, Spikelee\_30, Spoonbill\_29, StAnnes\_27, Stap\_30, Starcevich\_32, Strokeseat\_29, SuperGrey\_29, SwagPigglett\_29, TDanisky\_29, Tapioca\_27, Tchotchke\_28, ThetaBob\_28, TootsiePop\_30, Tootsieroll\_30, Tortoise12\_27, Totinger\_30, VRedHorse\_29, Velveteen\_24, Veteran\_29, Violac\_31, Vivum\_29, Wachhund\_29, Whatsapiecost\_29, Whouxphf\_29, WillSterrel\_30, XFactor\_29, Yorick\_29, Zerg\_29, Zizzle\_29,

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

- Aggie\_27, Ardmore\_28, Bipolar\_26, Bobi\_31, Carcharodon\_27, Charlie\_27, Chewbacca\_27, Doomphist\_29, DotProduct\_29, Drago\_30, Firehouse51\_30, GUmble\_29, Gex\_27, Hamulus\_29, Journey\_27, LilSpotty\_30, Magsby\_27, Melville\_27, Ogopogo\_29, Parmesanjohn\_27, Philonius\_27, Pipsqueaks\_27, Rialto\_32, Rockne\_29, SG4\_29, Schnauzer\_27, Shauna1\_26, Smurph\_27, Taj\_29, Tweety\_29, UncleRicky\_32, Wee\_30, Xerxes\_27,

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

- Blexus\_29,

### Summary by start number:

Start 8:

- Found in 8 of 268 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Bobi\_31 (F1),

Start 9:

- Found in 3 of 268 ( 1.1% ) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 33.3% of time when present
- Phage (with cluster) where this start called: SG4\_29 (F1),

Start 10:

- Found in 22 of 268 ( 8.2% ) of genes in pham
- Manual Annotations of this start: 15 of 236
- Called 68.2% of time when present
- Phage (with cluster) where this start called: Aggie\_27 (N), Carcharodon\_27 (N), Charlie\_27 (N), Chewbacca\_27 (N), Gex\_27 (N), Journey\_27 (N), LilSpotty\_30 (singleton), Magsby\_27 (N), Melville\_27 (N), Parmesanjohn\_27 (N), Philonius\_27 (N), Pipsqueaks\_27 (N), Schnauzer\_27 (N), Smurph\_27 (N), Xerxes\_27 (N),

Start 11:

- Found in 83 of 268 ( 31.0% ) of genes in pham
- Manual Annotations of this start: 8 of 236
- Called 10.8% of time when present
- Phage (with cluster) where this start called: Ardmore\_28 (F1), Drago\_30 (F1), Firehouse51\_30 (F1), Rockne\_29 (F1), Shauna1\_26 (F1), Taj\_29 (F1), Tweety\_29 (F1), UncleRicky\_32 (F1), Wee\_30 (F1),

Start 13:

- Found in 28 of 268 ( 10.4% ) of genes in pham

- Manual Annotations of this start: 7 of 236
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Bipolar\_26 (F1), Doomphist\_29 (F1), DotProduct\_29 (F1), GUmbie\_29 (F1), Hamulus\_29 (F1), Ogopogo\_29 (F1), Rialto\_32 (F1),

Start 14:

- Found in 267 of 268 ( 99.6% ) of genes in pham
- Manual Annotations of this start: 203 of 236
- Called 87.6% of time when present
- Phage (with cluster) where this start called: Akhila\_23 (F1), Alexphander\_31 (F1), Aloeri\_31 (F1), AlpineSix\_30 (F1), ArcusAngelus\_29 (F1), Aubs\_29 (F1), Awesomesauce\_30 (F1), Batiatus\_29 (F1), Beakin\_30 (F1), BigPhil\_24 (F1), Blarby\_37 (F), BlueCrab\_29 (F1), BobaPhett\_29 (F1), BodEinwohner17\_29 (F1), Boomer\_30 (F1), Bosection6\_27 (N), Brocalys\_24 (F1), Brookers\_27 (F1), Brushbloom\_31 (F1), Bubbles123\_30 (F1), Burwell21\_29 (F1), BuzzLyseyear\_31 (F1), ByChance\_29 (F1), Byougenkin\_29 (F1), Cabrinians\_29 (F1), CaptainTrips\_30 (F1), Cerasum\_24 (F1), Che8\_31 (F1), CheesePuff\_32 (F1), Chevrolet\_29 (F1), ChickenDinner\_31 (F1), Chuckly\_29 (F1), Clifton\_23 (F1), Coco12\_28 (F1), Corium\_29 (F1), Cornie\_29 (F5), Cornucopia\_30 (F1), Crumble\_23 (F1), DLane\_29 (F1), DRBy19\_29 (F1), DaWorst\_31 (F1), DaddyRickover\_29 (F1), Daenerys\_29 (F1), Dante\_29 (F1), DeadP\_29 (F1), Deb65\_29 (F1), DillTech15\_29 (F1), DirtMcGirt\_30 (F1), DoRead\_30 (F1), DocMcStuffins\_31 (F1), Donkeykong\_29 (F1), Dorothy\_29 (F1), DosHalletts\_30 (F1), Doug\_30 (F1), Duplicity\_27 (N), EGUnicorn\_28 (N), Eish\_29 (F1), EleanorGeorge\_29 (F1), EmiMonkey\_30 (F1), Emma\_31 (F1), Emmaloid\_32 (F1), Empress\_30 (F1), Enby\_30 (F1), Eradicator\_29 (F1), Estave1\_27 (F1), FancyPants\_29 (F1), Fastidio\_31 (F1), Filuzino\_29 (F1), Flathead\_29 (F1), Florinda\_29 (F1), FreddyB\_29 (F1), Fruitloop\_28 (F1), Galactic\_29 (F1), Gandolph\_29 (F1), Geralt\_29 (F1), GigiOuiOui\_29 (F1), Girafales\_30 (F1), Girr\_29 (F1), Gorge\_29 (F1), Grimmer\_31 (F1), Guppsters\_30 (F1), Harley\_29 (F1), Hegedechwinu\_30 (F1), Hlubikazi\_29 (F1), IMPilo\_28 (F1), IbOuu\_31 (F1), Ibhubesi\_29 (F1), Inventum\_29 (F1), IrishSherpFalk\_30 (F1), JalFarm20\_31 (F1), James\_29 (F1), Jant\_30 (F1), Jarcob\_29 (F1), Jinglebell\_28 (F1), Job42\_32 (F1), JoeyJr\_29 (F1), Juice456\_30 (F1), Juniper1\_29 (F1), Karhdo\_29 (F1), Kenuha5\_26 (F1), Kersh\_28 (F1), Kimberlium\_31 (F1), KingJulian\_29 (F1), KingMidas\_30 (F1), Kingsley\_27 (F1), Koella\_23 (F1), Krakatau\_30 (F1), KristaRAM\_30 (F1), LastJedi\_23 (F1), Latretium\_30 (F1), Leozinho\_30 (F1), Leperchaun\_29 (F1), LilMoolah\_29 (F1), LittleShirley\_31 (F1), Lizziana\_29 (F1), Llama\_29 (F1), Llij\_29 (F1), Lorde\_30 (F1), LunaBlu\_30 (F1), MadMen\_26 (F1), Madiba\_27 (F1), Mahavrat\_29 (F1), Mandlovu\_29 (F1), Mantra\_29 (F1), Maravista\_29 (F1), Marker\_30 (F1), Martik\_29 (F1), Mattes\_29 (F1), Melissauren88\_29 (F1), MilanaBonita\_23 (F1), MilleniumForce\_30 (F1), MinionDave\_30 (F1), Minnie\_30 (F1), Misha28\_30 (F1), MisterCuddles\_29 (F1), Modragons\_29 (F1), Moonbeam\_30 (F1), Mova\_30 (F1), Mozy\_30 (F1), Ms6\_23 (F1), MulchExplorer\_32 (F1), MulchSalad\_26 (F), Mutaforma13\_29 (F1), NewHope4\_32 (F1), Nimbo\_29 (F1), Nitzel\_30 (F1), Nivrat\_29 (F1), NormanBulbieJr\_29 (F1), Ochi17\_27 (F1), OfUltron\_29 (F1), Oksu\_30 (F1), OldBen\_29 (F1), OlympiaSaint\_29 (F1), Ovechkin\_29 (F1), OwlsT2W\_30 (F1), PHappiness\_29 (F1), PMC\_29 (F1), Pacc40\_29 (F1), Phalconet\_29 (F1), Phanphagia\_26 (F1), Phasih\_30 (F1), Phatniss\_30 (F1), PhesterPotato\_29 (F1), Philus\_29 (F1), PhilipPhlop\_30 (F1), Piper2020\_31 (F1), Pippy\_23 (F1), Poenanya\_29 (F1), Polka14\_30 (F1), Pollywog\_29 (F1), Polo2Bam\_33 (F1), PopTart\_29 (F1), Priscilla\_29 (F1), QuickMath\_30 (F1), Quico\_30 (F1), Radiance\_29 (F1), Ramsey\_30 (F1), RedBird\_29 (F1), Renaud18\_29 (F4), RitaG\_29 (F1), Rita\_29 (F1),

RockyHorror\_30 (F1), Royals2015\_29 (F1), Ruby\_29 (F1), Saal\_29 (F1), Sabbb\_30 (F1), Sandalphon\_30 (F1), Sarma624\_24 (F1), Sassafras\_29 (F1), SassyB\_29 (F1), Scottish\_30 (F1), Seabastian\_29 (F1), Seagreen\_30 (F1), ShiLan\_29 (F1), ShowerHandel\_29 (F1), ShroomBoi\_26 (F1), SiSi\_29 (F1), Silvafighter\_27 (N), SilverChicken\_36 (F2), Silvy\_27 (N), SimranZ1\_31 (F1), Slim\_32 (F1), Soul22\_33 (F2), Sparkdehlily\_29 (F1), Spartacus\_30 (F1), Spikelee\_30 (F1), Spoonbill\_29 (F1), StAnnes\_27 (F1), Stap\_30 (F1), Starceвич\_32 (F1), Strokeseat\_29 (F1), SuperGrey\_29 (F1), SwagPigglett\_29 (F1), TDanisky\_29 (F1), Tapioca\_27 (N), Tchotchke\_28 (F1), ThetaBob\_28 (F4), TootsiePop\_30 (F1), Tootsieroll\_30 (F1), Tortoise12\_27 (N), Totinger\_30 (F1), VRedHorse\_29 (F1), Velveteen\_24 (F1), Veteran\_29 (F1), Violac\_31 (F1), Vivum\_29 (F1), Wachhund\_29 (F1), Whatsapiecost\_29 (F1), Whouxphf\_29 (F1), WillSterrel\_30 (F1), XFactor\_29 (F1), Yorick\_29 (F1), Zerg\_29 (F1), Zizzle\_29 (F1),

Start 15:

- Found in 1 of 268 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 236
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Blexus\_29 (F1),

### **Summary by clusters:**

There are 7 clusters represented in this pham: F1, F2, F4, F5, F, singleton, N,

Info for manual annotations of cluster F1:

- Start number 8 was manually annotated 1 time for cluster F1.
- Start number 9 was manually annotated 1 time for cluster F1.
- Start number 11 was manually annotated 8 times for cluster F1.
- Start number 13 was manually annotated 7 times for cluster F1.
- Start number 14 was manually annotated 195 times for cluster F1.
- Start number 15 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

- Start number 14 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F4:

- Start number 14 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster F5:

- Start number 14 was manually annotated 1 time for cluster F5.

Info for manual annotations of cluster N:

- Start number 10 was manually annotated 14 times for cluster N.
- Start number 14 was manually annotated 4 times for cluster N.

### **Gene Information:**

Gene: Aggie\_27 Start: 22566, Stop: 22838, Start Num: 10

Candidate Starts for Aggie\_27:



(Start: 10 @22566 has 15 MA's), (Start: 11 @22569 has 8 MA's), (Start: 14 @22602 has 203 MA's), (16, 22620),

Gene: Akhila\_23 Start: 22215, Stop: 22448, Start Num: 14  
Candidate Starts for Akhila\_23:  
(Start: 14 @22215 has 203 MA's), (20, 22323), (23, 22380),

Gene: Alexphander\_31 Start: 26619, Stop: 26840, Start Num: 14  
Candidate Starts for Alexphander\_31:  
(Start: 14 @26619 has 203 MA's), (20, 26727),

Gene: Aloeri\_31 Start: 26708, Stop: 26941, Start Num: 14  
Candidate Starts for Aloeri\_31:  
(6, 26555), (Start: 11 @26669 has 8 MA's), (Start: 14 @26708 has 203 MA's), (20, 26816), (23, 26873),

Gene: AlpineSix\_30 Start: 26306, Stop: 26539, Start Num: 14  
Candidate Starts for AlpineSix\_30:  
(Start: 14 @26306 has 203 MA's), (20, 26414), (21, 26447),

Gene: ArcusAngelus\_29 Start: 26077, Stop: 26310, Start Num: 14  
Candidate Starts for ArcusAngelus\_29:  
(7, 25942), (Start: 14 @26077 has 203 MA's), (20, 26185),

Gene: Ardmore\_28 Start: 26093, Stop: 26365, Start Num: 11  
Candidate Starts for Ardmore\_28:  
(6, 25979), (Start: 11 @26093 has 8 MA's), (Start: 14 @26132 has 203 MA's), (20, 26240), (23, 26297),

Gene: Aubs\_29 Start: 26242, Stop: 26475, Start Num: 14  
Candidate Starts for Aubs\_29:  
(6, 26089), (Start: 14 @26242 has 203 MA's), (20, 26350), (23, 26407),

Gene: Awesomesauce\_30 Start: 25970, Stop: 26203, Start Num: 14  
Candidate Starts for Awesomesauce\_30:  
(6, 25814), (Start: 11 @25931 has 8 MA's), (Start: 14 @25970 has 203 MA's), (20, 26078),

Gene: Batiatus\_29 Start: 26125, Stop: 26358, Start Num: 14  
Candidate Starts for Batiatus\_29:  
(6, 25972), (Start: 14 @26125 has 203 MA's), (20, 26233), (23, 26290),

Gene: Beakin\_30 Start: 25994, Stop: 26227, Start Num: 14  
Candidate Starts for Beakin\_30:  
(6, 25841), (Start: 11 @25955 has 8 MA's), (Start: 14 @25994 has 203 MA's), (20, 26102), (23, 26159),

Gene: BigPhil\_24 Start: 22110, Stop: 22331, Start Num: 14  
Candidate Starts for BigPhil\_24:  
(6, 21963), (Start: 14 @22110 has 203 MA's), (20, 22218),

Gene: Bipolar\_26 Start: 25134, Stop: 25388, Start Num: 13  
Candidate Starts for Bipolar\_26:  
(Start: 13 @25134 has 7 MA's), (Start: 14 @25155 has 203 MA's), (20, 25263), (23, 25320),

Gene: Blarby\_37 Start: 26544, Stop: 26780, Start Num: 14  
Candidate Starts for Blarby\_37:

(6, 26391), (Start: 11 @26505 has 8 MA's), (Start: 14 @26544 has 203 MA's), (20, 26652),

Gene: Blexus\_29 Start: 26395, Stop: 26631, Start Num: 15

Candidate Starts for Blexus\_29:

(5, 26233), (Start: 13 @26377 has 7 MA's), (Start: 15 @26395 has 1 MA's), (20, 26503),

Gene: BlueCrab\_29 Start: 26264, Stop: 26497, Start Num: 14

Candidate Starts for BlueCrab\_29:

(Start: 14 @26264 has 203 MA's), (20, 26372),

Gene: BobaPhett\_29 Start: 26246, Stop: 26479, Start Num: 14

Candidate Starts for BobaPhett\_29:

(Start: 14 @26246 has 203 MA's), (20, 26354),

Gene: Bobi\_31 Start: 26797, Stop: 27072, Start Num: 8

Candidate Starts for Bobi\_31:

(Start: 8 @26797 has 1 MA's), (Start: 11 @26800 has 8 MA's), (Start: 14 @26839 has 203 MA's), (20, 26947), (23, 27004),

Gene: BodEinwohner17\_29 Start: 26405, Stop: 26638, Start Num: 14

Candidate Starts for BodEinwohner17\_29:

(Start: 14 @26405 has 203 MA's), (20, 26513),

Gene: Boomer\_30 Start: 25887, Stop: 26108, Start Num: 14

Candidate Starts for Boomer\_30:

(5, 25719), (Start: 11 @25848 has 8 MA's), (Start: 14 @25887 has 203 MA's), (20, 25995),

Gene: Bosection6\_27 Start: 22601, Stop: 22837, Start Num: 14

Candidate Starts for Bosection6\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's), (16, 22619),

Gene: Brocalys\_24 Start: 21916, Stop: 22155, Start Num: 14

Candidate Starts for Brocalys\_24:

(Start: 14 @21916 has 203 MA's), (18, 21952), (21, 22060),

Gene: Brookers\_27 Start: 25074, Stop: 25307, Start Num: 14

Candidate Starts for Brookers\_27:

(6, 24921), (Start: 11 @25035 has 8 MA's), (Start: 14 @25074 has 203 MA's), (20, 25182), (23, 25239),

Gene: Brushbloom\_31 Start: 26149, Stop: 26382, Start Num: 14

Candidate Starts for Brushbloom\_31:

(6, 25996), (Start: 11 @26110 has 8 MA's), (Start: 14 @26149 has 203 MA's), (20, 26257), (23, 26314),

Gene: Bubbles123\_30 Start: 26821, Stop: 27042, Start Num: 14

Candidate Starts for Bubbles123\_30:

(3, 26602), (Start: 14 @26821 has 203 MA's), (20, 26929),

Gene: Burwell21\_29 Start: 26271, Stop: 26504, Start Num: 14

Candidate Starts for Burwell21\_29:

(Start: 14 @26271 has 203 MA's), (20, 26379), (23, 26436),

Gene: BuzzLyseyear\_31 Start: 26650, Stop: 26871, Start Num: 14

Candidate Starts for BuzzLyseyear\_31:

(Start: 14 @26650 has 203 MA's),

Gene: ByChance\_29 Start: 26248, Stop: 26481, Start Num: 14

Candidate Starts for ByChance\_29:

(Start: 14 @26248 has 203 MA's), (20, 26356), (23, 26413),

Gene: Byougenkin\_29 Start: 26154, Stop: 26390, Start Num: 14

Candidate Starts for Byougenkin\_29:

(Start: 14 @26154 has 203 MA's), (17, 26184), (20, 26262), (23, 26319),

Gene: Cabrinians\_29 Start: 26274, Stop: 26507, Start Num: 14

Candidate Starts for Cabrinians\_29:

(Start: 14 @26274 has 203 MA's), (20, 26382),

Gene: CaptainTrips\_30 Start: 26474, Stop: 26710, Start Num: 14

Candidate Starts for CaptainTrips\_30:

(Start: 14 @26474 has 203 MA's),

Gene: Carcharodon\_27 Start: 22565, Stop: 22837, Start Num: 10

Candidate Starts for Carcharodon\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's), (16, 22619),

Gene: Cerasum\_24 Start: 22110, Stop: 22331, Start Num: 14

Candidate Starts for Cerasum\_24:

(6, 21963), (Start: 14 @22110 has 203 MA's), (20, 22218),

Gene: Charlie\_27 Start: 22565, Stop: 22837, Start Num: 10

Candidate Starts for Charlie\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's), (16, 22619),

Gene: Che8\_31 Start: 26453, Stop: 26686, Start Num: 14

Candidate Starts for Che8\_31:

(1, 26114), (7, 26318), (Start: 14 @26453 has 203 MA's), (20, 26561),

Gene: Cheesepuff\_32 Start: 27095, Stop: 27316, Start Num: 14

Candidate Starts for Cheesepuff\_32:

(Start: 14 @27095 has 203 MA's), (20, 27203),

Gene: Chevrolet\_29 Start: 26078, Stop: 26311, Start Num: 14

Candidate Starts for Chevrolet\_29:

(7, 25943), (Start: 14 @26078 has 203 MA's), (20, 26186),

Gene: Chewbacca\_27 Start: 22565, Stop: 22837, Start Num: 10

Candidate Starts for Chewbacca\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's), (16, 22619),

Gene: ChickenDinner\_31 Start: 26708, Stop: 26941, Start Num: 14

Candidate Starts for ChickenDinner\_31:

(6, 26555), (Start: 11 @26669 has 8 MA's), (Start: 14 @26708 has 203 MA's), (20, 26816), (23, 26873),

Gene: Chuckly\_29 Start: 26250, Stop: 26486, Start Num: 14  
Candidate Starts for Chuckly\_29:  
(Start: 14 @26250 has 203 MA's), (20, 26358),

Gene: Clifton\_23 Start: 22229, Stop: 22468, Start Num: 14  
Candidate Starts for Clifton\_23:  
(Start: 14 @22229 has 203 MA's), (18, 22265), (21, 22373),

Gene: Coco12\_28 Start: 25615, Stop: 25848, Start Num: 14  
Candidate Starts for Coco12\_28:  
(6, 25462), (Start: 11 @25576 has 8 MA's), (Start: 14 @25615 has 203 MA's), (20, 25723), (23, 25780),

Gene: Corium\_29 Start: 26289, Stop: 26522, Start Num: 14  
Candidate Starts for Corium\_29:  
(Start: 8 @26247 has 1 MA's), (Start: 11 @26250 has 8 MA's), (Start: 14 @26289 has 203 MA's), (20, 26397), (23, 26454),

Gene: Cornie\_29 Start: 26490, Stop: 26723, Start Num: 14  
Candidate Starts for Cornie\_29:  
(7, 26355), (Start: 14 @26490 has 203 MA's), (20, 26598),

Gene: Cornucopia\_30 Start: 26153, Stop: 26386, Start Num: 14  
Candidate Starts for Cornucopia\_30:  
(6, 26000), (Start: 11 @26114 has 8 MA's), (Start: 14 @26153 has 203 MA's), (20, 26261), (23, 26318),

Gene: Crumble\_23 Start: 22276, Stop: 22515, Start Num: 14  
Candidate Starts for Crumble\_23:  
(Start: 14 @22276 has 203 MA's), (18, 22312), (21, 22420),

Gene: DLane\_29 Start: 26102, Stop: 26335, Start Num: 14  
Candidate Starts for DLane\_29:  
(6, 25949), (Start: 14 @26102 has 203 MA's), (20, 26210), (23, 26267),

Gene: DRBy19\_29 Start: 26116, Stop: 26349, Start Num: 14  
Candidate Starts for DRBy19\_29:  
(Start: 14 @26116 has 203 MA's), (20, 26224),

Gene: DaWorst\_31 Start: 26632, Stop: 26865, Start Num: 14  
Candidate Starts for DaWorst\_31:  
(6, 26479), (Start: 11 @26593 has 8 MA's), (Start: 14 @26632 has 203 MA's), (20, 26740), (23, 26797),

Gene: DaddyRickover\_29 Start: 26272, Stop: 26505, Start Num: 14  
Candidate Starts for DaddyRickover\_29:  
(6, 26119), (Start: 14 @26272 has 203 MA's), (20, 26380), (23, 26437),

Gene: Daenerys\_29 Start: 26096, Stop: 26329, Start Num: 14  
Candidate Starts for Daenerys\_29:  
(Start: 14 @26096 has 203 MA's), (20, 26204),

Gene: Dante\_29 Start: 26136, Stop: 26369, Start Num: 14  
Candidate Starts for Dante\_29:  
(Start: 14 @26136 has 203 MA's), (20, 26244),

Gene: DeadP\_29 Start: 26299, Stop: 26532, Start Num: 14  
Candidate Starts for DeadP\_29:  
(6, 26146), (Start: 11 @26260 has 8 MA's), (Start: 14 @26299 has 203 MA's), (20, 26407), (23, 26464),

Gene: Deb65\_29 Start: 26098, Stop: 26331, Start Num: 14  
Candidate Starts for Deb65\_29:  
(Start: 8 @26056 has 1 MA's), (Start: 11 @26059 has 8 MA's), (Start: 14 @26098 has 203 MA's), (20, 26206), (23, 26263),

Gene: DillTech15\_29 Start: 26181, Stop: 26414, Start Num: 14  
Candidate Starts for DillTech15\_29:  
(Start: 14 @26181 has 203 MA's), (17, 26211), (20, 26289),

Gene: DirtMcgirt\_30 Start: 25919, Stop: 26152, Start Num: 14  
Candidate Starts for DirtMcgirt\_30:  
(Start: 14 @25919 has 203 MA's), (20, 26027),

Gene: DoRead\_30 Start: 26089, Stop: 26310, Start Num: 14  
Candidate Starts for DoRead\_30:  
(7, 25954), (Start: 14 @26089 has 203 MA's), (20, 26197),

Gene: DocMcStuffins\_31 Start: 26708, Stop: 26941, Start Num: 14  
Candidate Starts for DocMcStuffins\_31:  
(6, 26555), (Start: 11 @26669 has 8 MA's), (Start: 14 @26708 has 203 MA's), (20, 26816), (23, 26873),

Gene: Donkeykong\_29 Start: 26267, Stop: 26500, Start Num: 14  
Candidate Starts for Donkeykong\_29:  
(5, 26105), (Start: 14 @26267 has 203 MA's), (20, 26375), (23, 26432),

Gene: Doomphist\_29 Start: 26200, Stop: 26451, Start Num: 13  
Candidate Starts for Doomphist\_29:  
(5, 26044), (Start: 13 @26200 has 7 MA's), (Start: 14 @26218 has 203 MA's), (20, 26326),

Gene: Dorothy\_29 Start: 26057, Stop: 26290, Start Num: 14  
Candidate Starts for Dorothy\_29:  
(6, 25904), (Start: 14 @26057 has 203 MA's), (20, 26165), (23, 26222),

Gene: DosHalletts\_30 Start: 26214, Stop: 26435, Start Num: 14  
Candidate Starts for DosHalletts\_30:  
(6, 26061), (Start: 14 @26214 has 203 MA's), (20, 26322),

Gene: DotProduct\_29 Start: 26067, Stop: 26318, Start Num: 13  
Candidate Starts for DotProduct\_29:  
(5, 25911), (Start: 13 @26067 has 7 MA's), (Start: 14 @26085 has 203 MA's), (20, 26193),

Gene: Doug\_30 Start: 26649, Stop: 26882, Start Num: 14  
Candidate Starts for Doug\_30:  
(6, 26496), (Start: 14 @26649 has 203 MA's), (20, 26757), (23, 26814),

Gene: Drago\_30 Start: 25873, Stop: 26145, Start Num: 11  
Candidate Starts for Drago\_30:  
(5, 25744), (Start: 11 @25873 has 8 MA's), (Start: 14 @25912 has 203 MA's), (20, 26020), (23, 26077),

Gene: Duplicity\_27 Start: 22601, Stop: 22837, Start Num: 14  
Candidate Starts for Duplicity\_27:  
(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's),  
(16, 22619),

Gene: EGUunicorn\_28 Start: 22601, Stop: 22837, Start Num: 14  
Candidate Starts for EGUunicorn\_28:  
(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's),  
(16, 22619),

Gene: Eish\_29 Start: 26237, Stop: 26470, Start Num: 14  
Candidate Starts for Eish\_29:  
(6, 26084), (Start: 14 @26237 has 203 MA's), (20, 26345), (23, 26402),

Gene: EleanorGeorge\_29 Start: 26407, Stop: 26640, Start Num: 14  
Candidate Starts for EleanorGeorge\_29:  
(6, 26254), (Start: 14 @26407 has 203 MA's), (20, 26515),

Gene: EmiMonkey\_30 Start: 27630, Stop: 27863, Start Num: 14  
Candidate Starts for EmiMonkey\_30:  
(Start: 13 @27612 has 7 MA's), (Start: 14 @27630 has 203 MA's), (20, 27738),

Gene: Emma\_31 Start: 26666, Stop: 26899, Start Num: 14  
Candidate Starts for Emma\_31:  
(5, 26504), (Start: 13 @26648 has 7 MA's), (Start: 14 @26666 has 203 MA's), (20, 26774),

Gene: Emmaloid\_32 Start: 27477, Stop: 27710, Start Num: 14  
Candidate Starts for Emmaloid\_32:  
(Start: 13 @27459 has 7 MA's), (Start: 14 @27477 has 203 MA's), (20, 27585),

Gene: Empress\_30 Start: 27432, Stop: 27665, Start Num: 14  
Candidate Starts for Empress\_30:  
(Start: 14 @27432 has 203 MA's), (20, 27540),

Gene: Enby\_30 Start: 25936, Stop: 26169, Start Num: 14  
Candidate Starts for Enby\_30:  
(Start: 9 @25894 has 1 MA's), (Start: 13 @25915 has 7 MA's), (Start: 14 @25936 has 203 MA's), (17,  
25966), (20, 26044), (23, 26101),

Gene: Eradicator\_29 Start: 26125, Stop: 26358, Start Num: 14  
Candidate Starts for Eradicator\_29:  
(7, 25990), (Start: 14 @26125 has 203 MA's), (20, 26233),

Gene: Estave1\_27 Start: 25537, Stop: 25770, Start Num: 14  
Candidate Starts for Estave1\_27:  
(Start: 14 @25537 has 203 MA's), (20, 25645),

Gene: Fancypants\_29 Start: 26105, Stop: 26338, Start Num: 14  
Candidate Starts for Fancypants\_29:  
(6, 25952), (Start: 8 @26063 has 1 MA's), (Start: 11 @26066 has 8 MA's), (Start: 14 @26105 has 203  
MA's), (20, 26213), (23, 26270),

Gene: Fastidio\_31 Start: 26410, Stop: 26643, Start Num: 14

Candidate Starts for Fastidio\_31:

(Start: 14 @26410 has 203 MA's), (20, 26518), (23, 26575),

Gene: Filuzino\_29 Start: 26094, Stop: 26327, Start Num: 14

Candidate Starts for Filuzino\_29:

(6, 25941), (Start: 14 @26094 has 203 MA's), (20, 26202), (23, 26259),

Gene: Firehouse51\_30 Start: 26777, Stop: 27049, Start Num: 11

Candidate Starts for Firehouse51\_30:

(6, 26663), (Start: 11 @26777 has 8 MA's), (Start: 14 @26816 has 203 MA's), (17, 26846), (20, 26924),

Gene: Flathead\_29 Start: 26132, Stop: 26365, Start Num: 14

Candidate Starts for Flathead\_29:

(6, 25979), (Start: 14 @26132 has 203 MA's), (20, 26240), (23, 26297),

Gene: Florinda\_29 Start: 26097, Stop: 26330, Start Num: 14

Candidate Starts for Florinda\_29:

(Start: 14 @26097 has 203 MA's), (20, 26205), (23, 26262),

Gene: FreddyB\_29 Start: 26283, Stop: 26516, Start Num: 14

Candidate Starts for FreddyB\_29:

(Start: 14 @26283 has 203 MA's), (20, 26391),

Gene: Fruitloop\_28 Start: 26288, Stop: 26521, Start Num: 14

Candidate Starts for Fruitloop\_28:

(6, 26135), (Start: 14 @26288 has 203 MA's), (20, 26396), (23, 26453),

Gene: GUmbie\_29 Start: 26096, Stop: 26347, Start Num: 13

Candidate Starts for GUmbie\_29:

(5, 25940), (Start: 13 @26096 has 7 MA's), (Start: 14 @26114 has 203 MA's), (20, 26222),

Gene: Galactic\_29 Start: 26135, Stop: 26356, Start Num: 14

Candidate Starts for Galactic\_29:

(Start: 14 @26135 has 203 MA's), (17, 26165), (20, 26243),

Gene: Gandalph\_29 Start: 26198, Stop: 26419, Start Num: 14

Candidate Starts for Gandalph\_29:

(6, 26045), (Start: 14 @26198 has 203 MA's), (20, 26306),

Gene: Geralt\_29 Start: 26097, Stop: 26330, Start Num: 14

Candidate Starts for Geralt\_29:

(Start: 8 @26055 has 1 MA's), (Start: 11 @26058 has 8 MA's), (Start: 14 @26097 has 203 MA's), (20, 26205), (23, 26262),

Gene: Gex\_27 Start: 22561, Stop: 22833, Start Num: 10

Candidate Starts for Gex\_27:

(Start: 10 @22561 has 15 MA's), (Start: 11 @22564 has 8 MA's), (Start: 14 @22597 has 203 MA's), (16, 22615),

Gene: GigiOuiOui\_29 Start: 26226, Stop: 26459, Start Num: 14

Candidate Starts for GigiOuiOui\_29:

(Start: 14 @26226 has 203 MA's), (20, 26334),

Gene: Girafales\_30 Start: 25905, Stop: 26138, Start Num: 14  
Candidate Starts for Girafales\_30:  
(Start: 14 @25905 has 203 MA's), (20, 26013), (23, 26070),

Gene: Girr\_29 Start: 26056, Stop: 26277, Start Num: 14  
Candidate Starts for Girr\_29:  
(5, 25897), (Start: 14 @26056 has 203 MA's), (20, 26164),

Gene: Gorge\_29 Start: 26250, Stop: 26483, Start Num: 14  
Candidate Starts for Gorge\_29:  
(Start: 14 @26250 has 203 MA's), (20, 26358),

Gene: Grimmer\_31 Start: 26819, Stop: 27052, Start Num: 14  
Candidate Starts for Grimmer\_31:  
(7, 26684), (Start: 14 @26819 has 203 MA's), (20, 26927),

Gene: Guppsters\_30 Start: 26365, Stop: 26586, Start Num: 14  
Candidate Starts for Guppsters\_30:  
(7, 26230), (Start: 14 @26365 has 203 MA's), (20, 26473),

Gene: Hamulus\_29 Start: 26232, Stop: 26483, Start Num: 13  
Candidate Starts for Hamulus\_29:  
(7, 26112), (Start: 13 @26232 has 7 MA's), (Start: 14 @26250 has 203 MA's), (20, 26358),

Gene: Harley\_29 Start: 26034, Stop: 26267, Start Num: 14  
Candidate Starts for Harley\_29:  
(2, 25809), (7, 25899), (Start: 14 @26034 has 203 MA's), (17, 26064), (20, 26142),

Gene: Hegedechwinu\_30 Start: 26115, Stop: 26348, Start Num: 14  
Candidate Starts for Hegedechwinu\_30:  
(3, 25896), (Start: 14 @26115 has 203 MA's), (17, 26145), (20, 26223),

Gene: Hlubikazi\_29 Start: 26357, Stop: 26590, Start Num: 14  
Candidate Starts for Hlubikazi\_29:  
(6, 26204), (Start: 14 @26357 has 203 MA's), (20, 26465), (23, 26522),

Gene: IMpilo\_28 Start: 25884, Stop: 26120, Start Num: 14  
Candidate Starts for IMpilo\_28:  
(6, 25728), (Start: 11 @25845 has 8 MA's), (Start: 14 @25884 has 203 MA's), (20, 25992),

Gene: lbOuu\_31 Start: 26113, Stop: 26346, Start Num: 14  
Candidate Starts for lbOuu\_31:  
(6, 25960), (Start: 11 @26074 has 8 MA's), (Start: 14 @26113 has 203 MA's), (20, 26221), (23, 26278),

Gene: lbhubesi\_29 Start: 26041, Stop: 26274, Start Num: 14  
Candidate Starts for lbhubesi\_29:  
(2, 25816), (7, 25906), (Start: 14 @26041 has 203 MA's), (17, 26071), (20, 26149),

Gene: Inventum\_29 Start: 26214, Stop: 26447, Start Num: 14  
Candidate Starts for Inventum\_29:  
(Start: 14 @26214 has 203 MA's), (17, 26244), (20, 26322), (23, 26379),



Gene: IrishSherpFalk\_30 Start: 27450, Stop: 27671, Start Num: 14

Candidate Starts for IrishSherpFalk\_30:

(3, 27231), (Start: 14 @27450 has 203 MA's), (20, 27558),

Gene: JalFarm20\_31 Start: 26636, Stop: 26869, Start Num: 14

Candidate Starts for JalFarm20\_31:

(6, 26483), (Start: 11 @26597 has 8 MA's), (Start: 14 @26636 has 203 MA's), (20, 26744), (23, 26801),

Gene: James\_29 Start: 26246, Stop: 26479, Start Num: 14

Candidate Starts for James\_29:

(Start: 14 @26246 has 203 MA's), (20, 26354),

Gene: Jant\_30 Start: 26266, Stop: 26499, Start Num: 14

Candidate Starts for Jant\_30:

(6, 26113), (Start: 11 @26227 has 8 MA's), (Start: 14 @26266 has 203 MA's), (20, 26374), (23, 26431),

Gene: Jarcob\_29 Start: 26281, Stop: 26556, Start Num: 14

Candidate Starts for Jarcob\_29:

(Start: 14 @26281 has 203 MA's), (19, 26389), (20, 26431), (23, 26488),

Gene: Jinglebell\_28 Start: 26305, Stop: 26538, Start Num: 14

Candidate Starts for Jinglebell\_28:

(Start: 14 @26305 has 203 MA's), (20, 26413), (21, 26446),

Gene: Job42\_32 Start: 27828, Stop: 28049, Start Num: 14

Candidate Starts for Job42\_32:

(6, 27675), (Start: 14 @27828 has 203 MA's), (20, 27936),

Gene: JoeyJr\_29 Start: 26264, Stop: 26497, Start Num: 14

Candidate Starts for JoeyJr\_29:

(Start: 14 @26264 has 203 MA's), (20, 26372),

Gene: Journey\_27 Start: 22565, Stop: 22837, Start Num: 10

Candidate Starts for Journey\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's), (16, 22619),

Gene: Juice456\_30 Start: 27386, Stop: 27619, Start Num: 14

Candidate Starts for Juice456\_30:

(3, 27167), (Start: 14 @27386 has 203 MA's), (17, 27416), (20, 27494),

Gene: Juniper1\_29 Start: 26063, Stop: 26296, Start Num: 14

Candidate Starts for Juniper1\_29:

(7, 25928), (Start: 14 @26063 has 203 MA's), (20, 26171),

Gene: Karhdo\_29 Start: 26228, Stop: 26461, Start Num: 14

Candidate Starts for Karhdo\_29:

(Start: 14 @26228 has 203 MA's), (20, 26336),

Gene: Kenuha5\_26 Start: 25252, Stop: 25485, Start Num: 14

Candidate Starts for Kenuha5\_26:

(5, 25084), (Start: 11 @25213 has 8 MA's), (Start: 14 @25252 has 203 MA's), (20, 25360),

Gene: Kersh\_28 Start: 27304, Stop: 27537, Start Num: 14

Candidate Starts for Kersh\_28:

(Start: 14 @27304 has 203 MA's), (20, 27412),

Gene: Kimberlium\_31 Start: 27224, Stop: 27457, Start Num: 14

Candidate Starts for Kimberlium\_31:

(5, 27056), (Start: 11 @27185 has 8 MA's), (Start: 14 @27224 has 203 MA's), (20, 27332), (23, 27389),

Gene: KingJulian\_29 Start: 26289, Stop: 26522, Start Num: 14

Candidate Starts for KingJulian\_29:

(Start: 8 @26247 has 1 MA's), (Start: 11 @26250 has 8 MA's), (Start: 14 @26289 has 203 MA's), (20, 26397), (23, 26454),

Gene: KingMidas\_30 Start: 27392, Stop: 27625, Start Num: 14

Candidate Starts for KingMidas\_30:

(Start: 14 @27392 has 203 MA's), (20, 27500),

Gene: Kingsley\_27 Start: 25079, Stop: 25312, Start Num: 14

Candidate Starts for Kingsley\_27:

(6, 24926), (Start: 11 @25040 has 8 MA's), (Start: 14 @25079 has 203 MA's), (20, 25187), (23, 25244),

Gene: Koella\_23 Start: 22241, Stop: 22480, Start Num: 14

Candidate Starts for Koella\_23:

(Start: 14 @22241 has 203 MA's), (18, 22277), (21, 22385),

Gene: Krakatau\_30 Start: 26773, Stop: 27009, Start Num: 14

Candidate Starts for Krakatau\_30:

(Start: 14 @26773 has 203 MA's), (20, 26881),

Gene: KristaRAM\_30 Start: 26945, Stop: 27178, Start Num: 14

Candidate Starts for KristaRAM\_30:

(6, 26792), (Start: 14 @26945 has 203 MA's), (20, 27053), (23, 27110),

Gene: LastJedi\_23 Start: 22272, Stop: 22511, Start Num: 14

Candidate Starts for LastJedi\_23:

(Start: 14 @22272 has 203 MA's), (18, 22308), (21, 22416),

Gene: Latretium\_30 Start: 26907, Stop: 27140, Start Num: 14

Candidate Starts for Latretium\_30:

(12, 26868), (Start: 13 @26883 has 7 MA's), (Start: 14 @26907 has 203 MA's), (20, 27015),

Gene: Leozinho\_30 Start: 25956, Stop: 26189, Start Num: 14

Candidate Starts for Leozinho\_30:

(Start: 8 @25914 has 1 MA's), (Start: 11 @25917 has 8 MA's), (Start: 14 @25956 has 203 MA's), (20, 26064), (23, 26121),

Gene: Leperchaun\_29 Start: 26152, Stop: 26388, Start Num: 14

Candidate Starts for Leperchaun\_29:

(7, 26017), (Start: 14 @26152 has 203 MA's), (17, 26182), (20, 26260), (23, 26317),

Gene: LilMoolah\_29 Start: 26371, Stop: 26604, Start Num: 14

Candidate Starts for LilMoolah\_29:

(Start: 14 @26371 has 203 MA's), (20, 26479), (23, 26536),

Gene: LilSpotty\_30 Start: 23533, Stop: 23808, Start Num: 10  
Candidate Starts for LilSpotty\_30:  
(Start: 10 @23533 has 15 MA's), (Start: 11 @23536 has 8 MA's), (Start: 14 @23569 has 203 MA's),  
(16, 23587), (21, 23713),

Gene: LittleShirley\_31 Start: 27497, Stop: 27718, Start Num: 14  
Candidate Starts for LittleShirley\_31:  
(Start: 13 @27479 has 7 MA's), (Start: 14 @27497 has 203 MA's), (20, 27605),

Gene: Lizziana\_29 Start: 26246, Stop: 26479, Start Num: 14  
Candidate Starts for Lizziana\_29:  
(Start: 14 @26246 has 203 MA's), (20, 26354), (23, 26411),

Gene: Llama\_29 Start: 26304, Stop: 26537, Start Num: 14  
Candidate Starts for Llama\_29:  
(Start: 14 @26304 has 203 MA's), (20, 26412), (21, 26445),

Gene: Llij\_29 Start: 26076, Stop: 26309, Start Num: 14  
Candidate Starts for Llij\_29:  
(5, 25908), (Start: 11 @26037 has 8 MA's), (Start: 14 @26076 has 203 MA's), (20, 26184), (23, 26241),

Gene: Lorde\_30 Start: 25911, Stop: 26144, Start Num: 14  
Candidate Starts for Lorde\_30:  
(Start: 9 @25869 has 1 MA's), (Start: 13 @25890 has 7 MA's), (Start: 14 @25911 has 203 MA's), (17,  
25941), (20, 26019), (23, 26076),

Gene: LunaBlu\_30 Start: 26309, Stop: 26530, Start Num: 14  
Candidate Starts for LunaBlu\_30:  
(7, 26171), (Start: 13 @26291 has 7 MA's), (Start: 14 @26309 has 203 MA's), (20, 26417),

Gene: MadMen\_26 Start: 25352, Stop: 25585, Start Num: 14  
Candidate Starts for MadMen\_26:  
(Start: 14 @25352 has 203 MA's), (20, 25460), (23, 25517),

Gene: Madiba\_27 Start: 25006, Stop: 25239, Start Num: 14  
Candidate Starts for Madiba\_27:  
(7, 24871), (Start: 14 @25006 has 203 MA's), (20, 25114),

Gene: Magsby\_27 Start: 22562, Stop: 22834, Start Num: 10  
Candidate Starts for Magsby\_27:  
(Start: 10 @22562 has 15 MA's), (Start: 11 @22565 has 8 MA's), (Start: 14 @22598 has 203 MA's),  
(16, 22616),

Gene: Mahavrat\_29 Start: 26057, Stop: 26290, Start Num: 14  
Candidate Starts for Mahavrat\_29:  
(Start: 13 @26039 has 7 MA's), (Start: 14 @26057 has 203 MA's), (20, 26165),

Gene: Mandlovu\_29 Start: 26299, Stop: 26532, Start Num: 14  
Candidate Starts for Mandlovu\_29:  
(6, 26146), (Start: 14 @26299 has 203 MA's), (20, 26407), (23, 26464),

Gene: Mantra\_29 Start: 26195, Stop: 26428, Start Num: 14

Candidate Starts for Mantra\_29:  
(Start: 14 @26195 has 203 MA's), (20, 26303),

Gene: Maravista\_29 Start: 26028, Stop: 26261, Start Num: 14  
Candidate Starts for Maravista\_29:  
(Start: 14 @26028 has 203 MA's), (20, 26136), (22, 26178), (23, 26193),

Gene: Marker\_30 Start: 25963, Stop: 26196, Start Num: 14  
Candidate Starts for Marker\_30:  
(6, 25810), (Start: 14 @25963 has 203 MA's), (20, 26071), (23, 26128),

Gene: Martik\_29 Start: 26273, Stop: 26506, Start Num: 14  
Candidate Starts for Martik\_29:  
(Start: 14 @26273 has 203 MA's), (20, 26381), (23, 26438),

Gene: Mattes\_29 Start: 26246, Stop: 26479, Start Num: 14  
Candidate Starts for Mattes\_29:  
(Start: 14 @26246 has 203 MA's), (20, 26354),

Gene: Melissauren88\_29 Start: 26284, Stop: 26517, Start Num: 14  
Candidate Starts for Melissauren88\_29:  
(6, 26131), (Start: 14 @26284 has 203 MA's), (20, 26392), (23, 26449),

Gene: Melville\_27 Start: 22565, Stop: 22837, Start Num: 10  
Candidate Starts for Melville\_27:  
(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's),  
(16, 22619),

Gene: MilanaBonita\_23 Start: 22215, Stop: 22448, Start Num: 14  
Candidate Starts for MilanaBonita\_23:  
(Start: 14 @22215 has 203 MA's), (20, 22323), (23, 22380),

Gene: MilleniumForce\_30 Start: 27076, Stop: 27309, Start Num: 14  
Candidate Starts for MilleniumForce\_30:  
(6, 26923), (Start: 11 @27037 has 8 MA's), (Start: 14 @27076 has 203 MA's), (20, 27184), (23, 27241),

Gene: MinionDave\_30 Start: 26467, Stop: 26688, Start Num: 14  
Candidate Starts for MinionDave\_30:  
(7, 26329), (Start: 13 @26449 has 7 MA's), (Start: 14 @26467 has 203 MA's), (20, 26575), (24, 26668),

Gene: Minnie\_30 Start: 26814, Stop: 27035, Start Num: 14  
Candidate Starts for Minnie\_30:  
(6, 26661), (Start: 11 @26775 has 8 MA's), (Start: 14 @26814 has 203 MA's), (20, 26922),

Gene: Misha28\_30 Start: 25975, Stop: 26208, Start Num: 14  
Candidate Starts for Misha28\_30:  
(6, 25819), (Start: 11 @25936 has 8 MA's), (Start: 14 @25975 has 203 MA's), (20, 26083),

Gene: MisterCuddles\_29 Start: 26056, Stop: 26277, Start Num: 14  
Candidate Starts for MisterCuddles\_29:  
(5, 25897), (Start: 14 @26056 has 203 MA's), (20, 26164),

Gene: Modragons\_29 Start: 26149, Stop: 26382, Start Num: 14

Candidate Starts for Modragons\_29:  
(Start: 14 @26149 has 203 MA's), (20, 26257), (21, 26290),

Gene: Moonbeam\_30 Start: 26769, Stop: 27002, Start Num: 14  
Candidate Starts for Moonbeam\_30:  
(6, 26616), (Start: 11 @26730 has 8 MA's), (Start: 14 @26769 has 203 MA's), (20, 26877), (23, 26934),

Gene: Mova\_30 Start: 25966, Stop: 26199, Start Num: 14  
Candidate Starts for Mova\_30:  
(6, 25813), (Start: 11 @25927 has 8 MA's), (Start: 14 @25966 has 203 MA's), (20, 26074),

Gene: Mozy\_30 Start: 26161, Stop: 26394, Start Num: 14  
Candidate Starts for Mozy\_30:  
(6, 26008), (Start: 14 @26161 has 203 MA's), (20, 26269),

Gene: Ms6\_23 Start: 21747, Stop: 21980, Start Num: 14  
Candidate Starts for Ms6\_23:  
(Start: 14 @21747 has 203 MA's), (20, 21855), (23, 21912),

Gene: MulchExplorer\_32 Start: 27224, Stop: 27457, Start Num: 14  
Candidate Starts for MulchExplorer\_32:  
(5, 27056), (Start: 11 @27185 has 8 MA's), (Start: 14 @27224 has 203 MA's), (20, 27332), (23, 27389),

Gene: MulchSalad\_26 Start: 22396, Stop: 22632, Start Num: 14  
Candidate Starts for MulchSalad\_26:  
(Start: 14 @22396 has 203 MA's),

Gene: Mutaforma13\_29 Start: 26280, Stop: 26513, Start Num: 14  
Candidate Starts for Mutaforma13\_29:  
(Start: 14 @26280 has 203 MA's), (20, 26388),

Gene: NewHope4\_32 Start: 26316, Stop: 26549, Start Num: 14  
Candidate Starts for NewHope4\_32:  
(6, 26163), (Start: 11 @26277 has 8 MA's), (Start: 14 @26316 has 203 MA's), (20, 26424),

Gene: Nimbo\_29 Start: 26101, Stop: 26334, Start Num: 14  
Candidate Starts for Nimbo\_29:  
(Start: 14 @26101 has 203 MA's), (20, 26209),

Gene: Nitzel\_30 Start: 26816, Stop: 27049, Start Num: 14  
Candidate Starts for Nitzel\_30:  
(7, 26678), (Start: 13 @26798 has 7 MA's), (Start: 14 @26816 has 203 MA's), (20, 26924),

Gene: Nivrat\_29 Start: 26245, Stop: 26478, Start Num: 14  
Candidate Starts for Nivrat\_29:  
(Start: 14 @26245 has 203 MA's), (20, 26353), (23, 26410),

Gene: NormanBulbieJr\_29 Start: 26260, Stop: 26493, Start Num: 14  
Candidate Starts for NormanBulbieJr\_29:  
(Start: 14 @26260 has 203 MA's), (20, 26368), (23, 26425),

Gene: Ochi17\_27 Start: 25756, Stop: 25989, Start Num: 14  
Candidate Starts for Ochi17\_27:

(Start: 13 @25735 has 7 MA's), (Start: 14 @25756 has 203 MA's), (20, 25864),

Gene: OfUltron\_29 Start: 26305, Stop: 26538, Start Num: 14

Candidate Starts for OfUltron\_29:

(Start: 14 @26305 has 203 MA's), (20, 26413), (21, 26446),

Gene: Ogopogo\_29 Start: 25437, Stop: 25688, Start Num: 13

Candidate Starts for Ogopogo\_29:

(Start: 13 @25437 has 7 MA's), (Start: 14 @25455 has 203 MA's), (20, 25563),

Gene: Oksu\_30 Start: 26149, Stop: 26382, Start Num: 14

Candidate Starts for Oksu\_30:

(Start: 14 @26149 has 203 MA's), (20, 26257), (21, 26290),

Gene: OldBen\_29 Start: 26053, Stop: 26286, Start Num: 14

Candidate Starts for OldBen\_29:

(Start: 14 @26053 has 203 MA's), (20, 26161),

Gene: OlympiaSaint\_29 Start: 26469, Stop: 26702, Start Num: 14

Candidate Starts for OlympiaSaint\_29:

(Start: 14 @26469 has 203 MA's), (20, 26577),

Gene: Ovechkin\_29 Start: 26271, Stop: 26504, Start Num: 14

Candidate Starts for Ovechkin\_29:

(6, 26118), (Start: 14 @26271 has 203 MA's), (20, 26379), (23, 26436),

Gene: OwlsT2W\_30 Start: 26550, Stop: 26783, Start Num: 14

Candidate Starts for OwlsT2W\_30:

(6, 26397), (Start: 14 @26550 has 203 MA's), (17, 26580), (20, 26658), (23, 26715),

Gene: PHappiness\_29 Start: 26074, Stop: 26307, Start Num: 14

Candidate Starts for PHappiness\_29:

(Start: 13 @26056 has 7 MA's), (Start: 14 @26074 has 203 MA's), (20, 26182),

Gene: PMC\_29 Start: 26076, Stop: 26309, Start Num: 14

Candidate Starts for PMC\_29:

(5, 25908), (Start: 11 @26037 has 8 MA's), (Start: 14 @26076 has 203 MA's), (20, 26184), (23, 26241),

Gene: Pacc40\_29 Start: 26248, Stop: 26484, Start Num: 14

Candidate Starts for Pacc40\_29:

(7, 26113), (Start: 14 @26248 has 203 MA's), (17, 26278), (20, 26356), (23, 26413),

Gene: Parmesanjohn\_27 Start: 22565, Stop: 22837, Start Num: 10

Candidate Starts for Parmesanjohn\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's), (16, 22619),

Gene: Phalconet\_29 Start: 26190, Stop: 26426, Start Num: 14

Candidate Starts for Phalconet\_29:

(6, 26034), (Start: 11 @26151 has 8 MA's), (Start: 14 @26190 has 203 MA's), (20, 26298), (23, 26355),

Gene: Phanphagia\_26 Start: 25273, Stop: 25506, Start Num: 14

Candidate Starts for Phanphagia\_26:

(6, 25120), (Start: 11 @25234 has 8 MA's), (Start: 14 @25273 has 203 MA's), (20, 25381), (23, 25438),

Gene: Phasih\_30 Start: 26651, Stop: 26884, Start Num: 14

Candidate Starts for Phasih\_30:

(5, 26477), (Start: 13 @26633 has 7 MA's), (Start: 14 @26651 has 203 MA's), (20, 26759),

Gene: Phatniss\_30 Start: 26593, Stop: 26826, Start Num: 14

Candidate Starts for Phatniss\_30:

(5, 26425), (Start: 11 @26554 has 8 MA's), (Start: 14 @26593 has 203 MA's), (20, 26701), (23, 26758),

Gene: PhesterPhotato\_29 Start: 26110, Stop: 26346, Start Num: 14

Candidate Starts for PhesterPhotato\_29:

(6, 25954), (Start: 11 @26071 has 8 MA's), (Start: 14 @26110 has 203 MA's), (20, 26218), (23, 26275),

Gene: Philonius\_27 Start: 22565, Stop: 22837, Start Num: 10

Candidate Starts for Philonius\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's),  
(16, 22619),

Gene: Philus\_29 Start: 26092, Stop: 26325, Start Num: 14

Candidate Starts for Philus\_29:

(Start: 14 @26092 has 203 MA's), (20, 26200),

Gene: PhlipPhlop\_30 Start: 27630, Stop: 27863, Start Num: 14

Candidate Starts for PhlipPhlop\_30:

(Start: 13 @27612 has 7 MA's), (Start: 14 @27630 has 203 MA's), (20, 27738),

Gene: Piper2020\_31 Start: 26685, Stop: 26918, Start Num: 14

Candidate Starts for Piper2020\_31:

(Start: 14 @26685 has 203 MA's), (20, 26793),

Gene: Pippy\_23 Start: 22268, Stop: 22507, Start Num: 14

Candidate Starts for Pippy\_23:

(Start: 14 @22268 has 203 MA's), (18, 22304), (21, 22412),

Gene: Pipsqueaks\_27 Start: 22565, Stop: 22837, Start Num: 10

Candidate Starts for Pipsqueaks\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's),  
(16, 22619),

Gene: Poenanya\_29 Start: 26218, Stop: 26451, Start Num: 14

Candidate Starts for Poenanya\_29:

(5, 26044), (Start: 13 @26200 has 7 MA's), (Start: 14 @26218 has 203 MA's), (20, 26326),

Gene: Polka14\_30 Start: 26639, Stop: 26872, Start Num: 14

Candidate Starts for Polka14\_30:

(6, 26486), (Start: 11 @26600 has 8 MA's), (Start: 14 @26639 has 203 MA's), (20, 26747), (23, 26804),

Gene: Pollywog\_29 Start: 26336, Stop: 26569, Start Num: 14

Candidate Starts for Pollywog\_29:

(7, 26198), (Start: 14 @26336 has 203 MA's), (20, 26444),

Gene: Polo2Bam\_33 Start: 26275, Stop: 26508, Start Num: 14

Candidate Starts for Polo2Bam\_33:

(6, 26122), (Start: 11 @26236 has 8 MA's), (Start: 14 @26275 has 203 MA's), (20, 26383), (23, 26440),

Gene: PopTart\_29 Start: 26314, Stop: 26547, Start Num: 14

Candidate Starts for PopTart\_29:

(6, 26161), (Start: 11 @26275 has 8 MA's), (Start: 14 @26314 has 203 MA's), (20, 26422),

Gene: Priscilla\_29 Start: 26283, Stop: 26516, Start Num: 14

Candidate Starts for Priscilla\_29:

(Start: 14 @26283 has 203 MA's), (20, 26391),

Gene: QuickMath\_30 Start: 27448, Stop: 27681, Start Num: 14

Candidate Starts for QuickMath\_30:

(5, 27280), (Start: 11 @27409 has 8 MA's), (Start: 14 @27448 has 203 MA's), (20, 27556), (23, 27613),

Gene: Quico\_30 Start: 25905, Stop: 26138, Start Num: 14

Candidate Starts for Quico\_30:

(Start: 14 @25905 has 203 MA's), (20, 26013), (23, 26070),

Gene: Radiance\_29 Start: 26191, Stop: 26424, Start Num: 14

Candidate Starts for Radiance\_29:

(Start: 14 @26191 has 203 MA's), (20, 26299),

Gene: Ramsey\_30 Start: 26130, Stop: 26351, Start Num: 14

Candidate Starts for Ramsey\_30:

(Start: 14 @26130 has 203 MA's),

Gene: RedBird\_29 Start: 26069, Stop: 26302, Start Num: 14

Candidate Starts for RedBird\_29:

(Start: 14 @26069 has 203 MA's), (17, 26099), (20, 26177), (23, 26234),

Gene: Renaud18\_29 Start: 26281, Stop: 26517, Start Num: 14

Candidate Starts for Renaud18\_29:

(Start: 14 @26281 has 203 MA's), (20, 26389),

Gene: Rialto\_32 Start: 28170, Stop: 28409, Start Num: 13

Candidate Starts for Rialto\_32:

(Start: 13 @28170 has 7 MA's), (Start: 14 @28188 has 203 MA's), (20, 28296),

Gene: Rita\_29 Start: 26094, Stop: 26315, Start Num: 14

Candidate Starts for Rita\_29:

(Start: 14 @26094 has 203 MA's), (20, 26202),

Gene: RitaG\_29 Start: 26298, Stop: 26519, Start Num: 14

Candidate Starts for RitaG\_29:

(Start: 14 @26298 has 203 MA's), (20, 26406),

Gene: Rockne\_29 Start: 26037, Stop: 26309, Start Num: 11

Candidate Starts for Rockne\_29:

(5, 25908), (Start: 11 @26037 has 8 MA's), (Start: 14 @26076 has 203 MA's), (20, 26184), (23, 26241),

Gene: RockyHorror\_30 Start: 26018, Stop: 26251, Start Num: 14

Candidate Starts for RockyHorror\_30:



(Start: 14 @26018 has 203 MA's), (17, 26048), (20, 26126), (23, 26183),

Gene: Royals2015\_29 Start: 26194, Stop: 26427, Start Num: 14

Candidate Starts for Royals2015\_29:

(6, 26041), (Start: 11 @26155 has 8 MA's), (Start: 14 @26194 has 203 MA's), (20, 26302), (23, 26359),

Gene: Ruby\_29 Start: 26056, Stop: 26277, Start Num: 14

Candidate Starts for Ruby\_29:

(5, 25897), (Start: 14 @26056 has 203 MA's), (20, 26164),

Gene: SG4\_29 Start: 26379, Stop: 26654, Start Num: 9

Candidate Starts for SG4\_29:

(Start: 9 @26379 has 1 MA's), (Start: 13 @26400 has 7 MA's), (Start: 14 @26421 has 203 MA's), (17, 26451), (20, 26529), (23, 26586),

Gene: Saal\_29 Start: 26070, Stop: 26303, Start Num: 14

Candidate Starts for Saal\_29:

(Start: 14 @26070 has 203 MA's), (20, 26178),

Gene: Sabbb\_30 Start: 26415, Stop: 26648, Start Num: 14

Candidate Starts for Sabbb\_30:

(7, 26280), (Start: 14 @26415 has 203 MA's), (20, 26523), (23, 26580),

Gene: Sandalphon\_30 Start: 26801, Stop: 27034, Start Num: 14

Candidate Starts for Sandalphon\_30:

(Start: 14 @26801 has 203 MA's), (20, 26909),

Gene: Sarma624\_24 Start: 22110, Stop: 22331, Start Num: 14

Candidate Starts for Sarma624\_24:

(6, 21963), (Start: 14 @22110 has 203 MA's), (20, 22218),

Gene: Sassafras\_29 Start: 26214, Stop: 26447, Start Num: 14

Candidate Starts for Sassafras\_29:

(Start: 14 @26214 has 203 MA's), (17, 26244), (20, 26322), (23, 26379),

Gene: SassyB\_29 Start: 26314, Stop: 26547, Start Num: 14

Candidate Starts for SassyB\_29:

(6, 26161), (Start: 11 @26275 has 8 MA's), (Start: 14 @26314 has 203 MA's), (20, 26422),

Gene: Schnauzer\_27 Start: 22565, Stop: 22837, Start Num: 10

Candidate Starts for Schnauzer\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's), (16, 22619),

Gene: Scottish\_30 Start: 27397, Stop: 27630, Start Num: 14

Candidate Starts for Scottish\_30:

(Start: 14 @27397 has 203 MA's), (20, 27505),

Gene: Seabastian\_29 Start: 26305, Stop: 26538, Start Num: 14

Candidate Starts for Seabastian\_29:

(Start: 14 @26305 has 203 MA's), (20, 26413), (21, 26446),

Gene: Seagreen\_30 Start: 26121, Stop: 26354, Start Num: 14

Candidate Starts for Seagreen\_30:

(6, 25968), (Start: 11 @26082 has 8 MA's), (Start: 14 @26121 has 203 MA's), (20, 26229), (23, 26286),

Gene: Shauna1\_26 Start: 25237, Stop: 25509, Start Num: 11

Candidate Starts for Shauna1\_26:

(6, 25123), (Start: 11 @25237 has 8 MA's), (Start: 14 @25276 has 203 MA's), (20, 25384), (23, 25441),

Gene: ShiLan\_29 Start: 26272, Stop: 26547, Start Num: 14

Candidate Starts for ShiLan\_29:

(Start: 14 @26272 has 203 MA's), (19, 26380), (20, 26422), (23, 26479),

Gene: ShowerHandel\_29 Start: 26273, Stop: 26506, Start Num: 14

Candidate Starts for ShowerHandel\_29:

(Start: 14 @26273 has 203 MA's), (20, 26381), (23, 26438),

Gene: ShroomBoi\_26 Start: 25213, Stop: 25446, Start Num: 14

Candidate Starts for ShroomBoi\_26:

(Start: 14 @25213 has 203 MA's), (17, 25243), (20, 25321), (23, 25378),

Gene: SiSi\_29 Start: 26072, Stop: 26305, Start Num: 14

Candidate Starts for SiSi\_29:

(Start: 14 @26072 has 203 MA's), (17, 26102), (20, 26180),

Gene: Silvafighter\_27 Start: 22601, Stop: 22837, Start Num: 14

Candidate Starts for Silvafighter\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's), (16, 22619),

Gene: SilverChicken\_36 Start: 26023, Stop: 26256, Start Num: 14

Candidate Starts for SilverChicken\_36:

(Start: 14 @26023 has 203 MA's), (17, 26053), (20, 26131), (23, 26188),

Gene: Silvy\_27 Start: 22602, Stop: 22838, Start Num: 14

Candidate Starts for Silvy\_27:

(Start: 10 @22566 has 15 MA's), (Start: 11 @22569 has 8 MA's), (Start: 14 @22602 has 203 MA's), (16, 22620),

Gene: SimranZ1\_31 Start: 26138, Stop: 26359, Start Num: 14

Candidate Starts for SimranZ1\_31:

(4, 25937), (Start: 14 @26138 has 203 MA's), (20, 26246),

Gene: Slim\_32 Start: 27468, Stop: 27701, Start Num: 14

Candidate Starts for Slim\_32:

(Start: 13 @27450 has 7 MA's), (Start: 14 @27468 has 203 MA's), (20, 27576),

Gene: Smurph\_27 Start: 22565, Stop: 22837, Start Num: 10

Candidate Starts for Smurph\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's), (16, 22619),

Gene: Soul22\_33 Start: 25621, Stop: 25854, Start Num: 14

Candidate Starts for Soul22\_33:

(7, 25486), (Start: 14 @25621 has 203 MA's), (17, 25651), (20, 25729),

Gene: Sparkdehlily\_29 Start: 26116, Stop: 26349, Start Num: 14  
Candidate Starts for Sparkdehlily\_29:  
(Start: 14 @26116 has 203 MA's), (20, 26224),

Gene: Spartacus\_30 Start: 26350, Stop: 26571, Start Num: 14  
Candidate Starts for Spartacus\_30:  
(3, 26131), (Start: 14 @26350 has 203 MA's), (20, 26458),

Gene: Spikelee\_30 Start: 26096, Stop: 26329, Start Num: 14  
Candidate Starts for Spikelee\_30:  
(Start: 8 @26054 has 1 MA's), (Start: 14 @26096 has 203 MA's), (20, 26216),

Gene: Spoonbill\_29 Start: 26280, Stop: 26513, Start Num: 14  
Candidate Starts for Spoonbill\_29:  
(Start: 14 @26280 has 203 MA's), (20, 26388),

Gene: StAnnes\_27 Start: 25835, Stop: 26068, Start Num: 14  
Candidate Starts for StAnnes\_27:  
(Start: 13 @25814 has 7 MA's), (Start: 14 @25835 has 203 MA's), (20, 25943), (23, 26000),

Gene: Stap\_30 Start: 26246, Stop: 26479, Start Num: 14  
Candidate Starts for Stap\_30:  
(Start: 14 @26246 has 203 MA's), (20, 26354),

Gene: Starcevich\_32 Start: 26394, Stop: 26627, Start Num: 14  
Candidate Starts for Starcevich\_32:  
(Start: 14 @26394 has 203 MA's), (20, 26502), (23, 26559),

Gene: Strokeseat\_29 Start: 26356, Stop: 26589, Start Num: 14  
Candidate Starts for Strokeseat\_29:  
(6, 26203), (Start: 14 @26356 has 203 MA's), (20, 26464), (23, 26521),

Gene: SuperGrey\_29 Start: 26816, Stop: 27037, Start Num: 14  
Candidate Starts for SuperGrey\_29:  
(7, 26681), (Start: 14 @26816 has 203 MA's), (17, 26846), (20, 26924),

Gene: SwagPigglett\_29 Start: 26084, Stop: 26317, Start Num: 14  
Candidate Starts for SwagPigglett\_29:  
(Start: 14 @26084 has 203 MA's), (20, 26192), (23, 26249),

Gene: TDanisky\_29 Start: 26116, Stop: 26349, Start Num: 14  
Candidate Starts for TDanisky\_29:  
(Start: 14 @26116 has 203 MA's), (20, 26224),

Gene: Taj\_29 Start: 26262, Stop: 26534, Start Num: 11  
Candidate Starts for Taj\_29:  
(6, 26148), (Start: 11 @26262 has 8 MA's), (Start: 14 @26301 has 203 MA's), (20, 26409), (23, 26466),

Gene: Tapioca\_27 Start: 22601, Stop: 22837, Start Num: 14  
Candidate Starts for Tapioca\_27:  
(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's),  
(16, 22619),

Gene: Tchotchke\_28 Start: 25457, Stop: 25678, Start Num: 14

Candidate Starts for Tchotchke\_28:

(Start: 14 @25457 has 203 MA's), (20, 25565),

Gene: ThetaBob\_28 Start: 25464, Stop: 25697, Start Num: 14

Candidate Starts for ThetaBob\_28:

(Start: 14 @25464 has 203 MA's), (20, 25572),

Gene: TootsiePop\_30 Start: 25975, Stop: 26208, Start Num: 14

Candidate Starts for TootsiePop\_30:

(6, 25819), (Start: 11 @25936 has 8 MA's), (Start: 14 @25975 has 203 MA's), (20, 26083),

Gene: Tootsieroll\_30 Start: 26142, Stop: 26375, Start Num: 14

Candidate Starts for Tootsieroll\_30:

(Start: 14 @26142 has 203 MA's), (17, 26172), (20, 26250), (23, 26307),

Gene: Tortoise12\_27 Start: 22601, Stop: 22837, Start Num: 14

Candidate Starts for Tortoise12\_27:

(Start: 10 @22565 has 15 MA's), (Start: 11 @22568 has 8 MA's), (Start: 14 @22601 has 203 MA's), (16, 22619),

Gene: Totinger\_30 Start: 26000, Stop: 26233, Start Num: 14

Candidate Starts for Totinger\_30:

(Start: 14 @26000 has 203 MA's), (20, 26108),

Gene: Tweety\_29 Start: 26263, Stop: 26535, Start Num: 11

Candidate Starts for Tweety\_29:

(6, 26149), (Start: 11 @26263 has 8 MA's), (Start: 14 @26302 has 203 MA's), (20, 26410), (23, 26467),

Gene: UncleRicky\_32 Start: 27370, Stop: 27642, Start Num: 11

Candidate Starts for UncleRicky\_32:

(5, 27241), (Start: 11 @27370 has 8 MA's), (Start: 14 @27409 has 203 MA's), (20, 27517), (23, 27574),

Gene: VRedHorse\_29 Start: 26309, Stop: 26542, Start Num: 14

Candidate Starts for VRedHorse\_29:

(6, 26156), (Start: 11 @26270 has 8 MA's), (Start: 14 @26309 has 203 MA's), (20, 26417), (23, 26474),

Gene: Velveteen\_24 Start: 22110, Stop: 22331, Start Num: 14

Candidate Starts for Velveteen\_24:

(6, 21963), (Start: 14 @22110 has 203 MA's), (20, 22218),

Gene: Veteran\_29 Start: 26114, Stop: 26347, Start Num: 14

Candidate Starts for Veteran\_29:

(5, 25940), (Start: 13 @26096 has 7 MA's), (Start: 14 @26114 has 203 MA's), (20, 26222),

Gene: Violac\_31 Start: 26802, Stop: 27035, Start Num: 14

Candidate Starts for Violac\_31:

(6, 26649), (Start: 11 @26763 has 8 MA's), (Start: 14 @26802 has 203 MA's), (20, 26910), (23, 26967),

Gene: Vivum\_29 Start: 26083, Stop: 26316, Start Num: 14

Candidate Starts for Vivum\_29:

(Start: 14 @26083 has 203 MA's), (17, 26113), (20, 26191),

Gene: Wachhund\_29 Start: 26256, Stop: 26489, Start Num: 14

Candidate Starts for Wachhund\_29:

(Start: 14 @26256 has 203 MA's), (20, 26364),

Gene: Wee\_30 Start: 26800, Stop: 27072, Start Num: 11

Candidate Starts for Wee\_30:

(6, 26686), (Start: 11 @26800 has 8 MA's), (Start: 14 @26839 has 203 MA's), (20, 26947), (23, 27004),

Gene: Whatsapiecost\_29 Start: 26282, Stop: 26503, Start Num: 14

Candidate Starts for Whatsapiecost\_29:

(Start: 14 @26282 has 203 MA's), (20, 26390),

Gene: Whouxphf\_29 Start: 26348, Stop: 26569, Start Num: 14

Candidate Starts for Whouxphf\_29:

(5, 26180), (Start: 11 @26309 has 8 MA's), (Start: 14 @26348 has 203 MA's), (20, 26456),

Gene: WillSterrel\_30 Start: 27483, Stop: 27704, Start Num: 14

Candidate Starts for WillSterrel\_30:

(3, 27264), (Start: 14 @27483 has 203 MA's), (20, 27591),

Gene: XFactor\_29 Start: 26256, Stop: 26492, Start Num: 14

Candidate Starts for XFactor\_29:

(6, 26103), (Start: 11 @26217 has 8 MA's), (Start: 14 @26256 has 203 MA's), (20, 26364), (23, 26421),

Gene: Xerxes\_27 Start: 22562, Stop: 22834, Start Num: 10

Candidate Starts for Xerxes\_27:

(Start: 10 @22562 has 15 MA's), (Start: 11 @22565 has 8 MA's), (Start: 14 @22598 has 203 MA's),  
(16, 22616),

Gene: Yorick\_29 Start: 26271, Stop: 26504, Start Num: 14

Candidate Starts for Yorick\_29:

(Start: 14 @26271 has 203 MA's), (20, 26379), (23, 26436),

Gene: Zerg\_29 Start: 26127, Stop: 26360, Start Num: 14

Candidate Starts for Zerg\_29:

(Start: 14 @26127 has 203 MA's), (17, 26157), (20, 26235), (23, 26292),

Gene: Zizzle\_29 Start: 26215, Stop: 26448, Start Num: 14

Candidate Starts for Zizzle\_29:

(Start: 14 @26215 has 203 MA's), (20, 26323), (23, 26380),