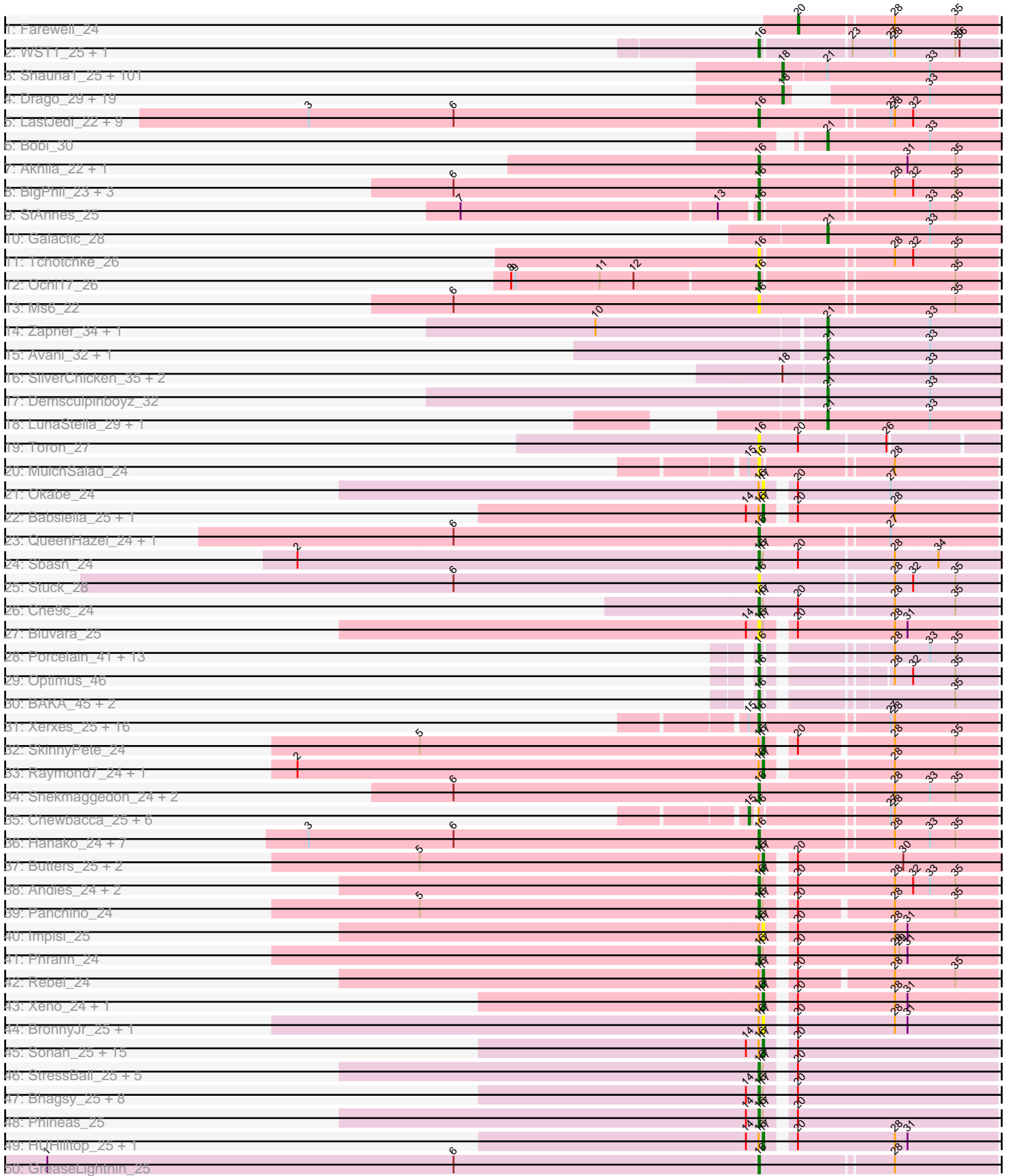


Pham 302983





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 302983 Report

This analysis was run 06/08/26 on database version 649.

Pham number 302983 has 286 members, 36 are drafts.

Phages represented in each track:

- Track 1 : Farewell\_24
- Track 2 : WST1\_25, IdentityCrisis\_24
- Track 3 : Shauna1\_25, Lucia\_29, Fruitloop\_27, Dorothy\_28, Cornucopia\_29, Vivum\_28, Enby\_29, SeaLumen\_31, Polka14\_29, DillTech15\_28, XFactor\_28, Awesomesauce\_29, Filuzino\_28, JalFarm20\_30, Corium\_28, Royals2015\_28, Blarby\_36, Job42\_31, Alexphander\_30, Eish\_28, PatoPoderoso\_28, Seagreen\_29, Brushbloom\_29, DoRead\_28, Doug\_29, KingJulian\_28, Firehouse51\_29, Doomslug\_31, Aloeri\_30, Mwanjiwa\_28, Medindi\_29, Bipolar\_25, Tweety\_28, IMpilo\_27, Florinda\_28, NewHope4\_30, Batiatus\_28, MilleniumForce\_29, Hlubikazi\_28, OwlsT2W\_29, Plumbus\_29, DaWorst\_30, WillSterrel\_29, Enzomatic\_32, Hades\_28, TootsiePop\_29, SassyB\_28, DLane\_28, Moonbeam\_29, Coco12\_27, Melissauren88\_28, Juice456\_29, Polo2Bam\_32, ChickenDinner\_30, DocMcStuffins\_30, Strokeseat\_28, Violac\_29, Beakin\_29, PopTart\_28, Taj\_28, Jant\_29, Ovechkin\_28, DeadP\_28, RockyHorror\_29, Quico\_29, Zerg\_28, Ramsey\_29, Marker\_29, Mozy\_29, DaddyRickover\_28, Geralt\_28, Misha28\_29, Mandlovu\_28, Mova\_29, Deb65\_28, Brookers\_26, Girafales\_29, EleanorGeorge\_28, DosHalletts\_29, Gandolph\_28, Bubbles123\_29, VRedHorse\_28, KristaRAM\_29, Tootsieroll\_29, BuzzLyseyear\_30, SG4\_28, Spartacus\_29, Spikelee\_29, ShroomBoi\_25, Kingsley\_26, Leozinho\_29, Fancypants\_28, Phanphagia\_25, Phalconet\_28, PhesterPhotato\_28, Aubs\_28, Wee\_29, Hegedechwinu\_29, IrishSherpFalk\_29, Flathead\_28, Krakatau\_29, IbOuu\_29
- Track 4 : Drago\_29, MulchExplorer\_30, PMC\_28, Veteran\_28, Phatniss\_29, Rockne\_28, Lorde\_29, Llij\_28, Boomer\_29, UncleRicky\_31, Kimberlium\_30, Kenuha5\_25, QuickMath\_29, Whouxphf\_28, Phasih\_29, GUmbie\_28, DotProduct\_28, RedBird\_28, Doomphist\_28, Poenanya\_28
- Track 5 : LastJedi\_22, Phloss\_24, Brocalys\_23, Koella\_22, Pippy\_22, Squirty\_23, Jennelsea\_22, Fulbright\_24, Crumble\_22, Clifton\_22
- Track 6 : Bobi\_30
- Track 7 : Akhila\_22, MilanaBonita\_22
- Track 8 : BigPhil\_23, Cerasum\_23, Velveteen\_23, Sarma624\_23
- Track 9 : StAnnes\_25
- Track 10 : Galactic\_28
- Track 11 : Tchotchke\_26
- Track 12 : Ochi17\_26
- Track 13 : Ms6\_22
- Track 14 : Zapner\_34, Jabbawokkie\_35
- Track 15 : Avani\_32, Che9d\_32

- Track 16 : SilverChicken\_35, Minnie\_29, Beanstalk\_32
- Track 17 : Demsculpinboyz\_32
- Track 18 : LunaStella\_29, TChen\_27
- Track 19 : Toron\_27
- Track 20 : MulchSalad\_24
- Track 21 : Okabe\_24
- Track 22 : Babsiella\_25, HC\_25
- Track 23 : QueenHazel\_24, Xula\_23
- Track 24 : Sbash\_24
- Track 25 : Stuck\_28
- Track 26 : Che9c\_24
- Track 27 : Bluvara\_25
- Track 28 : Porcelain\_41, Courthouse\_42, Superphikiman\_42, Shaboozey\_36, Lucky2013\_42, Hannaconda\_39, MiaZeal\_42, DmpstrDiver\_43, Ariel\_42, Nibley\_37, KashFlow\_36, BronnyJames\_36, LittleE\_48, Squint\_41
- Track 29 : Optimus\_46
- Track 30 : BAKA\_45, Omega\_47, Gonephishing\_43
- Track 31 : Xerxes\_25, Parmesanjohn\_25, Tessdabest\_24, Duplicity\_25, Cubone\_25, Journey\_25, Silvy\_25, Charlie\_25, Melville\_25, Aggie\_25, LilSpotty\_28, Gex\_25, Smurph\_25, Tortoise12\_25, Magsby\_25, Bosection6\_25, Tapioca\_25
- Track 32 : SkinnyPete\_24
- Track 33 : Raymond7\_24, MichelleMyBell\_25
- Track 34 : Snekmaggedon\_24, SpongeBob\_24, Jamie19\_24
- Track 35 : Chewbacca\_25, Pipsqueaks\_25, Carcharodon\_25, EGUunicorn\_25, Schnauzer\_25, Philonius\_25, Silvafighter\_25
- Track 36 : Hanako\_24, Nenae\_24, PhancyPhin\_24, Redi\_24, Spinach\_24, Purgamenstris\_24, ShrimpFriedEgg\_24, BabeRuth\_24
- Track 37 : Butters\_25, Kevin1\_25, Rubeelu\_25
- Track 38 : Andies\_24, Shweta\_24, Scitech\_24
- Track 39 : Panchino\_24
- Track 40 : Impisi\_25
- Track 41 : Phrann\_24
- Track 42 : Rebel\_24
- Track 43 : Xeno\_24, Techage\_25
- Track 44 : BronnyJr\_25, GaloreK\_25
- Track 45 : Sonah\_25, Venti\_25, Polkaroo\_25, Fishburne\_25, FirstPlacePfu\_25, StevieRay\_25, Chubbello\_25, Vidya\_25, Bunnies\_25, Jebeks\_25, Etoile\_25, Donovan\_25, PeanutPie\_25, Ksquard\_25, Phegasus\_25, Juniormint\_25
- Track 46 : StressBall\_25, Glaske\_25, KilKor\_25, Phalm\_25, Megiddo\_25, CactusJack\_25
- Track 47 : Bhagsy\_25, Brusacoram\_25, Arib1\_25, Necropolis\_25, Majeke\_25, Thespis\_25, Malithi\_25, Zilizebeth\_25, Mangethe\_25
- Track 48 : Phineas\_25
- Track 49 : HUHilltop\_25, Langerak\_25
- Track 50 : GreaseLightnin\_25
- Track 51 : Dynamo\_25
- Track 52 : Gavriela\_25
- Track 53 : Willsammy\_25
- Track 54 : Tortellini\_25
- Track 55 : Xavia\_25, Atcoo\_25, Camster\_25, Kari\_25
- Track 56 : Nazo\_25, BigNuz\_25
- Track 57 : Phayonce\_25
- Track 58 : ThulaThula\_25

- Track 59 : Purky\_25

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

The start number called the most often in the published annotations is 18, it was called in 111 of the 250 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alexphander\_30, Aloeri\_30, Aubs\_28, Awesomesauce\_29, Batiatus\_28, Beakin\_29, Bipolar\_25, Blarby\_36, Boomer\_29, Brookers\_26, Brushbloom\_29, Bubbles123\_29, BuzzLyseyear\_30, ChickenDinner\_30, Coco12\_27, Corium\_28, Cornucopia\_29, DLane\_28, DaWorst\_30, DaddyRickover\_28, DeadP\_28, Deb65\_28, DillTech15\_28, DoRead\_28, DocMcStuffins\_30, Doomphist\_28, Doomslug\_31, Dorothy\_28, DosHalletts\_29, DotProduct\_28, Doug\_29, Drago\_29, Eish\_28, EleanorGeorge\_28, Enby\_29, Enzomatic\_32, Fancypants\_28, Filuzino\_28, Firehouse51\_29, Flathead\_28, Florinda\_28, Fruitloop\_27, GUmbe\_28, Gandolph\_28, Geralt\_28, Girafales\_29, Hades\_28, Hegedechwinu\_29, Hlubikazi\_28, IMpilo\_27, IbOuu\_29, IrishSherpFalk\_29, JalFarm20\_30, Jant\_29, Job42\_31, Juice456\_29, Kenuha5\_25, Kimberlium\_30, KingJulian\_28, Kingsley\_26, Krakatau\_29, KristaRAM\_29, Leozinho\_29, Llij\_28, Lorde\_29, Lucia\_29, Mandlovu\_28, Marker\_29, Medindi\_29, Melissauren88\_28, MilleniumForce\_29, Misha28\_29, Moonbeam\_29, Mova\_29, Mozy\_29, MulchExplorer\_30, Mwanjiwa\_28, NewHope4\_30, Ovechkin\_28, OwlsT2W\_29, PMC\_28, PatoPoderoso\_28, Phalconet\_28, Phanphagia\_25, Phasih\_29, Phatniss\_29, PhesterPotato\_28, Plumbus\_29, Poenanya\_28, Polka14\_29, Polo2Bam\_32, PopTart\_28, QuickMath\_29, Quico\_29, Ramsey\_29, RedBird\_28, Rockne\_28, RockyHorror\_29, Royals2015\_28, SG4\_28, SassyB\_28, SeaLumen\_31, Seagreen\_29, Shauna1\_25, ShroomBoi\_25, Spartacus\_29, Spikelee\_29, Strokeseat\_28, Taj\_28, TootsiePop\_29, Tootsieroll\_29, Tweety\_28, UncleRicky\_31, VRedHorse\_28, Veteran\_28, Violac\_29, Vivum\_28, Wee\_29, Whouxphf\_28, WillSterrel\_29, XFactor\_28, Zerg\_28,

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

- Beanstalk\_32, Minnie\_29, SilverChicken\_35,

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

- Aggie\_25, Akhila\_22, Andies\_24, Arib1\_25, Ariel\_42, Atcoo\_25, Avani\_32, BAKA\_45, BabeRuth\_24, Babsiella\_25, Bhagsy\_25, BigNuz\_25, BigPhil\_23, Bluvara\_25, Bobi\_30, Bosection6\_25, Brocalys\_23, BronnyJames\_36, BronnyJr\_25, Brusacoram\_25, Bunnies\_25, Butters\_25, CactusJack\_25, Camster\_25, Carcharodon\_25, Cerasum\_23, Charlie\_25, Che9c\_24, Che9d\_32, Chewbacca\_25, Chubbello\_25, Clifton\_22, Courthouse\_42, Crumble\_22, Cubone\_25, Demsculpinboyz\_32, DmpstrDiver\_43, Donovan\_25, Duplicity\_25, Dynamo\_25, EGUnicorn\_25, Etoile\_25, Farewell\_24, FirstPlacePfu\_25, Fishburne\_25, Fulbright\_24, Galactic\_28, GaloreK\_25, Gavriela\_25, Gex\_25, Glaske\_25, Gonephishing\_43, GreaseLightnin\_25, HC\_25, HUHilltop\_25, Hanako\_24, Hannaconda\_39, IdentityCrisis\_24, Impisi\_25, Jabbawokkie\_35, Jamie19\_24, Jebeks\_25, Jennelsea\_22, Journey\_25, Juniormint\_25, Kari\_25, KashFlow\_36, Kevin1\_25, KilKor\_25, Koella\_22, Ksquared\_25, Langerak\_25, LastJedi\_22, LilSpotty\_28, LittleE\_48, Lucky2013\_42, LunaStella\_29, Magsby\_25, Majeke\_25, Malithi\_25, Mangethe\_25, Megiddo\_25, Melville\_25, MiaZeal\_42, MichelleMyBell\_25,

MilanaBonita\_22, Ms6\_22, MulchSalad\_24, Nazo\_25, Necropolis\_25, Nenae\_24, Nibley\_37, Ochi17\_26, Okabe\_24, Omega\_47, Optimus\_46, Panchino\_24, ParmesanJohn\_25, PeanutPie\_25, Phalm\_25, PhancyPhin\_24, Phayonce\_25, Phegasus\_25, Philonius\_25, Phineas\_25, Phloss\_24, Phrann\_24, Pippy\_22, Pipsqueaks\_25, Polkaroo\_25, Porcelain\_41, Purgamenstris\_24, Purky\_25, QueenHazel\_24, Raymond7\_24, Rebel\_24, Redi\_24, Rubeelu\_25, Sarma624\_23, Sbash\_24, Schnauzer\_25, Scitech\_24, Shaboozey\_36, ShrimpFriedEgg\_24, Shweta\_24, Silvafighter\_25, Silvy\_25, SkinnyPete\_24, Smurph\_25, Snekmaggedon\_24, Sonah\_25, Spinach\_24, SpongeBob\_24, Squint\_41, Squirty\_23, StAnnes\_25, StevieRay\_25, StressBall\_25, Stuck\_28, Superphikiman\_42, TChen\_27, Tapioca\_25, Tchotchke\_26, Techage\_25, Tessdabest\_24, Thespis\_25, ThulaThula\_25, Toron\_27, Tortellini\_25, Tortoise12\_25, Velveteen\_23, Venti\_25, Vidya\_25, WST1\_25, Willsammy\_25, Xavia\_25, Xeno\_24, Xerxes\_25, Xula\_23, Zapner\_34, Zilizebeth\_25,

### Summary by start number:

#### Start 15:

- Found in 25 of 286 ( 8.7% ) of genes in pham
- Manual Annotations of this start: 7 of 250
- Called 28.0% of time when present
- Phage (with cluster) where this start called: Carcharodon\_25 (N), Chewbacca\_25 (N), EGUnicorn\_25 (N), Philonius\_25 (N), Pipsqueaks\_25 (N), Schnauzer\_25 (N), Silvafighter\_25 (N),

#### Start 16:

- Found in 151 of 286 ( 52.8% ) of genes in pham
- Manual Annotations of this start: 86 of 250
- Called 66.9% of time when present
- Phage (with cluster) where this start called: Aggie\_25 (N), Akhila\_22 (F1), Andies\_24 (N), Arib1\_25 (P1), Ariel\_42 (J), BAKA\_45 (J), BabeRuth\_24 (N), Bhagsy\_25 (P1), BigPhil\_23 (F1), Bluvara\_25 (I3), Bosection6\_25 (N), Brocalys\_23 (F1), BronnyJames\_36 (J), Brusacoram\_25 (P1), CactusJack\_25 (P1), Cerasum\_23 (F1), Charlie\_25 (N), Che9c\_24 (I2), Clifton\_22 (F1), Courthouse\_42 (J), Crumble\_22 (F1), Cubone\_25 (N), DmpstrDiver\_43 (J), Duplicity\_25 (N), Fulbright\_24 (N), Gex\_25 (N), Glaske\_25 (P1), Gonephishing\_43 (J), GreaseLightnin\_25 (P1), Hanako\_24 (N), Hannaconda\_39 (J), IdentityCrisis\_24 (AJ), Jamie19\_24 (N), Jennelsea\_22 (F1), Journey\_25 (N), KashFlow\_36 (J), KilKor\_25 (P1), Koella\_22 (F1), LastJedi\_22 (F1), LilSpotty\_28 (singleton), LittleE\_48 (J), Lucky2013\_42 (J), Magsby\_25 (N), Majeke\_25 (P1), Malithi\_25 (P1), Mangethe\_25 (P1), Megiddo\_25 (P1), Melville\_25 (N), MiaZeal\_42 (J), MilanaBonita\_22 (F1), Ms6\_22 (F1), MulchSalad\_24 (F7), Necropolis\_25 (P1), Nenae\_24 (N), Nibley\_37 (J), Ochi17\_26 (F1), Omega\_47 (J), Optimus\_46 (J), Panchino\_24 (N), ParmesanJohn\_25 (N), Phalm\_25 (P1), PhancyPhin\_24 (N), Phineas\_25 (P1), Phloss\_24 (N), Phrann\_24 (N), Pippy\_22 (F1), Porcelain\_41 (J), Purgamenstris\_24 (N), Purky\_25 (P6), QueenHazel\_24 (I1), Redi\_24 (N), Sarma624\_23 (F1), Sbash\_24 (I2), Scitech\_24 (N), Shaboozey\_36 (J), ShrimpFriedEgg\_24 (N), Shweta\_24 (N), Silvy\_25 (N), Smurph\_25 (N), Snekmaggedon\_24 (N), Spinach\_24 (N), SpongeBob\_24 (N), Squint\_41 (J), Squirty\_23 (F3), StAnnes\_25 (F1), StressBall\_25 (P1), Stuck\_28 (I2), Superphikiman\_42 (J), Tapioca\_25 (N), Tchotchke\_26 (F1), Tessdabest\_24 (N), Thespis\_25 (P1), Toron\_27 (F6), Tortellini\_25 (P2), Tortoise12\_25 (N), Velveteen\_23 (F1), WST1\_25 (AJ), Willsammy\_25 (P1), Xerxes\_25 (N), Xula\_23 (I1), Zilizebeth\_25 (P1),

Start 17:

- Found in 70 of 286 ( 24.5% ) of genes in pham
- Manual Annotations of this start: 35 of 250
- Called 61.4% of time when present
- Phage (with cluster) where this start called: Atcoo\_25 (P1), Babsiella\_25 (I1), BigNuz\_25 (P4), BronnyJr\_25 (P1), Bunnies\_25 (P1), Butters\_25 (N), Camster\_25 (P1), Chubbello\_25 (P1), Donovan\_25 (P1), Dynamo\_25 (P1), Etoile\_25 (P1), FirstPlacePfu\_25 (P1), Fishburne\_25 (P1), GaloreK\_25 (P1), Gavriela\_25 (P1), HC\_25 (I1), HUHilltop\_25 (P1), Impisi\_25 (N), Jebeks\_25 (P1), Juniormint\_25 (P1), Kari\_25 (P1), Kevin1\_25 (N), Ksquared\_25 (P1), Langerak\_25 (P1), MichelleMyBell\_25 (N), Nazo\_25 (P4), Okabe\_24 (F8), PeanutPie\_25 (P1), Phayonce\_25 (P5), Phegasus\_25 (P1), Polkaroo\_25 (P1), Raymond7\_24 (N), Rebel\_24 (N), Rubeelu\_25 (N), SkinnyPete\_24 (N), Sonah\_25 (P1), StevieRay\_25 (P1), Techage\_25 (P1), ThulaThula\_25 (P5), Venti\_25 (P1), Vidya\_25 (P1), Xavia\_25 (P3), Xeno\_24 (N),

Start 18:

- Found in 125 of 286 ( 43.7% ) of genes in pham
- Manual Annotations of this start: 111 of 250
- Called 97.6% of time when present
- Phage (with cluster) where this start called: Alexphander\_30 (F1), Aloeri\_30 (F1), Aubs\_28 (F1), Awesomesauce\_29 (F1), Batiatus\_28 (F1), Beakin\_29 (F1), Bipolar\_25 (F1), Blarby\_36 (F), Boomer\_29 (F1), Brookers\_26 (F1), Brushbloom\_29 (F1), Bubbles123\_29 (F1), BuzzLyseyear\_30 (F1), ChickenDinner\_30 (F1), Coco12\_27 (F1), Corium\_28 (F1), Cornucopia\_29 (F1), DLane\_28 (F1), DaWorst\_30 (F1), DaddyRickover\_28 (F1), DeadP\_28 (F1), Deb65\_28 (F1), DillTech15\_28 (F1), DoRead\_28 (F1), DocMcStuffins\_30 (F1), Doomphist\_28 (F1), Doomslug\_31 (F), Dorothy\_28 (F1), DosHalletts\_29 (F1), DotProduct\_28 (F1), Doug\_29 (F1), Drago\_29 (F1), Eish\_28 (F1), EleanorGeorge\_28 (F1), Enby\_29 (F1), Enzomatic\_32 (F1), Fancypants\_28 (F1), Filuzino\_28 (F1), Firehouse51\_29 (F1), Flathead\_28 (F1), Florinda\_28 (F1), Fruitloop\_27 (F1), GUmbie\_28 (F1), Gandalph\_28 (F1), Geralt\_28 (F1), Girafales\_29 (F1), Hades\_28 (F1), Hegedechwinu\_29 (F1), Hlubikazi\_28 (F1), IMpilo\_27 (F1), IbOuu\_29 (F1), IrishSherpFalk\_29 (F1), JalFarm20\_30 (F1), Jant\_29 (F1), Job42\_31 (F1), Juice456\_29 (F1), Kenuha5\_25 (F1), Kimberlium\_30 (F1), KingJulian\_28 (F1), Kingsley\_26 (F1), Krakatau\_29 (F1), KristaRAM\_29 (F1), Leozinho\_29 (F1), Llij\_28 (F1), Lorde\_29 (F1), Lucia\_29 (F1), Mandlovu\_28 (F1), Marker\_29 (F1), Medindi\_29 (F1), Melissauren88\_28 (F1), MilleniumForce\_29 (F1), Misha28\_29 (F1), Moonbeam\_29 (F1), Mova\_29 (F1), Mozy\_29 (F1), MulchExplorer\_30 (F1), Mwanjiwa\_28 (F1), NewHope4\_30 (F1), Ovechkin\_28 (F1), OwlsT2W\_29 (F1), PMC\_28 (F1), PatoPoderoso\_28 (F1), Phalconet\_28 (F1), Phanphagia\_25 (F1), Phasih\_29 (F1), Phatniss\_29 (F1), PhesterPhotato\_28 (F1), Plumbus\_29 (F1), Poenanya\_28 (F1), Polka14\_29 (F1), Polo2Bam\_32 (F1), PopTart\_28 (F1), QuickMath\_29 (F1), Quico\_29 (F1), Ramsey\_29 (F1), RedBird\_28 (F1), Rockne\_28 (F1), RockyHorror\_29 (F1), Royals2015\_28 (F1), SG4\_28 (F1), SassyB\_28 (F1), SeaLumen\_31 (F1), Seagreen\_29 (F1), Shauna1\_25 (F1), ShroomBoi\_25 (F1), Spartacus\_29 (F1), Spikelee\_29 (F1), Strokeseat\_28 (F1), Taj\_28 (F1), TootsiePop\_29 (F1), Tootsieroll\_29 (F1), Tweety\_28 (F1), UncleRicky\_31 (F1), VRedHorse\_28 (F1), Veteran\_28 (F1), Violac\_29 (F1), Vivum\_28 (F1), Wee\_29 (F1), Whouxphf\_28 (F1), WillSterrel\_29 (F1), XFactor\_28 (F1), Zerg\_28 (F1),

Start 20:

- Found in 69 of 286 ( 24.1% ) of genes in pham
- Manual Annotations of this start: 1 of 250
- Called 1.4% of time when present
- Phage (with cluster) where this start called: Farewell\_24 (AF),

Start 21:

- Found in 116 of 286 ( 40.6% ) of genes in pham
- Manual Annotations of this start: 10 of 250
- Called 10.3% of time when present
- Phage (with cluster) where this start called: Avani\_32 (F2), Beanstalk\_32 (F1), Bobi\_30 (F1), Che9d\_32 (F2), Demsculpinboyz\_32 (F2), Galactic\_28 (F1), Jabbawokkie\_35 (F2), LunaStella\_29 (F4), Minnie\_29 (F1), SilverChicken\_35 (F2), TChen\_27 (F4), Zapner\_34 (F2),

### Summary by clusters:

There are 22 clusters represented in this pham: singleton, I2, AJ, I1, I3, AF, P5, P2, P3, P1, P6, P4, F, J, N, F1, F2, F3, F4, F6, F7, F8,

Info for manual annotations of cluster AF:

- Start number 20 was manually annotated 1 time for cluster AF.

Info for manual annotations of cluster AJ:

- Start number 16 was manually annotated 1 time for cluster AJ.

Info for manual annotations of cluster F1:

- Start number 16 was manually annotated 14 times for cluster F1.
- Start number 18 was manually annotated 111 times for cluster F1.
- Start number 21 was manually annotated 3 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 21 was manually annotated 5 times for cluster F2.

Info for manual annotations of cluster F3:

- Start number 16 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 21 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster I1:

- Start number 16 was manually annotated 2 times for cluster I1.
- Start number 17 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster I2:

- Start number 16 was manually annotated 2 times for cluster I2.

Info for manual annotations of cluster J:

- Start number 16 was manually annotated 14 times for cluster J.

Info for manual annotations of cluster N:

- Start number 15 was manually annotated 7 times for cluster N.
- Start number 16 was manually annotated 31 times for cluster N.
- Start number 17 was manually annotated 8 times for cluster N.

Info for manual annotations of cluster P1:

- Start number 16 was manually annotated 18 times for cluster P1.
- Start number 17 was manually annotated 20 times for cluster P1.

Info for manual annotations of cluster P2:

- Start number 16 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster P3:

- Start number 17 was manually annotated 1 time for cluster P3.

Info for manual annotations of cluster P4:

- Start number 17 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 17 was manually annotated 2 times for cluster P5.

Info for manual annotations of cluster P6:

- Start number 16 was manually annotated 1 time for cluster P6.

### ***Gene Information:***

Gene: Aggie\_25 Start: 22170, Stop: 22349, Start Num: 16

Candidate Starts for Aggie\_25:

(Start: 15 @22167 has 7 MA's), (Start: 16 @22170 has 86 MA's), (27, 22254), (28, 22257),

Gene: Akhila\_22 Start: 21918, Stop: 22094, Start Num: 16

Candidate Starts for Akhila\_22:

(Start: 16 @21918 has 86 MA's), (31, 22017), (35, 22050),

Gene: Alexphander\_30 Start: 26399, Stop: 26551, Start Num: 18

Candidate Starts for Alexphander\_30:

(Start: 18 @26399 has 111 MA's), (Start: 21 @26414 has 10 MA's), (33, 26486),

Gene: Aloeri\_30 Start: 26467, Stop: 26634, Start Num: 18

Candidate Starts for Aloeri\_30:

(Start: 18 @26467 has 111 MA's), (Start: 21 @26497 has 10 MA's), (33, 26569),

Gene: Andies\_24 Start: 21768, Stop: 21941, Start Num: 16

Candidate Starts for Andies\_24:

(Start: 16 @21768 has 86 MA's), (Start: 17 @21771 has 35 MA's), (Start: 20 @21786 has 1 MA's), (28, 21855), (32, 21867), (33, 21879), (35, 21897),

Gene: Arib1\_25 Start: 22882, Stop: 23055, Start Num: 16

Candidate Starts for Arib1\_25:

(14, 22873), (Start: 16 @22882 has 86 MA's), (Start: 17 @22885 has 35 MA's), (Start: 20 @22900 has 1 MA's),

Gene: Ariel\_42 Start: 34845, Stop: 35006, Start Num: 16  
Candidate Starts for Ariel\_42:  
(Start: 16 @34845 has 86 MA's), (28, 34920), (33, 34944), (35, 34962),

Gene: Atcoo\_25 Start: 23373, Stop: 23543, Start Num: 17  
Candidate Starts for Atcoo\_25:  
(Start: 16 @23370 has 86 MA's), (Start: 17 @23373 has 35 MA's), (Start: 20 @23388 has 1 MA's), (28, 23457), (29, 23460), (31, 23466),

Gene: Aubs\_28 Start: 26001, Stop: 26168, Start Num: 18  
Candidate Starts for Aubs\_28:  
(Start: 18 @26001 has 111 MA's), (Start: 21 @26031 has 10 MA's), (33, 26103),

Gene: Avani\_32 Start: 24801, Stop: 24938, Start Num: 21  
Candidate Starts for Avani\_32:  
(Start: 21 @24801 has 10 MA's), (33, 24873),

Gene: Awesomesauce\_29 Start: 25741, Stop: 25893, Start Num: 18  
Candidate Starts for Awesomesauce\_29:  
(Start: 18 @25741 has 111 MA's), (Start: 21 @25756 has 10 MA's), (33, 25828),

Gene: BAKA\_45 Start: 38282, Stop: 38443, Start Num: 16  
Candidate Starts for BAKA\_45:  
(Start: 16 @38282 has 86 MA's), (35, 38399),

Gene: BabeRuth\_24 Start: 21647, Stop: 21823, Start Num: 16  
Candidate Starts for BabeRuth\_24:  
(3, 21329), (6, 21431), (Start: 16 @21647 has 86 MA's), (28, 21737), (33, 21761), (35, 21779),

Gene: Babsiella\_25 Start: 22893, Stop: 23063, Start Num: 17  
Candidate Starts for Babsiella\_25:  
(14, 22881), (Start: 16 @22890 has 86 MA's), (Start: 17 @22893 has 35 MA's), (Start: 20 @22908 has 1 MA's), (28, 22977),

Gene: Batiatus\_28 Start: 25899, Stop: 26051, Start Num: 18  
Candidate Starts for Batiatus\_28:  
(Start: 18 @25899 has 111 MA's), (Start: 21 @25914 has 10 MA's), (33, 25986),

Gene: Beakin\_29 Start: 25768, Stop: 25920, Start Num: 18  
Candidate Starts for Beakin\_29:  
(Start: 18 @25768 has 111 MA's), (Start: 21 @25783 has 10 MA's), (33, 25855),

Gene: Beanstalk\_32 Start: 26059, Stop: 26196, Start Num: 21  
Candidate Starts for Beanstalk\_32:  
(Start: 18 @26029 has 111 MA's), (Start: 21 @26059 has 10 MA's), (33, 26131),

Gene: Bhagsy\_25 Start: 22883, Stop: 23056, Start Num: 16  
Candidate Starts for Bhagsy\_25:  
(14, 22874), (Start: 16 @22883 has 86 MA's), (Start: 17 @22886 has 35 MA's), (Start: 20 @22901 has 1 MA's),

Gene: BigNuz\_25 Start: 23510, Stop: 23683, Start Num: 17

Candidate Starts for BigNuz\_25:

(Start: 16 @23507 has 86 MA's), (Start: 17 @23510 has 35 MA's), (19, 23531), (Start: 20 @23534 has 1 MA's), (Start: 21 @23552 has 10 MA's), (25, 23585), (28, 23597),

Gene: BigPhil\_23 Start: 21863, Stop: 22039, Start Num: 16

Candidate Starts for BigPhil\_23:

(6, 21647), (Start: 16 @21863 has 86 MA's), (28, 21953), (32, 21965), (35, 21995),

Gene: Bipolar\_25 Start: 24931, Stop: 25083, Start Num: 18

Candidate Starts for Bipolar\_25:

(Start: 18 @24931 has 111 MA's), (Start: 21 @24946 has 10 MA's), (33, 25018),

Gene: Blarby\_36 Start: 26306, Stop: 26470, Start Num: 18

Candidate Starts for Blarby\_36:

(Start: 18 @26306 has 111 MA's), (Start: 21 @26333 has 10 MA's), (33, 26405),

Gene: Bluvara\_25 Start: 22957, Stop: 23130, Start Num: 16

Candidate Starts for Bluvara\_25:

(14, 22948), (Start: 16 @22957 has 86 MA's), (Start: 17 @22960 has 35 MA's), (Start: 20 @22975 has 1 MA's), (28, 23044), (31, 23053),

Gene: Bobi\_30 Start: 26629, Stop: 26766, Start Num: 21

Candidate Starts for Bobi\_30:

(Start: 21 @26629 has 10 MA's), (33, 26701),

Gene: Boomer\_29 Start: 25673, Stop: 25813, Start Num: 18

Candidate Starts for Boomer\_29:

(Start: 18 @25673 has 111 MA's), (33, 25748),

Gene: Bosection6\_25 Start: 22169, Stop: 22348, Start Num: 16

Candidate Starts for Bosection6\_25:

(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Brocalys\_23 Start: 21674, Stop: 21850, Start Num: 16

Candidate Starts for Brocalys\_23:

(3, 21356), (6, 21458), (Start: 16 @21674 has 86 MA's), (27, 21761), (28, 21764), (32, 21776),

Gene: BronnyJames\_36 Start: 33375, Stop: 33536, Start Num: 16

Candidate Starts for BronnyJames\_36:

(Start: 16 @33375 has 86 MA's), (28, 33450), (33, 33474), (35, 33492),

Gene: BronnyJr\_25 Start: 23344, Stop: 23514, Start Num: 17

Candidate Starts for BronnyJr\_25:

(Start: 16 @23341 has 86 MA's), (Start: 17 @23344 has 35 MA's), (Start: 20 @23359 has 1 MA's), (28, 23428), (31, 23437),

Gene: Brookers\_26 Start: 24833, Stop: 25000, Start Num: 18

Candidate Starts for Brookers\_26:

(Start: 18 @24833 has 111 MA's), (Start: 21 @24863 has 10 MA's), (33, 24935),

Gene: Brusacoram\_25 Start: 22876, Stop: 23049, Start Num: 16

Candidate Starts for Brusacoram\_25:  
(14, 22867), (Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has 1 MA's),

Gene: Brushbloom\_29 Start: 25908, Stop: 26075, Start Num: 18  
Candidate Starts for Brushbloom\_29:  
(Start: 18 @25908 has 111 MA's), (Start: 21 @25938 has 10 MA's), (33, 26010),

Gene: Bubbles123\_29 Start: 26579, Stop: 26746, Start Num: 18  
Candidate Starts for Bubbles123\_29:  
(Start: 18 @26579 has 111 MA's), (Start: 21 @26609 has 10 MA's), (33, 26681),

Gene: Bunnies\_25 Start: 22901, Stop: 23071, Start Num: 17  
Candidate Starts for Bunnies\_25:  
(14, 22889), (Start: 16 @22898 has 86 MA's), (Start: 17 @22901 has 35 MA's), (Start: 20 @22916 has 1 MA's),

Gene: Butters\_25 Start: 21584, Stop: 21754, Start Num: 17  
Candidate Starts for Butters\_25:  
(5, 21341), (Start: 16 @21581 has 86 MA's), (Start: 17 @21584 has 35 MA's), (Start: 20 @21599 has 1 MA's), (30, 21671),

Gene: BuzzLyseyear\_30 Start: 26410, Stop: 26577, Start Num: 18  
Candidate Starts for BuzzLyseyear\_30:  
(Start: 18 @26410 has 111 MA's), (Start: 21 @26440 has 10 MA's), (33, 26512),

Gene: CactusJack\_25 Start: 23141, Stop: 23314, Start Num: 16  
Candidate Starts for CactusJack\_25:  
(Start: 16 @23141 has 86 MA's), (Start: 17 @23144 has 35 MA's), (Start: 20 @23159 has 1 MA's),

Gene: Camster\_25 Start: 22914, Stop: 23081, Start Num: 17  
Candidate Starts for Camster\_25:  
(Start: 16 @22911 has 86 MA's), (Start: 17 @22914 has 35 MA's), (Start: 20 @22929 has 1 MA's), (28, 22995), (29, 22998), (31, 23004),

Gene: Carcharodon\_25 Start: 22166, Stop: 22348, Start Num: 15  
Candidate Starts for Carcharodon\_25:  
(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Cerasum\_23 Start: 21863, Stop: 22039, Start Num: 16  
Candidate Starts for Cerasum\_23:  
(6, 21647), (Start: 16 @21863 has 86 MA's), (28, 21953), (32, 21965), (35, 21995),

Gene: Charlie\_25 Start: 22169, Stop: 22348, Start Num: 16  
Candidate Starts for Charlie\_25:  
(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Che9c\_24 Start: 23013, Stop: 23189, Start Num: 16  
Candidate Starts for Che9c\_24:  
(Start: 16 @23013 has 86 MA's), (Start: 17 @23016 has 35 MA's), (Start: 20 @23040 has 1 MA's), (28, 23103), (35, 23145),

Gene: Che9d\_32 Start: 24809, Stop: 24946, Start Num: 21

Candidate Starts for Che9d\_32:  
(Start: 21 @24809 has 10 MA's), (33, 24881),

Gene: Chewbacca\_25 Start: 22166, Stop: 22348, Start Num: 15  
Candidate Starts for Chewbacca\_25:  
(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: ChickenDinner\_30 Start: 26467, Stop: 26634, Start Num: 18  
Candidate Starts for ChickenDinner\_30:  
(Start: 18 @26467 has 111 MA's), (Start: 21 @26497 has 10 MA's), (33, 26569),

Gene: Chubbello\_25 Start: 22878, Stop: 23048, Start Num: 17  
Candidate Starts for Chubbello\_25:  
(14, 22866), (Start: 16 @22875 has 86 MA's), (Start: 17 @22878 has 35 MA's), (Start: 20 @22893 has 1 MA's),

Gene: Clifton\_22 Start: 21987, Stop: 22163, Start Num: 16  
Candidate Starts for Clifton\_22:  
(3, 21669), (6, 21771), (Start: 16 @21987 has 86 MA's), (27, 22074), (28, 22077), (32, 22089),

Gene: Coco12\_27 Start: 25374, Stop: 25541, Start Num: 18  
Candidate Starts for Coco12\_27:  
(Start: 18 @25374 has 111 MA's), (Start: 21 @25404 has 10 MA's), (33, 25476),

Gene: Corium\_28 Start: 26064, Stop: 26216, Start Num: 18  
Candidate Starts for Corium\_28:  
(Start: 18 @26064 has 111 MA's), (Start: 21 @26079 has 10 MA's), (33, 26151),

Gene: Cornucopia\_29 Start: 25927, Stop: 26079, Start Num: 18  
Candidate Starts for Cornucopia\_29:  
(Start: 18 @25927 has 111 MA's), (Start: 21 @25942 has 10 MA's), (33, 26014),

Gene: Courthouse\_42 Start: 35249, Stop: 35410, Start Num: 16  
Candidate Starts for Courthouse\_42:  
(Start: 16 @35249 has 86 MA's), (28, 35324), (33, 35348), (35, 35366),

Gene: Crumble\_22 Start: 22034, Stop: 22210, Start Num: 16  
Candidate Starts for Crumble\_22:  
(3, 21716), (6, 21818), (Start: 16 @22034 has 86 MA's), (27, 22121), (28, 22124), (32, 22136),

Gene: Cubone\_25 Start: 22191, Stop: 22370, Start Num: 16  
Candidate Starts for Cubone\_25:  
(Start: 15 @22188 has 7 MA's), (Start: 16 @22191 has 86 MA's), (27, 22275), (28, 22278),

Gene: DLane\_28 Start: 25876, Stop: 26028, Start Num: 18  
Candidate Starts for DLane\_28:  
(Start: 18 @25876 has 111 MA's), (Start: 21 @25891 has 10 MA's), (33, 25963),

Gene: DaWorst\_30 Start: 26406, Stop: 26558, Start Num: 18  
Candidate Starts for DaWorst\_30:  
(Start: 18 @26406 has 111 MA's), (Start: 21 @26421 has 10 MA's), (33, 26493),

Gene: DaddyRickover\_28 Start: 26046, Stop: 26198, Start Num: 18

Candidate Starts for DaddyRickover\_28:

(Start: 18 @26046 has 111 MA's), (Start: 21 @26061 has 10 MA's), (33, 26133),

Gene: DeadP\_28 Start: 26058, Stop: 26225, Start Num: 18

Candidate Starts for DeadP\_28:

(Start: 18 @26058 has 111 MA's), (Start: 21 @26088 has 10 MA's), (33, 26160),

Gene: Deb65\_28 Start: 25873, Stop: 26025, Start Num: 18

Candidate Starts for Deb65\_28:

(Start: 18 @25873 has 111 MA's), (Start: 21 @25888 has 10 MA's), (33, 25960),

Gene: Demsculpinboyz\_32 Start: 24795, Stop: 24932, Start Num: 21

Candidate Starts for Demsculpinboyz\_32:

(Start: 21 @24795 has 10 MA's), (33, 24867),

Gene: DillTech15\_28 Start: 25893, Stop: 26060, Start Num: 18

Candidate Starts for DillTech15\_28:

(Start: 18 @25893 has 111 MA's), (Start: 21 @25923 has 10 MA's), (33, 25995),

Gene: DmpstrDiver\_43 Start: 37897, Stop: 38058, Start Num: 16

Candidate Starts for DmpstrDiver\_43:

(Start: 16 @37897 has 86 MA's), (28, 37972), (33, 37996), (35, 38014),

Gene: DoRead\_28 Start: 25871, Stop: 26023, Start Num: 18

Candidate Starts for DoRead\_28:

(Start: 18 @25871 has 111 MA's), (Start: 21 @25886 has 10 MA's), (33, 25958),

Gene: DocMcStuffins\_30 Start: 26467, Stop: 26634, Start Num: 18

Candidate Starts for DocMcStuffins\_30:

(Start: 18 @26467 has 111 MA's), (Start: 21 @26497 has 10 MA's), (33, 26569),

Gene: Donovan\_25 Start: 22868, Stop: 23038, Start Num: 17

Candidate Starts for Donovan\_25:

(14, 22856), (Start: 16 @22865 has 86 MA's), (Start: 17 @22868 has 35 MA's), (Start: 20 @22883 has 1 MA's),

Gene: Doomphist\_28 Start: 25998, Stop: 26138, Start Num: 18

Candidate Starts for Doomphist\_28:

(Start: 18 @25998 has 111 MA's), (33, 26073),

Gene: Doomslug\_31 Start: 25732, Stop: 25899, Start Num: 18

Candidate Starts for Doomslug\_31:

(Start: 18 @25732 has 111 MA's), (Start: 21 @25762 has 10 MA's), (33, 25834),

Gene: Dorothy\_28 Start: 25831, Stop: 25983, Start Num: 18

Candidate Starts for Dorothy\_28:

(Start: 18 @25831 has 111 MA's), (Start: 21 @25846 has 10 MA's), (33, 25918),

Gene: DosHalletts\_29 Start: 25988, Stop: 26140, Start Num: 18

Candidate Starts for DosHalletts\_29:

(Start: 18 @25988 has 111 MA's), (Start: 21 @26003 has 10 MA's), (33, 26075),

Gene: DotProduct\_28 Start: 25865, Stop: 26005, Start Num: 18

Candidate Starts for DotProduct\_28:  
(Start: 18 @25865 has 111 MA's), (33, 25940),

Gene: Doug\_29 Start: 26423, Stop: 26575, Start Num: 18  
Candidate Starts for Doug\_29:  
(Start: 18 @26423 has 111 MA's), (Start: 21 @26438 has 10 MA's), (33, 26510),

Gene: Drago\_29 Start: 25698, Stop: 25838, Start Num: 18  
Candidate Starts for Drago\_29:  
(Start: 18 @25698 has 111 MA's), (33, 25773),

Gene: Duplicity\_25 Start: 22169, Stop: 22348, Start Num: 16  
Candidate Starts for Duplicity\_25:  
(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Dynamo\_25 Start: 23268, Stop: 23438, Start Num: 17  
Candidate Starts for Dynamo\_25:  
(4, 22953), (Start: 16 @23265 has 86 MA's), (Start: 17 @23268 has 35 MA's), (Start: 20 @23283 has 1 MA's), (30, 23355),

Gene: EGUunicorn\_25 Start: 22166, Stop: 22348, Start Num: 15  
Candidate Starts for EGUunicorn\_25:  
(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Eish\_28 Start: 26011, Stop: 26163, Start Num: 18  
Candidate Starts for Eish\_28:  
(Start: 18 @26011 has 111 MA's), (Start: 21 @26026 has 10 MA's), (33, 26098),

Gene: EleanorGeorge\_28 Start: 26166, Stop: 26333, Start Num: 18  
Candidate Starts for EleanorGeorge\_28:  
(Start: 18 @26166 has 111 MA's), (Start: 21 @26196 has 10 MA's), (33, 26268),

Gene: Enby\_29 Start: 25696, Stop: 25863, Start Num: 18  
Candidate Starts for Enby\_29:  
(Start: 18 @25696 has 111 MA's), (Start: 21 @25726 has 10 MA's), (33, 25798),

Gene: Enzomatic\_32 Start: 26049, Stop: 26201, Start Num: 18  
Candidate Starts for Enzomatic\_32:  
(Start: 18 @26049 has 111 MA's), (Start: 21 @26064 has 10 MA's), (33, 26136),

Gene: Etoile\_25 Start: 22879, Stop: 23049, Start Num: 17  
Candidate Starts for Etoile\_25:  
(14, 22867), (Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has 1 MA's),

Gene: Fancypants\_28 Start: 25879, Stop: 26031, Start Num: 18  
Candidate Starts for Fancypants\_28:  
(Start: 18 @25879 has 111 MA's), (Start: 21 @25894 has 10 MA's), (33, 25966),

Gene: Farewell\_24 Start: 23918, Stop: 24067, Start Num: 20  
Candidate Starts for Farewell\_24:  
(Start: 20 @23918 has 1 MA's), (28, 23981), (35, 24023),

Gene: Filuzino\_28 Start: 25868, Stop: 26020, Start Num: 18  
Candidate Starts for Filuzino\_28:  
(Start: 18 @25868 has 111 MA's), (Start: 21 @25883 has 10 MA's), (33, 25955),

Gene: Firehouse51\_29 Start: 26590, Stop: 26742, Start Num: 18  
Candidate Starts for Firehouse51\_29:  
(Start: 18 @26590 has 111 MA's), (Start: 21 @26605 has 10 MA's), (33, 26677),

Gene: FirstPlacePfu\_25 Start: 22879, Stop: 23049, Start Num: 17  
Candidate Starts for FirstPlacePfu\_25:  
(14, 22867), (Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has 1 MA's),

Gene: Fishburne\_25 Start: 22879, Stop: 23049, Start Num: 17  
Candidate Starts for Fishburne\_25:  
(14, 22867), (Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has 1 MA's),

Gene: Flathead\_28 Start: 25891, Stop: 26058, Start Num: 18  
Candidate Starts for Flathead\_28:  
(Start: 18 @25891 has 111 MA's), (Start: 21 @25921 has 10 MA's), (33, 25993),

Gene: Florinda\_28 Start: 25889, Stop: 26032, Start Num: 18  
Candidate Starts for Florinda\_28:  
(Start: 18 @25889 has 111 MA's), (Start: 21 @25895 has 10 MA's), (33, 25967),

Gene: Fruitloop\_27 Start: 26062, Stop: 26214, Start Num: 18  
Candidate Starts for Fruitloop\_27:  
(Start: 18 @26062 has 111 MA's), (Start: 21 @26077 has 10 MA's), (33, 26149),

Gene: Fulbright\_24 Start: 21973, Stop: 22146, Start Num: 16  
Candidate Starts for Fulbright\_24:  
(3, 21655), (6, 21757), (Start: 16 @21973 has 86 MA's), (27, 22057), (28, 22060), (32, 22072),

Gene: GUmbie\_28 Start: 25894, Stop: 26034, Start Num: 18  
Candidate Starts for GUmbie\_28:  
(Start: 18 @25894 has 111 MA's), (33, 25969),

Gene: Galactic\_28 Start: 25877, Stop: 26014, Start Num: 21  
Candidate Starts for Galactic\_28:  
(Start: 21 @25877 has 10 MA's), (33, 25949),

Gene: GaloreK\_25 Start: 22875, Stop: 23045, Start Num: 17  
Candidate Starts for GaloreK\_25:  
(Start: 16 @22872 has 86 MA's), (Start: 17 @22875 has 35 MA's), (Start: 20 @22890 has 1 MA's), (28, 22959), (31, 22968),

Gene: Gandalph\_28 Start: 25972, Stop: 26124, Start Num: 18  
Candidate Starts for Gandalph\_28:  
(Start: 18 @25972 has 111 MA's), (Start: 21 @25987 has 10 MA's), (33, 26059),

Gene: Gavriela\_25 Start: 23144, Stop: 23314, Start Num: 17  
Candidate Starts for Gavriela\_25:

(Start: 16 @23141 has 86 MA's), (Start: 17 @23144 has 35 MA's), (Start: 20 @23159 has 1 MA's),

Gene: Geralt\_28 Start: 25872, Stop: 26024, Start Num: 18

Candidate Starts for Geralt\_28:

(Start: 18 @25872 has 111 MA's), (Start: 21 @25887 has 10 MA's), (33, 25959),

Gene: Gex\_25 Start: 22165, Stop: 22344, Start Num: 16

Candidate Starts for Gex\_25:

(Start: 15 @22162 has 7 MA's), (Start: 16 @22165 has 86 MA's), (27, 22249), (28, 22252),

Gene: Girafales\_29 Start: 25697, Stop: 25840, Start Num: 18

Candidate Starts for Girafales\_29:

(Start: 18 @25697 has 111 MA's), (Start: 21 @25703 has 10 MA's), (33, 25775),

Gene: Glaske\_25 Start: 23141, Stop: 23314, Start Num: 16

Candidate Starts for Glaske\_25:

(Start: 16 @23141 has 86 MA's), (Start: 17 @23144 has 35 MA's), (Start: 20 @23159 has 1 MA's),

Gene: Gonephishing\_43 Start: 36458, Stop: 36619, Start Num: 16

Candidate Starts for Gonephishing\_43:

(Start: 16 @36458 has 86 MA's), (35, 36575),

Gene: GreaseLightnin\_25 Start: 23125, Stop: 23301, Start Num: 16

Candidate Starts for GreaseLightnin\_25:

(1, 22621), (6, 22909), (Start: 16 @23125 has 86 MA's), (28, 23215),

Gene: HC\_25 Start: 22949, Stop: 23119, Start Num: 17

Candidate Starts for HC\_25:

(14, 22937), (Start: 16 @22946 has 86 MA's), (Start: 17 @22949 has 35 MA's), (Start: 20 @22964 has 1 MA's), (28, 23033),

Gene: HUHilltop\_25 Start: 22879, Stop: 23049, Start Num: 17

Candidate Starts for HUHilltop\_25:

(14, 22867), (Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has 1 MA's), (28, 22963), (31, 22972),

Gene: Hades\_28 Start: 25964, Stop: 26116, Start Num: 18

Candidate Starts for Hades\_28:

(Start: 18 @25964 has 111 MA's), (Start: 21 @25979 has 10 MA's), (33, 26051),

Gene: Hanako\_24 Start: 21647, Stop: 21823, Start Num: 16

Candidate Starts for Hanako\_24:

(3, 21329), (6, 21431), (Start: 16 @21647 has 86 MA's), (28, 21737), (33, 21761), (35, 21779),

Gene: Hannaconda\_39 Start: 33830, Stop: 33991, Start Num: 16

Candidate Starts for Hannaconda\_39:

(Start: 16 @33830 has 86 MA's), (28, 33905), (33, 33929), (35, 33947),

Gene: Hegedechwinu\_29 Start: 25873, Stop: 26040, Start Num: 18

Candidate Starts for Hegedechwinu\_29:

(Start: 18 @25873 has 111 MA's), (Start: 21 @25903 has 10 MA's), (33, 25975),

Gene: Hlubikazi\_28 Start: 26131, Stop: 26283, Start Num: 18

Candidate Starts for Hlubikazi\_28:

(Start: 18 @26131 has 111 MA's), (Start: 21 @26146 has 10 MA's), (33, 26218),

Gene: IMpilo\_27 Start: 25655, Stop: 25807, Start Num: 18

Candidate Starts for IMpilo\_27:

(Start: 18 @25655 has 111 MA's), (Start: 21 @25670 has 10 MA's), (33, 25742),

Gene: IbOuu\_29 Start: 25887, Stop: 26039, Start Num: 18

Candidate Starts for IbOuu\_29:

(Start: 18 @25887 has 111 MA's), (Start: 21 @25902 has 10 MA's), (33, 25974),

Gene: IdentityCrisis\_24 Start: 20626, Stop: 20802, Start Num: 16

Candidate Starts for IdentityCrisis\_24:

(Start: 16 @20626 has 86 MA's), (23, 20686), (27, 20713), (28, 20716), (35, 20758), (36, 20761),

Gene: Impisi\_25 Start: 21790, Stop: 21960, Start Num: 17

Candidate Starts for Impisi\_25:

(Start: 16 @21787 has 86 MA's), (Start: 17 @21790 has 35 MA's), (Start: 20 @21805 has 1 MA's), (28, 21874), (31, 21883),

Gene: IrishSherpFalk\_29 Start: 27208, Stop: 27375, Start Num: 18

Candidate Starts for IrishSherpFalk\_29:

(Start: 18 @27208 has 111 MA's), (Start: 21 @27238 has 10 MA's), (33, 27310),

Gene: Jabbawokkie\_35 Start: 26242, Stop: 26379, Start Num: 21

Candidate Starts for Jabbawokkie\_35:

(10, 26086), (Start: 21 @26242 has 10 MA's), (33, 26314),

Gene: JalFarm20\_30 Start: 26395, Stop: 26562, Start Num: 18

Candidate Starts for JalFarm20\_30:

(Start: 18 @26395 has 111 MA's), (Start: 21 @26425 has 10 MA's), (33, 26497),

Gene: Jamie19\_24 Start: 21647, Stop: 21823, Start Num: 16

Candidate Starts for Jamie19\_24:

(6, 21431), (Start: 16 @21647 has 86 MA's), (28, 21737), (33, 21761), (35, 21779),

Gene: Jant\_29 Start: 26025, Stop: 26192, Start Num: 18

Candidate Starts for Jant\_29:

(Start: 18 @26025 has 111 MA's), (Start: 21 @26055 has 10 MA's), (33, 26127),

Gene: Jebeks\_25 Start: 22864, Stop: 23034, Start Num: 17

Candidate Starts for Jebeks\_25:

(14, 22852), (Start: 16 @22861 has 86 MA's), (Start: 17 @22864 has 35 MA's), (Start: 20 @22879 has 1 MA's),

Gene: Jennelsea\_22 Start: 21987, Stop: 22163, Start Num: 16

Candidate Starts for Jennelsea\_22:

(3, 21669), (6, 21771), (Start: 16 @21987 has 86 MA's), (27, 22074), (28, 22077), (32, 22089),

Gene: Job42\_31 Start: 27602, Stop: 27754, Start Num: 18

Candidate Starts for Job42\_31:

(Start: 18 @27602 has 111 MA's), (Start: 21 @27617 has 10 MA's), (33, 27689),

Gene: Journey\_25 Start: 22169, Stop: 22348, Start Num: 16  
Candidate Starts for Journey\_25:  
(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Juice456\_29 Start: 27144, Stop: 27311, Start Num: 18  
Candidate Starts for Juice456\_29:  
(Start: 18 @27144 has 111 MA's), (Start: 21 @27174 has 10 MA's), (33, 27246),

Gene: Juniormint\_25 Start: 22923, Stop: 23093, Start Num: 17  
Candidate Starts for Juniormint\_25:  
(14, 22911), (Start: 16 @22920 has 86 MA's), (Start: 17 @22923 has 35 MA's), (Start: 20 @22938 has 1 MA's),

Gene: Kari\_25 Start: 22879, Stop: 23046, Start Num: 17  
Candidate Starts for Kari\_25:  
(Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has 1 MA's), (28, 22960), (29, 22963), (31, 22969),

Gene: KashFlow\_36 Start: 33451, Stop: 33612, Start Num: 16  
Candidate Starts for KashFlow\_36:  
(Start: 16 @33451 has 86 MA's), (28, 33526), (33, 33550), (35, 33568),

Gene: Kenuha5\_25 Start: 25038, Stop: 25178, Start Num: 18  
Candidate Starts for Kenuha5\_25:  
(Start: 18 @25038 has 111 MA's), (33, 25113),

Gene: Kevin1\_25 Start: 21582, Stop: 21752, Start Num: 17  
Candidate Starts for Kevin1\_25:  
(5, 21339), (Start: 16 @21579 has 86 MA's), (Start: 17 @21582 has 35 MA's), (Start: 20 @21597 has 1 MA's), (30, 21669),

Gene: KilKor\_25 Start: 23141, Stop: 23314, Start Num: 16  
Candidate Starts for KilKor\_25:  
(Start: 16 @23141 has 86 MA's), (Start: 17 @23144 has 35 MA's), (Start: 20 @23159 has 1 MA's),

Gene: Kimberlium\_30 Start: 27010, Stop: 27150, Start Num: 18  
Candidate Starts for Kimberlium\_30:  
(Start: 18 @27010 has 111 MA's), (33, 27085),

Gene: KingJulian\_28 Start: 26064, Stop: 26216, Start Num: 18  
Candidate Starts for KingJulian\_28:  
(Start: 18 @26064 has 111 MA's), (Start: 21 @26079 has 10 MA's), (33, 26151),

Gene: Kingsley\_26 Start: 24838, Stop: 25005, Start Num: 18  
Candidate Starts for Kingsley\_26:  
(Start: 18 @24838 has 111 MA's), (Start: 21 @24868 has 10 MA's), (33, 24940),

Gene: Koella\_22 Start: 21999, Stop: 22175, Start Num: 16  
Candidate Starts for Koella\_22:  
(3, 21681), (6, 21783), (Start: 16 @21999 has 86 MA's), (27, 22086), (28, 22089), (32, 22101),

Gene: Krakatau\_29 Start: 26546, Stop: 26698, Start Num: 18  
Candidate Starts for Krakatau\_29:

(Start: 18 @26546 has 111 MA's), (Start: 21 @26561 has 10 MA's), (33, 26633),

Gene: KristaRAM\_29 Start: 26704, Stop: 26871, Start Num: 18

Candidate Starts for KristaRAM\_29:

(Start: 18 @26704 has 111 MA's), (Start: 21 @26734 has 10 MA's), (33, 26806),

Gene: Ksquared\_25 Start: 22901, Stop: 23071, Start Num: 17

Candidate Starts for Ksquared\_25:

(14, 22889), (Start: 16 @22898 has 86 MA's), (Start: 17 @22901 has 35 MA's), (Start: 20 @22916 has 1 MA's),

Gene: Langerak\_25 Start: 22863, Stop: 23033, Start Num: 17

Candidate Starts for Langerak\_25:

(14, 22851), (Start: 16 @22860 has 86 MA's), (Start: 17 @22863 has 35 MA's), (Start: 20 @22878 has 1 MA's), (28, 22947), (31, 22956),

Gene: LastJedi\_22 Start: 22030, Stop: 22206, Start Num: 16

Candidate Starts for LastJedi\_22:

(3, 21712), (6, 21814), (Start: 16 @22030 has 86 MA's), (27, 22117), (28, 22120), (32, 22132),

Gene: Leozinho\_29 Start: 25731, Stop: 25883, Start Num: 18

Candidate Starts for Leozinho\_29:

(Start: 18 @25731 has 111 MA's), (Start: 21 @25746 has 10 MA's), (33, 25818),

Gene: LilSpotty\_28 Start: 23137, Stop: 23316, Start Num: 16

Candidate Starts for LilSpotty\_28:

(Start: 15 @23134 has 7 MA's), (Start: 16 @23137 has 86 MA's), (27, 23221), (28, 23224),

Gene: LittleE\_48 Start: 39362, Stop: 39508, Start Num: 16

Candidate Starts for LittleE\_48:

(Start: 16 @39362 has 86 MA's), (28, 39422), (33, 39446), (35, 39464),

Gene: Llij\_28 Start: 25862, Stop: 26002, Start Num: 18

Candidate Starts for Llij\_28:

(Start: 18 @25862 has 111 MA's), (33, 25937),

Gene: Lorde\_29 Start: 25698, Stop: 25838, Start Num: 18

Candidate Starts for Lorde\_29:

(Start: 18 @25698 has 111 MA's), (33, 25773),

Gene: Lucia\_29 Start: 25982, Stop: 26134, Start Num: 18

Candidate Starts for Lucia\_29:

(Start: 18 @25982 has 111 MA's), (Start: 21 @25997 has 10 MA's), (33, 26069),

Gene: Lucky2013\_42 Start: 35376, Stop: 35537, Start Num: 16

Candidate Starts for Lucky2013\_42:

(Start: 16 @35376 has 86 MA's), (28, 35451), (33, 35475), (35, 35493),

Gene: LunaStella\_29 Start: 26164, Stop: 26301, Start Num: 21

Candidate Starts for LunaStella\_29:

(Start: 21 @26164 has 10 MA's), (33, 26236),

Gene: Magsby\_25 Start: 22166, Stop: 22345, Start Num: 16

Candidate Starts for Magsby\_25:

(Start: 15 @22163 has 7 MA's), (Start: 16 @22166 has 86 MA's), (27, 22250), (28, 22253),

Gene: Majeke\_25 Start: 22882, Stop: 23055, Start Num: 16

Candidate Starts for Majeke\_25:

(14, 22873), (Start: 16 @22882 has 86 MA's), (Start: 17 @22885 has 35 MA's), (Start: 20 @22900 has 1 MA's),

Gene: Malithi\_25 Start: 22801, Stop: 22974, Start Num: 16

Candidate Starts for Malithi\_25:

(14, 22792), (Start: 16 @22801 has 86 MA's), (Start: 17 @22804 has 35 MA's), (Start: 20 @22819 has 1 MA's),

Gene: Mandlovu\_28 Start: 26073, Stop: 26225, Start Num: 18

Candidate Starts for Mandlovu\_28:

(Start: 18 @26073 has 111 MA's), (Start: 21 @26088 has 10 MA's), (33, 26160),

Gene: Mangethe\_25 Start: 22882, Stop: 23055, Start Num: 16

Candidate Starts for Mangethe\_25:

(14, 22873), (Start: 16 @22882 has 86 MA's), (Start: 17 @22885 has 35 MA's), (Start: 20 @22900 has 1 MA's),

Gene: Marker\_29 Start: 25737, Stop: 25889, Start Num: 18

Candidate Starts for Marker\_29:

(Start: 18 @25737 has 111 MA's), (Start: 21 @25752 has 10 MA's), (33, 25824),

Gene: Medindi\_29 Start: 25884, Stop: 26036, Start Num: 18

Candidate Starts for Medindi\_29:

(Start: 18 @25884 has 111 MA's), (Start: 21 @25899 has 10 MA's), (33, 25971),

Gene: Megiddo\_25 Start: 23141, Stop: 23314, Start Num: 16

Candidate Starts for Megiddo\_25:

(Start: 16 @23141 has 86 MA's), (Start: 17 @23144 has 35 MA's), (Start: 20 @23159 has 1 MA's),

Gene: Melissauren88\_28 Start: 26058, Stop: 26210, Start Num: 18

Candidate Starts for Melissauren88\_28:

(Start: 18 @26058 has 111 MA's), (Start: 21 @26073 has 10 MA's), (33, 26145),

Gene: Melville\_25 Start: 22169, Stop: 22348, Start Num: 16

Candidate Starts for Melville\_25:

(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: MiaZeal\_42 Start: 35060, Stop: 35221, Start Num: 16

Candidate Starts for MiaZeal\_42:

(Start: 16 @35060 has 86 MA's), (28, 35135), (33, 35159), (35, 35177),

Gene: MichelleMyBell\_25 Start: 21653, Stop: 21820, Start Num: 17

Candidate Starts for MichelleMyBell\_25:

(2, 21323), (Start: 16 @21650 has 86 MA's), (Start: 17 @21653 has 35 MA's), (28, 21734),

Gene: MilanaBonita\_22 Start: 21918, Stop: 22094, Start Num: 16

Candidate Starts for MilanaBonita\_22:

(Start: 16 @21918 has 86 MA's), (31, 22017), (35, 22050),

Gene: MilleniumForce\_29 Start: 26835, Stop: 27002, Start Num: 18  
Candidate Starts for MilleniumForce\_29:  
(Start: 18 @26835 has 111 MA's), (Start: 21 @26865 has 10 MA's), (33, 26937),

Gene: Minnie\_29 Start: 26603, Stop: 26740, Start Num: 21  
Candidate Starts for Minnie\_29:  
(Start: 18 @26573 has 111 MA's), (Start: 21 @26603 has 10 MA's), (33, 26675),

Gene: Misha28\_29 Start: 25746, Stop: 25898, Start Num: 18  
Candidate Starts for Misha28\_29:  
(Start: 18 @25746 has 111 MA's), (Start: 21 @25761 has 10 MA's), (33, 25833),

Gene: Moonbeam\_29 Start: 26528, Stop: 26695, Start Num: 18  
Candidate Starts for Moonbeam\_29:  
(Start: 18 @26528 has 111 MA's), (Start: 21 @26558 has 10 MA's), (33, 26630),

Gene: Mova\_29 Start: 25725, Stop: 25892, Start Num: 18  
Candidate Starts for Mova\_29:  
(Start: 18 @25725 has 111 MA's), (Start: 21 @25755 has 10 MA's), (33, 25827),

Gene: Mozy\_29 Start: 25935, Stop: 26087, Start Num: 18  
Candidate Starts for Mozy\_29:  
(Start: 18 @25935 has 111 MA's), (Start: 21 @25950 has 10 MA's), (33, 26022),

Gene: Ms6\_22 Start: 21500, Stop: 21676, Start Num: 16  
Candidate Starts for Ms6\_22:  
(6, 21284), (Start: 16 @21500 has 86 MA's), (35, 21632),

Gene: MulchExplorer\_30 Start: 27010, Stop: 27150, Start Num: 18  
Candidate Starts for MulchExplorer\_30:  
(Start: 18 @27010 has 111 MA's), (33, 27085),

Gene: MulchSalad\_24 Start: 21938, Stop: 22111, Start Num: 16  
Candidate Starts for MulchSalad\_24:  
(Start: 15 @21935 has 7 MA's), (Start: 16 @21938 has 86 MA's), (28, 22025),

Gene: Mwanjiwa\_28 Start: 25986, Stop: 26153, Start Num: 18  
Candidate Starts for Mwanjiwa\_28:  
(Start: 18 @25986 has 111 MA's), (Start: 21 @26016 has 10 MA's), (33, 26088),

Gene: Nazo\_25 Start: 23510, Stop: 23686, Start Num: 17  
Candidate Starts for Nazo\_25:  
(Start: 16 @23507 has 86 MA's), (Start: 17 @23510 has 35 MA's), (19, 23531), (Start: 20 @23534 has 1 MA's), (Start: 21 @23555 has 10 MA's), (25, 23588), (28, 23600),

Gene: Necropolis\_25 Start: 22876, Stop: 23049, Start Num: 16  
Candidate Starts for Necropolis\_25:  
(14, 22867), (Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has 1 MA's),

Gene: Nenae\_24 Start: 21647, Stop: 21823, Start Num: 16  
Candidate Starts for Nenae\_24:

(3, 21329), (6, 21431), (Start: 16 @21647 has 86 MA's), (28, 21737), (33, 21761), (35, 21779),

Gene: NewHope4\_30 Start: 26075, Stop: 26242, Start Num: 18

Candidate Starts for NewHope4\_30:

(Start: 18 @26075 has 111 MA's), (Start: 21 @26105 has 10 MA's), (33, 26177),

Gene: Nibley\_37 Start: 33891, Stop: 34052, Start Num: 16

Candidate Starts for Nibley\_37:

(Start: 16 @33891 has 86 MA's), (28, 33966), (33, 33990), (35, 34008),

Gene: Ochi17\_26 Start: 25511, Stop: 25684, Start Num: 16

Candidate Starts for Ochi17\_26:

(8, 25340), (9, 25343), (11, 25403), (12, 25427), (Start: 16 @25511 has 86 MA's), (35, 25640),

Gene: Okabe\_24 Start: 22042, Stop: 22212, Start Num: 17

Candidate Starts for Okabe\_24:

(Start: 16 @22039 has 86 MA's), (Start: 17 @22042 has 35 MA's), (Start: 20 @22057 has 1 MA's), (27, 22123),

Gene: Omega\_47 Start: 39998, Stop: 40156, Start Num: 16

Candidate Starts for Omega\_47:

(Start: 16 @39998 has 86 MA's), (35, 40112),

Gene: Optimus\_46 Start: 39166, Stop: 39324, Start Num: 16

Candidate Starts for Optimus\_46:

(Start: 16 @39166 has 86 MA's), (28, 39238), (32, 39250), (35, 39280),

Gene: Ovechkin\_28 Start: 26030, Stop: 26197, Start Num: 18

Candidate Starts for Ovechkin\_28:

(Start: 18 @26030 has 111 MA's), (Start: 21 @26060 has 10 MA's), (33, 26132),

Gene: OwlsT2W\_29 Start: 26324, Stop: 26476, Start Num: 18

Candidate Starts for OwlsT2W\_29:

(Start: 18 @26324 has 111 MA's), (Start: 21 @26339 has 10 MA's), (33, 26411),

Gene: PMC\_28 Start: 25862, Stop: 26002, Start Num: 18

Candidate Starts for PMC\_28:

(Start: 18 @25862 has 111 MA's), (33, 25937),

Gene: Panchino\_24 Start: 21760, Stop: 21927, Start Num: 16

Candidate Starts for Panchino\_24:

(5, 21520), (Start: 16 @21760 has 86 MA's), (Start: 17 @21763 has 35 MA's), (Start: 20 @21778 has 1 MA's), (28, 21841), (35, 21883),

Gene: Parmesanjohn\_25 Start: 22169, Stop: 22348, Start Num: 16

Candidate Starts for Parmesanjohn\_25:

(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: PatoPoderoso\_28 Start: 26064, Stop: 26216, Start Num: 18

Candidate Starts for PatoPoderoso\_28:

(Start: 18 @26064 has 111 MA's), (Start: 21 @26079 has 10 MA's), (33, 26151),

Gene: PeanutPie\_25 Start: 22886, Stop: 23056, Start Num: 17

Candidate Starts for PeanutPie\_25:

(14, 22874), (Start: 16 @22883 has 86 MA's), (Start: 17 @22886 has 35 MA's), (Start: 20 @22901 has 1 MA's),

Gene: Phalconet\_28 Start: 25961, Stop: 26113, Start Num: 18

Candidate Starts for Phalconet\_28:

(Start: 18 @25961 has 111 MA's), (Start: 21 @25976 has 10 MA's), (33, 26048),

Gene: Phalm\_25 Start: 23141, Stop: 23314, Start Num: 16

Candidate Starts for Phalm\_25:

(Start: 16 @23141 has 86 MA's), (Start: 17 @23144 has 35 MA's), (Start: 20 @23159 has 1 MA's),

Gene: PhancyPhin\_24 Start: 21644, Stop: 21820, Start Num: 16

Candidate Starts for PhancyPhin\_24:

(3, 21326), (6, 21428), (Start: 16 @21644 has 86 MA's), (28, 21734), (33, 21758), (35, 21776),

Gene: Phanphagia\_25 Start: 25032, Stop: 25199, Start Num: 18

Candidate Starts for Phanphagia\_25:

(Start: 18 @25032 has 111 MA's), (Start: 21 @25062 has 10 MA's), (33, 25134),

Gene: Phasih\_29 Start: 26431, Stop: 26571, Start Num: 18

Candidate Starts for Phasih\_29:

(Start: 18 @26431 has 111 MA's), (33, 26506),

Gene: Phatniss\_29 Start: 26379, Stop: 26519, Start Num: 18

Candidate Starts for Phatniss\_29:

(Start: 18 @26379 has 111 MA's), (33, 26454),

Gene: Phayonce\_25 Start: 23436, Stop: 23615, Start Num: 17

Candidate Starts for Phayonce\_25:

(2, 23106), (Start: 16 @23433 has 86 MA's), (Start: 17 @23436 has 35 MA's), (Start: 20 @23460 has 1 MA's), (22, 23487), (30, 23532),

Gene: Phegasus\_25 Start: 22885, Stop: 23055, Start Num: 17

Candidate Starts for Phegasus\_25:

(14, 22873), (Start: 16 @22882 has 86 MA's), (Start: 17 @22885 has 35 MA's), (Start: 20 @22900 has 1 MA's),

Gene: PhesterPhotato\_28 Start: 25881, Stop: 26033, Start Num: 18

Candidate Starts for PhesterPhotato\_28:

(Start: 18 @25881 has 111 MA's), (Start: 21 @25896 has 10 MA's), (33, 25968),

Gene: Philonius\_25 Start: 22166, Stop: 22348, Start Num: 15

Candidate Starts for Philonius\_25:

(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Phineas\_25 Start: 23247, Stop: 23420, Start Num: 16

Candidate Starts for Phineas\_25:

(14, 23238), (Start: 16 @23247 has 86 MA's), (Start: 17 @23250 has 35 MA's), (Start: 20 @23265 has 1 MA's),

Gene: Phloss\_24 Start: 21976, Stop: 22149, Start Num: 16

Candidate Starts for Phloss\_24:

(3, 21658), (6, 21760), (Start: 16 @21976 has 86 MA's), (27, 22060), (28, 22063), (32, 22075),

Gene: Phrann\_24 Start: 22023, Stop: 22196, Start Num: 16

Candidate Starts for Phrann\_24:

(Start: 16 @22023 has 86 MA's), (Start: 17 @22026 has 35 MA's), (Start: 20 @22041 has 1 MA's), (28, 22110), (29, 22113), (31, 22119),

Gene: Pippy\_22 Start: 22026, Stop: 22202, Start Num: 16

Candidate Starts for Pippy\_22:

(3, 21708), (6, 21810), (Start: 16 @22026 has 86 MA's), (27, 22113), (28, 22116), (32, 22128),

Gene: Pipsqueaks\_25 Start: 22166, Stop: 22348, Start Num: 15

Candidate Starts for Pipsqueaks\_25:

(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Plumbus\_29 Start: 25705, Stop: 25857, Start Num: 18

Candidate Starts for Plumbus\_29:

(Start: 18 @25705 has 111 MA's), (Start: 21 @25720 has 10 MA's), (33, 25792),

Gene: Poenanya\_28 Start: 25998, Stop: 26138, Start Num: 18

Candidate Starts for Poenanya\_28:

(Start: 18 @25998 has 111 MA's), (33, 26073),

Gene: Polka14\_29 Start: 26413, Stop: 26565, Start Num: 18

Candidate Starts for Polka14\_29:

(Start: 18 @26413 has 111 MA's), (Start: 21 @26428 has 10 MA's), (33, 26500),

Gene: Polkaroo\_25 Start: 22895, Stop: 23065, Start Num: 17

Candidate Starts for Polkaroo\_25:

(14, 22883), (Start: 16 @22892 has 86 MA's), (Start: 17 @22895 has 35 MA's), (Start: 20 @22910 has 1 MA's),

Gene: Polo2Bam\_32 Start: 26049, Stop: 26201, Start Num: 18

Candidate Starts for Polo2Bam\_32:

(Start: 18 @26049 has 111 MA's), (Start: 21 @26064 has 10 MA's), (33, 26136),

Gene: PopTart\_28 Start: 26073, Stop: 26240, Start Num: 18

Candidate Starts for PopTart\_28:

(Start: 18 @26073 has 111 MA's), (Start: 21 @26103 has 10 MA's), (33, 26175),

Gene: Porcelain\_41 Start: 35060, Stop: 35221, Start Num: 16

Candidate Starts for Porcelain\_41:

(Start: 16 @35060 has 86 MA's), (28, 35135), (33, 35159), (35, 35177),

Gene: Purgamenstris\_24 Start: 21647, Stop: 21823, Start Num: 16

Candidate Starts for Purgamenstris\_24:

(3, 21329), (6, 21431), (Start: 16 @21647 has 86 MA's), (28, 21737), (33, 21761), (35, 21779),

Gene: Purky\_25 Start: 23130, Stop: 23306, Start Num: 16

Candidate Starts for Purky\_25:

(Start: 16 @23130 has 86 MA's), (Start: 17 @23133 has 35 MA's), (24, 23199), (27, 23217), (28, 23220), (32, 23232), (35, 23262),

Gene: QueenHazel\_24 Start: 23056, Stop: 23232, Start Num: 16  
Candidate Starts for QueenHazel\_24:  
(6, 22840), (Start: 16 @23056 has 86 MA's), (27, 23143),

Gene: QuickMath\_29 Start: 27234, Stop: 27374, Start Num: 18  
Candidate Starts for QuickMath\_29:  
(Start: 18 @27234 has 111 MA's), (33, 27309),

Gene: Quico\_29 Start: 25697, Stop: 25840, Start Num: 18  
Candidate Starts for Quico\_29:  
(Start: 18 @25697 has 111 MA's), (Start: 21 @25703 has 10 MA's), (33, 25775),

Gene: Ramsey\_29 Start: 25906, Stop: 26058, Start Num: 18  
Candidate Starts for Ramsey\_29:  
(Start: 18 @25906 has 111 MA's), (Start: 21 @25921 has 10 MA's), (33, 25993),

Gene: Raymond7\_24 Start: 22039, Stop: 22206, Start Num: 17  
Candidate Starts for Raymond7\_24:  
(2, 21709), (Start: 16 @22036 has 86 MA's), (Start: 17 @22039 has 35 MA's), (28, 22120),

Gene: Rebel\_24 Start: 21448, Stop: 21612, Start Num: 17  
Candidate Starts for Rebel\_24:  
(Start: 16 @21445 has 86 MA's), (Start: 17 @21448 has 35 MA's), (Start: 20 @21463 has 1 MA's), (28, 21526), (35, 21568),

Gene: RedBird\_28 Start: 25808, Stop: 25948, Start Num: 18  
Candidate Starts for RedBird\_28:  
(Start: 18 @25808 has 111 MA's), (33, 25883),

Gene: Redi\_24 Start: 21647, Stop: 21823, Start Num: 16  
Candidate Starts for Redi\_24:  
(3, 21329), (6, 21431), (Start: 16 @21647 has 86 MA's), (28, 21737), (33, 21761), (35, 21779),

Gene: Rockne\_28 Start: 25862, Stop: 26002, Start Num: 18  
Candidate Starts for Rockne\_28:  
(Start: 18 @25862 has 111 MA's), (33, 25937),

Gene: RockyHorror\_29 Start: 25730, Stop: 25897, Start Num: 18  
Candidate Starts for RockyHorror\_29:  
(Start: 18 @25730 has 111 MA's), (Start: 21 @25760 has 10 MA's), (33, 25832),

Gene: Royals2015\_28 Start: 25953, Stop: 26120, Start Num: 18  
Candidate Starts for Royals2015\_28:  
(Start: 18 @25953 has 111 MA's), (Start: 21 @25983 has 10 MA's), (33, 26055),

Gene: Rubeelu\_25 Start: 21584, Stop: 21754, Start Num: 17  
Candidate Starts for Rubeelu\_25:  
(5, 21341), (Start: 16 @21581 has 86 MA's), (Start: 17 @21584 has 35 MA's), (Start: 20 @21599 has 1 MA's), (30, 21671),

Gene: SG4\_28 Start: 26181, Stop: 26348, Start Num: 18  
Candidate Starts for SG4\_28:  
(Start: 18 @26181 has 111 MA's), (Start: 21 @26211 has 10 MA's), (33, 26283),

Gene: Sarma624\_23 Start: 21863, Stop: 22039, Start Num: 16

Candidate Starts for Sarma624\_23:

(6, 21647), (Start: 16 @21863 has 86 MA's), (28, 21953), (32, 21965), (35, 21995),

Gene: SassyB\_28 Start: 26073, Stop: 26240, Start Num: 18

Candidate Starts for SassyB\_28:

(Start: 18 @26073 has 111 MA's), (Start: 21 @26103 has 10 MA's), (33, 26175),

Gene: Sbash\_24 Start: 23052, Stop: 23234, Start Num: 16

Candidate Starts for Sbash\_24:

(2, 22725), (Start: 16 @23052 has 86 MA's), (Start: 17 @23055 has 35 MA's), (Start: 20 @23079 has 1 MA's), (28, 23145), (34, 23175),

Gene: Schnauzer\_25 Start: 22166, Stop: 22348, Start Num: 15

Candidate Starts for Schnauzer\_25:

(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Scitech\_24 Start: 21768, Stop: 21941, Start Num: 16

Candidate Starts for Scitech\_24:

(Start: 16 @21768 has 86 MA's), (Start: 17 @21771 has 35 MA's), (Start: 20 @21786 has 1 MA's), (28, 21855), (32, 21867), (33, 21879), (35, 21897),

Gene: SeaLumen\_31 Start: 26049, Stop: 26201, Start Num: 18

Candidate Starts for SeaLumen\_31:

(Start: 18 @26049 has 111 MA's), (Start: 21 @26064 has 10 MA's), (33, 26136),

Gene: Seagreen\_29 Start: 25880, Stop: 26047, Start Num: 18

Candidate Starts for Seagreen\_29:

(Start: 18 @25880 has 111 MA's), (Start: 21 @25910 has 10 MA's), (33, 25982),

Gene: Shaboozey\_36 Start: 33375, Stop: 33536, Start Num: 16

Candidate Starts for Shaboozey\_36:

(Start: 16 @33375 has 86 MA's), (28, 33450), (33, 33474), (35, 33492),

Gene: Shauna1\_25 Start: 25035, Stop: 25202, Start Num: 18

Candidate Starts for Shauna1\_25:

(Start: 18 @25035 has 111 MA's), (Start: 21 @25065 has 10 MA's), (33, 25137),

Gene: ShrimpFriedEgg\_24 Start: 21647, Stop: 21823, Start Num: 16

Candidate Starts for ShrimpFriedEgg\_24:

(3, 21329), (6, 21431), (Start: 16 @21647 has 86 MA's), (28, 21737), (33, 21761), (35, 21779),

Gene: ShroomBoi\_25 Start: 24925, Stop: 25092, Start Num: 18

Candidate Starts for ShroomBoi\_25:

(Start: 18 @24925 has 111 MA's), (Start: 21 @24955 has 10 MA's), (33, 25027),

Gene: Shweta\_24 Start: 21778, Stop: 21951, Start Num: 16

Candidate Starts for Shweta\_24:

(Start: 16 @21778 has 86 MA's), (Start: 17 @21781 has 35 MA's), (Start: 20 @21796 has 1 MA's), (28, 21865), (32, 21877), (33, 21889), (35, 21907),

Gene: Silvafighter\_25 Start: 22166, Stop: 22348, Start Num: 15

Candidate Starts for Silvafighter\_25:

(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: SilverChicken\_35 Start: 25765, Stop: 25902, Start Num: 21

Candidate Starts for SilverChicken\_35:

(Start: 18 @25735 has 111 MA's), (Start: 21 @25765 has 10 MA's), (33, 25837),

Gene: Silvy\_25 Start: 22170, Stop: 22349, Start Num: 16

Candidate Starts for Silvy\_25:

(Start: 15 @22167 has 7 MA's), (Start: 16 @22170 has 86 MA's), (27, 22254), (28, 22257),

Gene: SkinnyPete\_24 Start: 21787, Stop: 21951, Start Num: 17

Candidate Starts for SkinnyPete\_24:

(5, 21544), (Start: 16 @21784 has 86 MA's), (Start: 17 @21787 has 35 MA's), (Start: 20 @21802 has 1 MA's), (28, 21865), (35, 21907),

Gene: Smurph\_25 Start: 22169, Stop: 22348, Start Num: 16

Candidate Starts for Smurph\_25:

(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Snekmaggedon\_24 Start: 21647, Stop: 21823, Start Num: 16

Candidate Starts for Snekmaggedon\_24:

(6, 21431), (Start: 16 @21647 has 86 MA's), (28, 21737), (33, 21761), (35, 21779),

Gene: Sonah\_25 Start: 22869, Stop: 23039, Start Num: 17

Candidate Starts for Sonah\_25:

(14, 22857), (Start: 16 @22866 has 86 MA's), (Start: 17 @22869 has 35 MA's), (Start: 20 @22884 has 1 MA's),

Gene: Spartacus\_29 Start: 26108, Stop: 26275, Start Num: 18

Candidate Starts for Spartacus\_29:

(Start: 18 @26108 has 111 MA's), (Start: 21 @26138 has 10 MA's), (33, 26210),

Gene: Spikelee\_29 Start: 25856, Stop: 26023, Start Num: 18

Candidate Starts for Spikelee\_29:

(Start: 18 @25856 has 111 MA's), (Start: 21 @25886 has 10 MA's), (33, 25958),

Gene: Spinach\_24 Start: 21647, Stop: 21823, Start Num: 16

Candidate Starts for Spinach\_24:

(3, 21329), (6, 21431), (Start: 16 @21647 has 86 MA's), (28, 21737), (33, 21761), (35, 21779),

Gene: SpongeBob\_24 Start: 21647, Stop: 21823, Start Num: 16

Candidate Starts for SpongeBob\_24:

(6, 21431), (Start: 16 @21647 has 86 MA's), (28, 21737), (33, 21761), (35, 21779),

Gene: Squint\_41 Start: 35179, Stop: 35340, Start Num: 16

Candidate Starts for Squint\_41:

(Start: 16 @35179 has 86 MA's), (28, 35254), (33, 35278), (35, 35296),

Gene: Squirty\_23 Start: 21695, Stop: 21868, Start Num: 16

Candidate Starts for Squirty\_23:

(3, 21377), (6, 21479), (Start: 16 @21695 has 86 MA's), (27, 21779), (28, 21782), (32, 21794),

Gene: StAnnes\_25 Start: 25400, Stop: 25573, Start Num: 16  
Candidate Starts for StAnnes\_25:  
(7, 25196), (13, 25376), (Start: 16 @25400 has 86 MA's), (33, 25511), (35, 25529),

Gene: StevieRay\_25 Start: 22870, Stop: 23028, Start Num: 17  
Candidate Starts for StevieRay\_25:  
(14, 22858), (Start: 16 @22867 has 86 MA's), (Start: 17 @22870 has 35 MA's), (Start: 20 @22885 has 1 MA's),

Gene: StressBall\_25 Start: 23141, Stop: 23314, Start Num: 16  
Candidate Starts for StressBall\_25:  
(Start: 16 @23141 has 86 MA's), (Start: 17 @23144 has 35 MA's), (Start: 20 @23159 has 1 MA's),

Gene: Strokeseat\_28 Start: 26130, Stop: 26282, Start Num: 18  
Candidate Starts for Strokeseat\_28:  
(Start: 18 @26130 has 111 MA's), (Start: 21 @26145 has 10 MA's), (33, 26217),

Gene: Stuck\_28 Start: 23375, Stop: 23551, Start Num: 16  
Candidate Starts for Stuck\_28:  
(6, 23159), (Start: 16 @23375 has 86 MA's), (28, 23465), (32, 23477), (35, 23507),

Gene: Superphikiman\_42 Start: 35242, Stop: 35403, Start Num: 16  
Candidate Starts for Superphikiman\_42:  
(Start: 16 @35242 has 86 MA's), (28, 35317), (33, 35341), (35, 35359),

Gene: TChen\_27 Start: 26165, Stop: 26302, Start Num: 21  
Candidate Starts for TChen\_27:  
(Start: 21 @26165 has 10 MA's), (33, 26237),

Gene: Taj\_28 Start: 26060, Stop: 26227, Start Num: 18  
Candidate Starts for Taj\_28:  
(Start: 18 @26060 has 111 MA's), (Start: 21 @26090 has 10 MA's), (33, 26162),

Gene: Tapioca\_25 Start: 22169, Stop: 22348, Start Num: 16  
Candidate Starts for Tapioca\_25:  
(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Tchotchke\_26 Start: 25034, Stop: 25207, Start Num: 16  
Candidate Starts for Tchotchke\_26:  
(Start: 16 @25034 has 86 MA's), (28, 25121), (32, 25133), (35, 25163),

Gene: Techage\_25 Start: 22870, Stop: 23040, Start Num: 17  
Candidate Starts for Techage\_25:  
(Start: 16 @22867 has 86 MA's), (Start: 17 @22870 has 35 MA's), (Start: 20 @22885 has 1 MA's), (28, 22954), (31, 22963),

Gene: Tessdabest\_24 Start: 22166, Stop: 22345, Start Num: 16  
Candidate Starts for Tessdabest\_24:  
(Start: 15 @22163 has 7 MA's), (Start: 16 @22166 has 86 MA's), (27, 22250), (28, 22253),

Gene: Thespis\_25 Start: 22876, Stop: 23049, Start Num: 16  
Candidate Starts for Thespis\_25:

(14, 22867), (Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has 1 MA's),

Gene: ThulaThula\_25 Start: 23442, Stop: 23621, Start Num: 17

Candidate Starts for ThulaThula\_25:

(Start: 16 @23439 has 86 MA's), (Start: 17 @23442 has 35 MA's), (Start: 20 @23466 has 1 MA's), (22, 23493), (30, 23538),

Gene: TootsiePop\_29 Start: 25746, Stop: 25898, Start Num: 18

Candidate Starts for TootsiePop\_29:

(Start: 18 @25746 has 111 MA's), (Start: 21 @25761 has 10 MA's), (33, 25833),

Gene: Tootsieroll\_29 Start: 25869, Stop: 26021, Start Num: 18

Candidate Starts for Tootsieroll\_29:

(Start: 18 @25869 has 111 MA's), (Start: 21 @25884 has 10 MA's), (33, 25956),

Gene: Toron\_27 Start: 25474, Stop: 25641, Start Num: 16

Candidate Starts for Toron\_27:

(Start: 16 @25474 has 86 MA's), (Start: 20 @25501 has 1 MA's), (26, 25561),

Gene: Tortellini\_25 Start: 23480, Stop: 23647, Start Num: 16

Candidate Starts for Tortellini\_25:

(Start: 16 @23480 has 86 MA's), (Start: 17 @23483 has 35 MA's), (Start: 20 @23498 has 1 MA's), (28, 23561), (33, 23585), (35, 23603),

Gene: Tortoise12\_25 Start: 22169, Stop: 22348, Start Num: 16

Candidate Starts for Tortoise12\_25:

(Start: 15 @22166 has 7 MA's), (Start: 16 @22169 has 86 MA's), (27, 22253), (28, 22256),

Gene: Tweety\_28 Start: 26076, Stop: 26228, Start Num: 18

Candidate Starts for Tweety\_28:

(Start: 18 @26076 has 111 MA's), (Start: 21 @26091 has 10 MA's), (33, 26163),

Gene: UncleRicky\_31 Start: 27195, Stop: 27335, Start Num: 18

Candidate Starts for UncleRicky\_31:

(Start: 18 @27195 has 111 MA's), (33, 27270),

Gene: VRedHorse\_28 Start: 26083, Stop: 26235, Start Num: 18

Candidate Starts for VRedHorse\_28:

(Start: 18 @26083 has 111 MA's), (Start: 21 @26098 has 10 MA's), (33, 26170),

Gene: Velveteen\_23 Start: 21863, Stop: 22039, Start Num: 16

Candidate Starts for Velveteen\_23:

(6, 21647), (Start: 16 @21863 has 86 MA's), (28, 21953), (32, 21965), (35, 21995),

Gene: Venti\_25 Start: 22879, Stop: 23049, Start Num: 17

Candidate Starts for Venti\_25:

(14, 22867), (Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has 1 MA's),

Gene: Veteran\_28 Start: 25894, Stop: 26034, Start Num: 18

Candidate Starts for Veteran\_28:

(Start: 18 @25894 has 111 MA's), (33, 25969),

Gene: Vidya\_25 Start: 22879, Stop: 23049, Start Num: 17  
Candidate Starts for Vidya\_25:  
(14, 22867), (Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has 1 MA's),

Gene: Violac\_29 Start: 26576, Stop: 26728, Start Num: 18  
Candidate Starts for Violac\_29:  
(Start: 18 @26576 has 111 MA's), (Start: 21 @26591 has 10 MA's), (33, 26663),

Gene: Vivum\_28 Start: 25795, Stop: 25962, Start Num: 18  
Candidate Starts for Vivum\_28:  
(Start: 18 @25795 has 111 MA's), (Start: 21 @25825 has 10 MA's), (33, 25897),

Gene: WST1\_25 Start: 20638, Stop: 20814, Start Num: 16  
Candidate Starts for WST1\_25:  
(Start: 16 @20638 has 86 MA's), (23, 20698), (27, 20725), (28, 20728), (35, 20770), (36, 20773),

Gene: Wee\_29 Start: 26598, Stop: 26765, Start Num: 18  
Candidate Starts for Wee\_29:  
(Start: 18 @26598 has 111 MA's), (Start: 21 @26628 has 10 MA's), (33, 26700),

Gene: Whouxphf\_28 Start: 26134, Stop: 26274, Start Num: 18  
Candidate Starts for Whouxphf\_28:  
(Start: 18 @26134 has 111 MA's), (33, 26209),

Gene: WillSterrel\_29 Start: 27241, Stop: 27408, Start Num: 18  
Candidate Starts for WillSterrel\_29:  
(Start: 18 @27241 has 111 MA's), (Start: 21 @27271 has 10 MA's), (33, 27343),

Gene: Willsammy\_25 Start: 23145, Stop: 23318, Start Num: 16  
Candidate Starts for Willsammy\_25:  
(Start: 16 @23145 has 86 MA's), (Start: 17 @23148 has 35 MA's), (Start: 20 @23163 has 1 MA's), (28, 23232), (35, 23274),

Gene: XFactor\_28 Start: 26030, Stop: 26182, Start Num: 18  
Candidate Starts for XFactor\_28:  
(Start: 18 @26030 has 111 MA's), (Start: 21 @26045 has 10 MA's), (33, 26117),

Gene: Xavia\_25 Start: 23502, Stop: 23672, Start Num: 17  
Candidate Starts for Xavia\_25:  
(Start: 16 @23499 has 86 MA's), (Start: 17 @23502 has 35 MA's), (Start: 20 @23517 has 1 MA's), (28, 23586), (29, 23589), (31, 23595),

Gene: Xeno\_24 Start: 21783, Stop: 21953, Start Num: 17  
Candidate Starts for Xeno\_24:  
(Start: 16 @21780 has 86 MA's), (Start: 17 @21783 has 35 MA's), (Start: 20 @21798 has 1 MA's), (28, 21867), (31, 21876),

Gene: Xerxes\_25 Start: 22166, Stop: 22345, Start Num: 16  
Candidate Starts for Xerxes\_25:  
(Start: 15 @22163 has 7 MA's), (Start: 16 @22166 has 86 MA's), (27, 22250), (28, 22253),

Gene: Xula\_23 Start: 22578, Stop: 22754, Start Num: 16  
Candidate Starts for Xula\_23:  
(6, 22362), (Start: 16 @22578 has 86 MA's), (27, 22665),

Gene: Zapner\_34 Start: 26243, Stop: 26380, Start Num: 21  
Candidate Starts for Zapner\_34:  
(10, 26087), (Start: 21 @26243 has 10 MA's), (33, 26315),

Gene: Zerg\_28 Start: 25839, Stop: 26006, Start Num: 18  
Candidate Starts for Zerg\_28:  
(Start: 18 @25839 has 111 MA's), (Start: 21 @25869 has 10 MA's), (33, 25941),

Gene: Zilizebeth\_25 Start: 22876, Stop: 23049, Start Num: 16  
Candidate Starts for Zilizebeth\_25:  
(14, 22867), (Start: 16 @22876 has 86 MA's), (Start: 17 @22879 has 35 MA's), (Start: 20 @22894 has  
1 MA's),