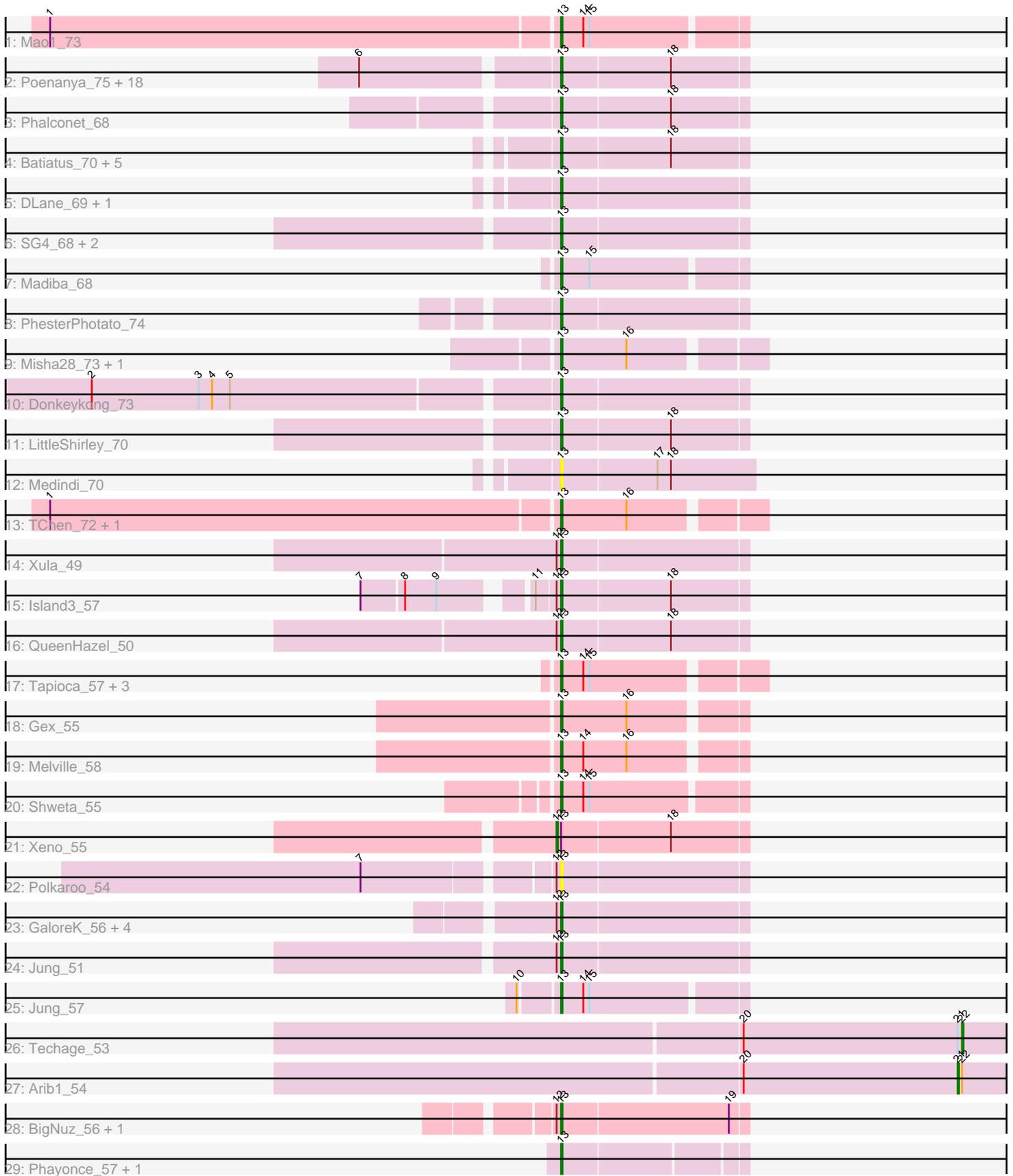


# Pham 283789



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 283789 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283789 has 66 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Mao1\_73
- Track 2 : Poenanya\_75, Deb65\_65, Nimbo\_64, Geralt\_65, JoeyJr\_72, Daenerys\_71, Inventum\_70, Empress\_70, RedBird\_73, RitaG\_72, Doomphist\_75, Dorothy\_73, Scottish\_70, Sassafras\_73, OldBen\_69, Polka14\_76, Leperchaun\_70, KingMidas\_71, PHappiness\_72
- Track 3 : Phalconet\_68
- Track 4 : Batiatus\_70, Ovechkin\_74, Kingsley\_75, Babsiella\_59, Quico\_81, Florinda\_84
- Track 5 : DLane\_69, Ms6\_70
- Track 6 : SG4\_68, Hegedechwinu\_71, StAnnes\_69
- Track 7 : Madiba\_68
- Track 8 : PhesterPhotato\_74
- Track 9 : Misha28\_73, TootsiePop\_73
- Track 10 : Donkeykong\_73
- Track 11 : LittleShirley\_70
- Track 12 : Medindi\_70
- Track 13 : TChen\_72, LunaStella\_70
- Track 14 : Xula\_49
- Track 15 : Island3\_57
- Track 16 : QueenHazel\_50
- Track 17 : Tapioca\_57, Andies\_53, BuzzLyseyear\_73, BodEinwohner17\_71
- Track 18 : Gex\_55
- Track 19 : Melville\_58
- Track 20 : Shweta\_55
- Track 21 : Xeno\_55
- Track 22 : Polkaroo\_54
- Track 23 : GaloreK\_56, Mangethe\_58, Zilizebeth\_58, Majeke\_58, Phegasus\_58
- Track 24 : Jung\_51
- Track 25 : Jung\_57
- Track 26 : Techage\_53
- Track 27 : Arib1\_54
- Track 28 : BigNuz\_56, Nazo\_57
- Track 29 : Phayonce\_57, Doomslug\_88

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

The start number called the most often in the published annotations is 13, it was called in 58 of the 61 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Andies\_53, Babsiella\_59, Batiatus\_70, BigNuz\_56, BodEinwohner17\_71, BuzzLyseyear\_73, DLane\_69, Daenerys\_71, Deb65\_65, Donkeykong\_73, Doomphist\_75, Doomslug\_88, Dorothy\_73, Empress\_70, Florinda\_84, GaloreK\_56, Geralt\_65, Gex\_55, Hegedechwinu\_71, Inventum\_70, Island3\_57, JoeyJr\_72, Jung\_51, Jung\_57, KingMidas\_71, Kingsley\_75, Leperchaun\_70, LittleShirley\_70, LunaStella\_70, Madiba\_68, Majeke\_58, Mangethe\_58, Mao1\_73, Medindi\_70, Melville\_58, Misha28\_73, Ms6\_70, Nazo\_57, Nimbo\_64, OldBen\_69, Ovechkin\_74, PHappiness\_72, Phalconet\_68, Phayonce\_57, Phegasus\_58, PhesterPhotato\_74, Poenanya\_75, Polka14\_76, Polkaroo\_54, QueenHazel\_50, Quico\_81, RedBird\_73, RitaG\_72, SG4\_68, Sassafras\_73, Scottish\_70, Shweta\_55, StAnnes\_69, TChen\_72, Tapioca\_57, TootsiePop\_73, Xula\_49, Zilizebeth\_58,

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

- Xeno\_55,

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

- Arib1\_54, Techage\_53,

### Summary by start number:

Start 12:

- Found in 13 of 66 ( 19.7% ) of genes in pham
- Manual Annotations of this start: 1 of 61
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Xeno\_55 (N),

Start 13:

- Found in 64 of 66 ( 97.0% ) of genes in pham
- Manual Annotations of this start: 58 of 61
- Called 98.4% of time when present
- Phage (with cluster) where this start called: Andies\_53 (N), Babsiella\_59 (I1), Batiatus\_70 (F1), BigNuz\_56 (P4), BodEinwohner17\_71 (F1), BuzzLyseyear\_73 (F1), DLane\_69 (F1), Daenerys\_71 (F1), Deb65\_65 (F1), Donkeykong\_73 (F1), Doomphist\_75 (F1), Doomslug\_88 (F), Dorothy\_73 (F1), Empress\_70 (F1), Florinda\_84 (F1), GaloreK\_56 (P1), Geralt\_65 (F1), Gex\_55 (N), Hegedechwinu\_71 (F1), Inventum\_70 (F1), Island3\_57 (I1), JoeyJr\_72 (F1), Jung\_51 (P1), Jung\_57 (P1), KingMidas\_71 (F1), Kingsley\_75 (F1), Leperchaun\_70 (F1), LittleShirley\_70 (F1), LunaStella\_70 (F4), Madiba\_68 (F1), Majeke\_58 (P1), Mangethe\_58 (P1), Mao1\_73 (AD), Medindi\_70 (F1), Melville\_58 (N), Misha28\_73 (F1), Ms6\_70 (F1), Nazo\_57 (P4), Nimbo\_64 (F1), OldBen\_69 (F1), Ovechkin\_74 (F1), PHappiness\_72 (F1), Phalconet\_68 (F1), Phayonce\_57 (P5), Phegasus\_58 (P1), PhesterPhotato\_74 (F1), Poenanya\_75 (F1), Polka14\_76 (F1), Polkaroo\_54 (P1), QueenHazel\_50 (I1), Quico\_81 (F1), RedBird\_73 (F1), RitaG\_72 (F1), SG4\_68 (F1), Sassafras\_73 (F1), Scottish\_70 (F1), Shweta\_55 (N), StAnnes\_69 (F1), TChen\_72 (F4), Tapioca\_57 (N), TootsiePop\_73 (F1), Xula\_49 (I1), Zilizebeth\_58 (P1),

Start 21:

- Found in 2 of 66 ( 3.0% ) of genes in pham

- Manual Annotations of this start: 1 of 61
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Arib1\_54 (P1),

Start 22:

- Found in 2 of 66 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 1 of 61
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Techage\_53 (P1),

### **Summary by clusters:**

There are 9 clusters represented in this pham: F1, P1, F4, AD, P4, P5, I1, F, N,

Info for manual annotations of cluster AD:

- Start number 13 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster F1:

- Start number 13 was manually annotated 37 times for cluster F1.

Info for manual annotations of cluster F4:

- Start number 13 was manually annotated 2 times for cluster F4.

Info for manual annotations of cluster I1:

- Start number 13 was manually annotated 4 times for cluster I1.

Info for manual annotations of cluster N:

- Start number 12 was manually annotated 1 time for cluster N.
- Start number 13 was manually annotated 5 times for cluster N.

Info for manual annotations of cluster P1:

- Start number 13 was manually annotated 6 times for cluster P1.
- Start number 21 was manually annotated 1 time for cluster P1.
- Start number 22 was manually annotated 1 time for cluster P1.

Info for manual annotations of cluster P4:

- Start number 13 was manually annotated 2 times for cluster P4.

Info for manual annotations of cluster P5:

- Start number 13 was manually annotated 1 time for cluster P5.

### **Gene Information:**

Gene: Andies\_53 Start: 38224, Stop: 38349, Start Num: 13

Candidate Starts for Andies\_53:

(Start: 13 @38224 has 58 MA's), (14, 38239), (15, 38242),

Gene: Arib1\_54 Start: 36196, Stop: 36321, Start Num: 21

Candidate Starts for Arib1\_54:

(20, 36052), (Start: 21 @36196 has 1 MA's), (Start: 22 @36199 has 1 MA's),

Gene: Babsiella\_59 Start: 39433, Stop: 39555, Start Num: 13

Candidate Starts for Babsiella\_59:

(Start: 13 @39433 has 58 MA's), (18, 39505),

Gene: Batiatus\_70 Start: 44968, Stop: 45090, Start Num: 13

Candidate Starts for Batiatus\_70:

(Start: 13 @44968 has 58 MA's), (18, 45040),

Gene: BigNuz\_56 Start: 39756, Stop: 39878, Start Num: 13

Candidate Starts for BigNuz\_56:

(Start: 12 @39753 has 1 MA's), (Start: 13 @39756 has 58 MA's), (19, 39867),

Gene: BodEinwohner17\_71 Start: 45997, Stop: 46113, Start Num: 13

Candidate Starts for BodEinwohner17\_71:

(Start: 13 @45997 has 58 MA's), (14, 46012), (15, 46015),

Gene: BuzzLyseyear\_73 Start: 47467, Stop: 47583, Start Num: 13

Candidate Starts for BuzzLyseyear\_73:

(Start: 13 @47467 has 58 MA's), (14, 47482), (15, 47485),

Gene: DLane\_69 Start: 44902, Stop: 45024, Start Num: 13

Candidate Starts for DLane\_69:

(Start: 13 @44902 has 58 MA's),

Gene: Daenerys\_71 Start: 46948, Stop: 47070, Start Num: 13

Candidate Starts for Daenerys\_71:

(6, 46825), (Start: 13 @46948 has 58 MA's), (18, 47020),

Gene: Deb65\_65 Start: 44669, Stop: 44791, Start Num: 13

Candidate Starts for Deb65\_65:

(6, 44546), (Start: 13 @44669 has 58 MA's), (18, 44741),

Gene: Donkeykong\_73 Start: 46520, Stop: 46642, Start Num: 13

Candidate Starts for Donkeykong\_73:

(2, 46217), (3, 46289), (4, 46298), (5, 46310), (Start: 13 @46520 has 58 MA's),

Gene: Doomphist\_75 Start: 46761, Stop: 46883, Start Num: 13

Candidate Starts for Doomphist\_75:

(6, 46638), (Start: 13 @46761 has 58 MA's), (18, 46833),

Gene: Doomslug\_88 Start: 46557, Stop: 46670, Start Num: 13

Candidate Starts for Doomslug\_88:

(Start: 13 @46557 has 58 MA's),

Gene: Dorothy\_73 Start: 45386, Stop: 45508, Start Num: 13

Candidate Starts for Dorothy\_73:

(6, 45263), (Start: 13 @45386 has 58 MA's), (18, 45458),

Gene: Empress\_70 Start: 45572, Stop: 45694, Start Num: 13

Candidate Starts for Empress\_70:

(6, 45449), (Start: 13 @45572 has 58 MA's), (18, 45644),

Gene: Florinda\_84 Start: 47608, Stop: 47730, Start Num: 13  
Candidate Starts for Florinda\_84:  
(Start: 13 @47608 has 58 MA's), (18, 47680),

Gene: GaloreK\_56 Start: 37671, Stop: 37793, Start Num: 13  
Candidate Starts for GaloreK\_56:  
(Start: 12 @37668 has 1 MA's), (Start: 13 @37671 has 58 MA's),

Gene: Geralt\_65 Start: 44668, Stop: 44790, Start Num: 13  
Candidate Starts for Geralt\_65:  
(6, 44545), (Start: 13 @44668 has 58 MA's), (18, 44740),

Gene: Gex\_55 Start: 36173, Stop: 36286, Start Num: 13  
Candidate Starts for Gex\_55:  
(Start: 13 @36173 has 58 MA's), (16, 36215),

Gene: Hegedechwinu\_71 Start: 42986, Stop: 43108, Start Num: 13  
Candidate Starts for Hegedechwinu\_71:  
(Start: 13 @42986 has 58 MA's),

Gene: Inventum\_70 Start: 45584, Stop: 45706, Start Num: 13  
Candidate Starts for Inventum\_70:  
(6, 45461), (Start: 13 @45584 has 58 MA's), (18, 45656),

Gene: Island3\_57 Start: 38289, Stop: 38411, Start Num: 13  
Candidate Starts for Island3\_57:  
(7, 38178), (8, 38205), (9, 38226), (11, 38274), (Start: 12 @38286 has 1 MA's), (Start: 13 @38289 has 58 MA's), (18, 38361),

Gene: JoeyJr\_72 Start: 46573, Stop: 46695, Start Num: 13  
Candidate Starts for JoeyJr\_72:  
(6, 46450), (Start: 13 @46573 has 58 MA's), (18, 46645),

Gene: Jung\_51 Start: 35878, Stop: 36000, Start Num: 13  
Candidate Starts for Jung\_51:  
(Start: 12 @35875 has 1 MA's), (Start: 13 @35878 has 58 MA's),

Gene: Jung\_57 Start: 38107, Stop: 38223, Start Num: 13  
Candidate Starts for Jung\_57:  
(10, 38083), (Start: 13 @38107 has 58 MA's), (14, 38122), (15, 38125),

Gene: KingMidas\_71 Start: 45987, Stop: 46109, Start Num: 13  
Candidate Starts for KingMidas\_71:  
(6, 45864), (Start: 13 @45987 has 58 MA's), (18, 46059),

Gene: Kingsley\_75 Start: 48363, Stop: 48485, Start Num: 13  
Candidate Starts for Kingsley\_75:  
(Start: 13 @48363 has 58 MA's), (18, 48435),

Gene: Leperchaun\_70 Start: 45807, Stop: 45929, Start Num: 13  
Candidate Starts for Leperchaun\_70:  
(6, 45684), (Start: 13 @45807 has 58 MA's), (18, 45879),

Gene: LittleShirley\_70 Start: 44567, Stop: 44689, Start Num: 13  
Candidate Starts for LittleShirley\_70:  
(Start: 13 @44567 has 58 MA's), (18, 44639),

Gene: LunaStella\_70 Start: 45241, Stop: 45366, Start Num: 13  
Candidate Starts for LunaStella\_70:  
(1, 44905), (Start: 13 @45241 has 58 MA's), (16, 45283),

Gene: Madiba\_68 Start: 44600, Stop: 44716, Start Num: 13  
Candidate Starts for Madiba\_68:  
(Start: 13 @44600 has 58 MA's), (15, 44618),

Gene: Majeke\_58 Start: 37716, Stop: 37838, Start Num: 13  
Candidate Starts for Majeke\_58:  
(Start: 12 @37713 has 1 MA's), (Start: 13 @37716 has 58 MA's),

Gene: Mangethe\_58 Start: 37716, Stop: 37838, Start Num: 13  
Candidate Starts for Mangethe\_58:  
(Start: 12 @37713 has 1 MA's), (Start: 13 @37716 has 58 MA's),

Gene: Mao1\_73 Start: 53391, Stop: 53507, Start Num: 13  
Candidate Starts for Mao1\_73:  
(1, 53055), (Start: 13 @53391 has 58 MA's), (14, 53406), (15, 53409),

Gene: Medindi\_70 Start: 44108, Stop: 44236, Start Num: 13  
Candidate Starts for Medindi\_70:  
(Start: 13 @44108 has 58 MA's), (17, 44171), (18, 44180),

Gene: Melville\_58 Start: 36158, Stop: 36271, Start Num: 13  
Candidate Starts for Melville\_58:  
(Start: 13 @36158 has 58 MA's), (14, 36173), (16, 36200),

Gene: Misha28\_73 Start: 45868, Stop: 45993, Start Num: 13  
Candidate Starts for Misha28\_73:  
(Start: 13 @45868 has 58 MA's), (16, 45910),

Gene: Ms6\_70 Start: 41131, Stop: 41253, Start Num: 13  
Candidate Starts for Ms6\_70:  
(Start: 13 @41131 has 58 MA's),

Gene: Nazo\_57 Start: 39956, Stop: 40078, Start Num: 13  
Candidate Starts for Nazo\_57:  
(Start: 12 @39953 has 1 MA's), (Start: 13 @39956 has 58 MA's), (19, 40067),

Gene: Nimbo\_64 Start: 44671, Stop: 44793, Start Num: 13  
Candidate Starts for Nimbo\_64:  
(6, 44548), (Start: 13 @44671 has 58 MA's), (18, 44743),

Gene: OldBen\_69 Start: 46063, Stop: 46185, Start Num: 13  
Candidate Starts for OldBen\_69:  
(6, 45940), (Start: 13 @46063 has 58 MA's), (18, 46135),

Gene: Ovechkin\_74 Start: 46191, Stop: 46313, Start Num: 13

Candidate Starts for Ovechkin\_74:  
(Start: 13 @46191 has 58 MA's), (18, 46263),

Gene: PHappiness\_72 Start: 46892, Stop: 47014, Start Num: 13  
Candidate Starts for PHappiness\_72:  
(6, 46769), (Start: 13 @46892 has 58 MA's), (18, 46964),

Gene: Phalconet\_68 Start: 43304, Stop: 43426, Start Num: 13  
Candidate Starts for Phalconet\_68:  
(Start: 13 @43304 has 58 MA's), (18, 43376),

Gene: Phayonce\_57 Start: 40353, Stop: 40469, Start Num: 13  
Candidate Starts for Phayonce\_57:  
(Start: 13 @40353 has 58 MA's),

Gene: Phegasus\_58 Start: 37683, Stop: 37805, Start Num: 13  
Candidate Starts for Phegasus\_58:  
(Start: 12 @37680 has 1 MA's), (Start: 13 @37683 has 58 MA's),

Gene: PhesterPhotato\_74 Start: 45630, Stop: 45752, Start Num: 13  
Candidate Starts for PhesterPhotato\_74:  
(Start: 13 @45630 has 58 MA's),

Gene: Poenanya\_75 Start: 46761, Stop: 46883, Start Num: 13  
Candidate Starts for Poenanya\_75:  
(6, 46638), (Start: 13 @46761 has 58 MA's), (18, 46833),

Gene: Polka14\_76 Start: 47551, Stop: 47673, Start Num: 13  
Candidate Starts for Polka14\_76:  
(6, 47428), (Start: 13 @47551 has 58 MA's), (18, 47623),

Gene: Polkaroo\_54 Start: 37256, Stop: 37378, Start Num: 13  
Candidate Starts for Polkaroo\_54:  
(7, 37136), (Start: 12 @37253 has 1 MA's), (Start: 13 @37256 has 58 MA's),

Gene: QueenHazel\_50 Start: 36087, Stop: 36209, Start Num: 13  
Candidate Starts for QueenHazel\_50:  
(Start: 12 @36084 has 1 MA's), (Start: 13 @36087 has 58 MA's), (18, 36159),

Gene: Quico\_81 Start: 47428, Stop: 47550, Start Num: 13  
Candidate Starts for Quico\_81:  
(Start: 13 @47428 has 58 MA's), (18, 47500),

Gene: RedBird\_73 Start: 45253, Stop: 45375, Start Num: 13  
Candidate Starts for RedBird\_73:  
(6, 45130), (Start: 13 @45253 has 58 MA's), (18, 45325),

Gene: RitaG\_72 Start: 46694, Stop: 46816, Start Num: 13  
Candidate Starts for RitaG\_72:  
(6, 46571), (Start: 13 @46694 has 58 MA's), (18, 46766),

Gene: SG4\_68 Start: 43359, Stop: 43481, Start Num: 13  
Candidate Starts for SG4\_68:

(Start: 13 @43359 has 58 MA's),

Gene: Sassafras\_73 Start: 45583, Stop: 45705, Start Num: 13  
Candidate Starts for Sassafras\_73:  
(6, 45460), (Start: 13 @45583 has 58 MA's), (18, 45655),

Gene: Scottish\_70 Start: 45242, Stop: 45364, Start Num: 13  
Candidate Starts for Scottish\_70:  
(6, 45119), (Start: 13 @45242 has 58 MA's), (18, 45314),

Gene: Shweta\_55 Start: 36817, Stop: 36933, Start Num: 13  
Candidate Starts for Shweta\_55:  
(Start: 13 @36817 has 58 MA's), (14, 36832), (15, 36835),

Gene: StAnnes\_69 Start: 44436, Stop: 44558, Start Num: 13  
Candidate Starts for StAnnes\_69:  
(Start: 13 @44436 has 58 MA's),

Gene: TChen\_72 Start: 47192, Stop: 47317, Start Num: 13  
Candidate Starts for TChen\_72:  
(1, 46856), (Start: 13 @47192 has 58 MA's), (16, 47234),

Gene: Tapioca\_57 Start: 38663, Stop: 38788, Start Num: 13  
Candidate Starts for Tapioca\_57:  
(Start: 13 @38663 has 58 MA's), (14, 38678), (15, 38681),

Gene: Techage\_53 Start: 36249, Stop: 36371, Start Num: 22  
Candidate Starts for Techage\_53:  
(20, 36102), (Start: 21 @36246 has 1 MA's), (Start: 22 @36249 has 1 MA's),

Gene: TootsiePop\_73 Start: 45868, Stop: 45993, Start Num: 13  
Candidate Starts for TootsiePop\_73:  
(Start: 13 @45868 has 58 MA's), (16, 45910),

Gene: Xeno\_55 Start: 35530, Stop: 35655, Start Num: 12  
Candidate Starts for Xeno\_55:  
(Start: 12 @35530 has 1 MA's), (Start: 13 @35533 has 58 MA's), (18, 35605),

Gene: Xula\_49 Start: 35689, Stop: 35811, Start Num: 13  
Candidate Starts for Xula\_49:  
(Start: 12 @35686 has 1 MA's), (Start: 13 @35689 has 58 MA's),

Gene: Zilizabeth\_58 Start: 37707, Stop: 37829, Start Num: 13  
Candidate Starts for Zilizabeth\_58:  
(Start: 12 @37704 has 1 MA's), (Start: 13 @37707 has 58 MA's),