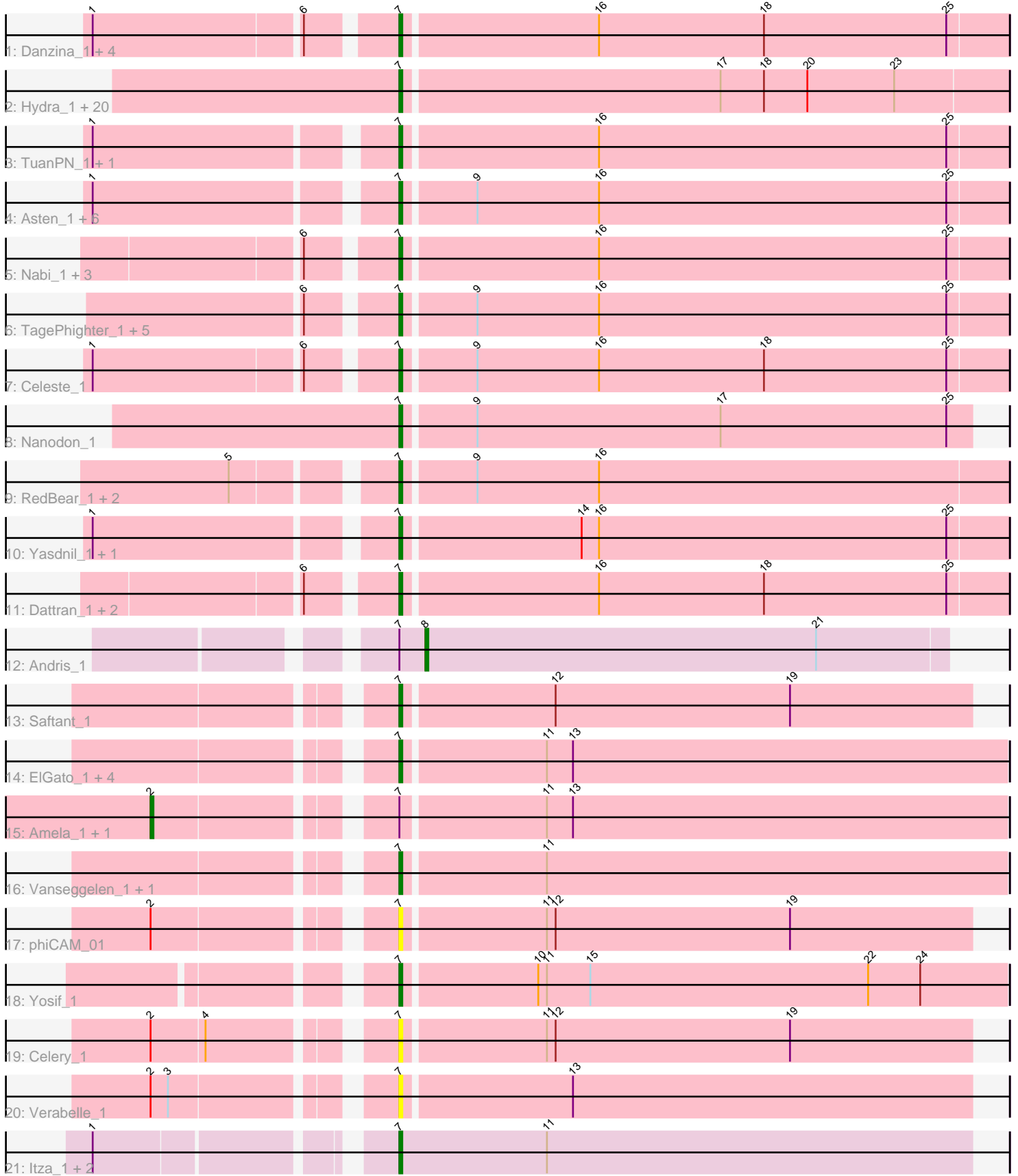


Pham 165021



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 165021 Report

This analysis was run 07/09/24 on database version 566.

Pham number 165021 has 73 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Danzina\_1, Godpower\_1, Lika\_1, Zemlya\_1, Brataylor\_1
- Track 2 : Hydra\_1, Indigo\_1, Nerdos\_1, BeardedLady\_1, SunsetPointe\_1, Eddasa\_1, Bovely\_1, Jash\_1, Esperer\_1, Caliburn\_1, Legacy\_1, Ozzie\_1, BryanRecycles\_1, Phettuccine\_1, Oliynyk\_1, EnochSoames\_1, Izzy\_1, Aaronocolus\_1, Rusticus\_1, Leviticus\_1, Unstoppable\_1
- Track 3 : TuanPN\_1, Ejemplo\_1
- Track 4 : Asten\_1, BarryBee\_1, Emaanora\_1, SarahRose\_1, Whatever\_1, Hippo\_1, Snorlax\_1
- Track 5 : Nabi\_1, Lorelei\_1, Sujidade\_1, Rana\_1
- Track 6 : TagePhighter\_1, Dwayne\_1, Chucky\_1, OzzyJ\_1, Werner\_1, Triste\_1
- Track 7 : Celeste\_1
- Track 8 : Nanodon\_1
- Track 9 : RedBear\_1, Katalie\_1, South40\_1
- Track 10 : Yasdnil\_1, Maneekul\_1
- Track 11 : Dattran\_1, Goby\_1, Toma\_1
- Track 12 : Andris\_1
- Track 13 : Saftant\_1
- Track 14 : ElGato\_1, Conan\_1, Provolone\_1, Dexers\_1, Alsaber\_1
- Track 15 : Amela\_1, Verse\_1
- Track 16 : Vanseggelen\_1, VieEnRose\_1
- Track 17 : phiCAM\_01
- Track 18 : Yosif\_1
- Track 19 : Celery\_1
- Track 20 : Verabelle\_1
- Track 21 : Itza\_1, Celia\_1, Urza\_1

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

The start number called the most often in the published annotations is 7, it was called in 63 of the 66 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aaronocolus\_1, Alsaber\_1, Asten\_1, BarryBee\_1, BeardedLady\_1, Bovely\_1, Brataylor\_1, BryanRecycles\_1, Caliburn\_1, Celery\_1, Celeste\_1, Celia\_1, Chucky\_1,

Conan\_1, Danzina\_1, Dattran\_1, Dexers\_1, Dwayne\_1, Eddasa\_1, Ejemplo\_1, ElGato\_1, Emaanora\_1, EnochSoames\_1, Esperer\_1, Goby\_1, Godpower\_1, Hippo\_1, Hydra\_1, Indigo\_1, Itza\_1, Izzy\_1, Jash\_1, Katalie\_1, Legacy\_1, Leviticus\_1, Lika\_1, Lorelei\_1, Maneekul\_1, Nabi\_1, Nanodon\_1, Nerdos\_1, Oliynyk\_1, Ozzie\_1, OzzyJ\_1, Phettuccine\_1, Provolone\_1, Rana\_1, RedBear\_1, Rusticus\_1, Saftant\_1, SarahRose\_1, Snorlax\_1, South40\_1, Sujidade\_1, SunsetPointe\_1, TagePhighter\_1, Toma\_1, Triste\_1, TuanPN\_1, Unstoppable\_1, Urza\_1, Vanseggelen\_1, Verabelle\_1, VieEnRose\_1, Werner\_1, Whatever\_1, Yasdni1\_1, Yosif\_1, Zemlya\_1, phiCAM\_01,

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

- Amela\_1, Andris\_1, Verse\_1,

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

- 

### Summary by start number:

Start 2:

- Found in 5 of 73 ( 6.8% ) of genes in pham
- Manual Annotations of this start: 2 of 66
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Amela\_1 (BD3), Verse\_1 (BD3),

Start 7:

- Found in 73 of 73 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 63 of 66
- Called 95.9% of time when present
- Phage (with cluster) where this start called: Aaronocolus\_1 (BD1), Alsaber\_1 (BD3), Asten\_1 (BD1), BarryBee\_1 (BD1), BeardedLady\_1 (BD1), Bovely\_1 (BD1), Brataylor\_1 (BD1), BryanRecycles\_1 (BD1), Caliburn\_1 (BD1), Celery\_1 (BD3), Celeste\_1 (BD1), Celia\_1 (BD6), Chucky\_1 (BD1), Conan\_1 (BD3), Danzina\_1 (BD1), Dattran\_1 (BD1), Dexers\_1 (BD3), Dwayne\_1 (BD1), Eddasa\_1 (BD1), Ejemplo\_1 (BD1), ElGato\_1 (BD3), Emaanora\_1 (BD1), EnochSoames\_1 (BD1), Esperer\_1 (BD1), Goby\_1 (BD1), Godpower\_1 (BD1), Hippo\_1 (BD1), Hydra\_1 (BD1), Indigo\_1 (BD1), Itza\_1 (BD6), Izzy\_1 (BD1), Jash\_1 (BD1), Katalie\_1 (BD1), Legacy\_1 (BD1), Leviticus\_1 (BD1), Lika\_1 (BD1), Lorelei\_1 (BD1), Maneekul\_1 (BD1), Nabi\_1 (BD1), Nanodon\_1 (BD1), Nerdos\_1 (BD1), Oliynyk\_1 (BD1), Ozzie\_1 (BD1), OzzyJ\_1 (BD1), Phettuccine\_1 (BD1), Provolone\_1 (BD3), Rana\_1 (BD1), RedBear\_1 (BD1), Rusticus\_1 (BD1), Saftant\_1 (BD3), SarahRose\_1 (BD1), Snorlax\_1 (BD1), South40\_1 (BD1), Sujidade\_1 (BD1), SunsetPointe\_1 (BD1), TagePhighter\_1 (BD1), Toma\_1 (BD1), Triste\_1 (BD1), TuanPN\_1 (BD1), Unstoppable\_1 (BD1), Urza\_1 (BD6), Vanseggelen\_1 (BD3), Verabelle\_1 (BD3), VieEnRose\_1 (BD6), Werner\_1 (BD1), Whatever\_1 (BD1), Yasdni1\_1 (BD1), Yosif\_1 (BD3), Zemlya\_1 (BD1), phiCAM\_01 (BD3),

Start 8:

- Found in 1 of 73 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 1 of 66
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Andris\_1 (BD2),

### Summary by clusters:

There are 4 clusters represented in this pham: BD6, BD1, BD3, BD2,

Info for manual annotations of cluster BD1:

- Start number 7 was manually annotated 54 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 8 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 2 was manually annotated 2 times for cluster BD3.
- Start number 7 was manually annotated 5 times for cluster BD3.

Info for manual annotations of cluster BD6:

- Start number 7 was manually annotated 4 times for cluster BD6.

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

Gene: Aaronocolus\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Aaronocolus\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Alsaber\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Alsaber\_1:

(Start: 7 @297 has 63 MA's), (11, 249), (13, 240),

Gene: Amela\_1 Start: 369, Stop: 91, Start Num: 2

Candidate Starts for Amela\_1:

(Start: 2 @369 has 2 MA's), (Start: 7 @297 has 63 MA's), (11, 249), (13, 240),

Gene: Andris\_1 Start: 244, Stop: 65, Start Num: 8

Candidate Starts for Andris\_1:

(Start: 7 @253 has 63 MA's), (Start: 8 @244 has 1 MA's), (21, 109),

Gene: Asten\_1 Start: 296, Stop: 90, Start Num: 7

Candidate Starts for Asten\_1:

(1, 392), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: BarryBee\_1 Start: 296, Stop: 90, Start Num: 7

Candidate Starts for BarryBee\_1:

(1, 392), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: BeardedLady\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for BeardedLady\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Bovely\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Bovely\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Brataylor\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Brataylor\_1:

(1, 393), (6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (18, 174), (25, 111),

Gene: BryanRecycles\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for BryanRecycles\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Caliburn\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Caliburn\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Celery\_1 Start: 297, Stop: 103, Start Num: 7

Candidate Starts for Celery\_1:

(Start: 2 @369 has 2 MA's), (4, 351), (Start: 7 @297 has 63 MA's), (11, 249), (12, 246), (19, 165),

Gene: Celeste\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Celeste\_1:

(1, 393), (6, 324), (Start: 7 @297 has 63 MA's), (9, 273), (16, 231), (18, 174), (25, 111),

Gene: Celia\_1 Start: 300, Stop: 103, Start Num: 7

Candidate Starts for Celia\_1:

(1, 390), (Start: 7 @300 has 63 MA's), (11, 249),

Gene: Chucky\_1 Start: 296, Stop: 90, Start Num: 7

Candidate Starts for Chucky\_1:

(6, 323), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: Conan\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Conan\_1:

(Start: 7 @297 has 63 MA's), (11, 249), (13, 240),

Gene: Danzina\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Danzina\_1:

(1, 393), (6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (18, 174), (25, 111),

Gene: Dattran\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Dattran\_1:

(6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (18, 174), (25, 111),

Gene: Dexers\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Dexers\_1:

(Start: 7 @297 has 63 MA's), (11, 249), (13, 240),

Gene: Dwayne\_1 Start: 296, Stop: 90, Start Num: 7

Candidate Starts for Dwayne\_1:

(6, 323), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: Eddasa\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Eddasa\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Ejemplo\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Ejemplo\_1:

(1, 393), (Start: 7 @297 has 63 MA's), (16, 231), (25, 111),

Gene: ElGato\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for ElGato\_1:

(Start: 7 @297 has 63 MA's), (11, 249), (13, 240),

Gene: Emaanora\_1 Start: 296, Stop: 90, Start Num: 7

Candidate Starts for Emaanora\_1:

(1, 392), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: EnochSoames\_1 Start: 296, Stop: 90, Start Num: 7

Candidate Starts for EnochSoames\_1:

(Start: 7 @296 has 63 MA's), (17, 188), (18, 173), (20, 158), (23, 128),

Gene: Esperer\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Esperer\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Goby\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Goby\_1:

(6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (18, 174), (25, 111),

Gene: Godpower\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Godpower\_1:

(1, 393), (6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (18, 174), (25, 111),

Gene: Hippo\_1 Start: 296, Stop: 90, Start Num: 7

Candidate Starts for Hippo\_1:

(1, 392), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: Hydra\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Hydra\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Indigo\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Indigo\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Itza\_1 Start: 300, Stop: 103, Start Num: 7

Candidate Starts for Itza\_1:

(1, 390), (Start: 7 @300 has 63 MA's), (11, 249),

Gene: Izzy\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Izzy\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Jash\_1 Start: 297, Stop: 91, Start Num: 7

Candidate Starts for Jash\_1:

(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Katalie\_1 Start: 296, Stop: 90, Start Num: 7

Candidate Starts for Katalie\_1:

(5, 344), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230),

Gene: Legacy\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Legacy\_1:  
(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Leviticus\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Leviticus\_1:  
(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Lika\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Lika\_1:  
(1, 393), (6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (18, 174), (25, 111),

Gene: Lorelei\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Lorelei\_1:  
(6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (25, 111),

Gene: Maneekul\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Maneekul\_1:  
(1, 393), (Start: 7 @297 has 63 MA's), (14, 237), (16, 231), (25, 111),

Gene: Nabi\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Nabi\_1:  
(6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (25, 111),

Gene: Nanodon\_1 Start: 296, Stop: 102, Start Num: 7  
Candidate Starts for Nanodon\_1:  
(Start: 7 @296 has 63 MA's), (9, 272), (17, 188), (25, 110),

Gene: Nerdos\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Nerdos\_1:  
(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Oliynyk\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Oliynyk\_1:  
(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Ozzie\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Ozzie\_1:  
(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: OzzyJ\_1 Start: 296, Stop: 90, Start Num: 7  
Candidate Starts for OzzyJ\_1:  
(6, 323), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: Phettuccine\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Phettuccine\_1:  
(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Provolone\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Provolone\_1:  
(Start: 7 @297 has 63 MA's), (11, 249), (13, 240),

Gene: Rana\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Rana\_1:  
(6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (25, 111),

Gene: RedBear\_1 Start: 296, Stop: 90, Start Num: 7  
Candidate Starts for RedBear\_1:  
(5, 344), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230),

Gene: Rusticus\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Rusticus\_1:  
(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Saftant\_1 Start: 297, Stop: 103, Start Num: 7  
Candidate Starts for Saftant\_1:  
(Start: 7 @297 has 63 MA's), (12, 246), (19, 165),

Gene: SarahRose\_1 Start: 296, Stop: 90, Start Num: 7  
Candidate Starts for SarahRose\_1:  
(1, 392), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: Snorlax\_1 Start: 296, Stop: 90, Start Num: 7  
Candidate Starts for Snorlax\_1:  
(1, 392), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: South40\_1 Start: 296, Stop: 90, Start Num: 7  
Candidate Starts for South40\_1:  
(5, 344), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230),

Gene: Sujidade\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Sujidade\_1:  
(6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (25, 111),

Gene: SunsetPointe\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for SunsetPointe\_1:  
(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: TagePhighter\_1 Start: 296, Stop: 90, Start Num: 7  
Candidate Starts for TagePhighter\_1:  
(6, 323), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: Toma\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Toma\_1:  
(6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (18, 174), (25, 111),

Gene: Triste\_1 Start: 296, Stop: 90, Start Num: 7  
Candidate Starts for Triste\_1:  
(6, 323), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: TuanPN\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for TuanPN\_1:  
(1, 393), (Start: 7 @297 has 63 MA's), (16, 231), (25, 111),

Gene: Unstoppable\_1 Start: 297, Stop: 91, Start Num: 7



Candidate Starts for Unstoppable\_1:  
(Start: 7 @297 has 63 MA's), (17, 189), (18, 174), (20, 159), (23, 129),

Gene: Urza\_1 Start: 300, Stop: 103, Start Num: 7  
Candidate Starts for Urza\_1:  
(1, 390), (Start: 7 @300 has 63 MA's), (11, 249),

Gene: Vanseggelen\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Vanseggelen\_1:  
(Start: 7 @297 has 63 MA's), (11, 249),

Gene: Verabelle\_1 Start: 297, Stop: 103, Start Num: 7  
Candidate Starts for Verabelle\_1:  
(Start: 2 @369 has 2 MA's), (3, 363), (Start: 7 @297 has 63 MA's), (13, 240),

Gene: Verse\_1 Start: 369, Stop: 91, Start Num: 2  
Candidate Starts for Verse\_1:  
(Start: 2 @369 has 2 MA's), (Start: 7 @297 has 63 MA's), (11, 249), (13, 240),

Gene: VieEnRose\_1 Start: 300, Stop: 103, Start Num: 7  
Candidate Starts for VieEnRose\_1:  
(Start: 7 @300 has 63 MA's), (11, 249),

Gene: Werner\_1 Start: 296, Stop: 90, Start Num: 7  
Candidate Starts for Werner\_1:  
(6, 323), (Start: 7 @296 has 63 MA's), (9, 272), (16, 230), (25, 110),

Gene: Whatever\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Whatever\_1:  
(1, 393), (Start: 7 @297 has 63 MA's), (9, 273), (16, 231), (25, 111),

Gene: Yasdni1\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Yasdni1\_1:  
(1, 393), (Start: 7 @297 has 63 MA's), (14, 237), (16, 231), (25, 111),

Gene: Yosif\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Yosif\_1:  
(Start: 7 @297 has 63 MA's), (10, 252), (11, 249), (15, 234), (22, 138), (24, 120),

Gene: Zemlya\_1 Start: 297, Stop: 91, Start Num: 7  
Candidate Starts for Zemlya\_1:  
(1, 393), (6, 324), (Start: 7 @297 has 63 MA's), (16, 231), (18, 174), (25, 111),

Gene: phiCAM\_01 Start: 297, Stop: 103, Start Num: 7  
Candidate Starts for phiCAM\_01:  
(Start: 2 @369 has 2 MA's), (Start: 7 @297 has 63 MA's), (11, 249), (12, 246), (19, 165),