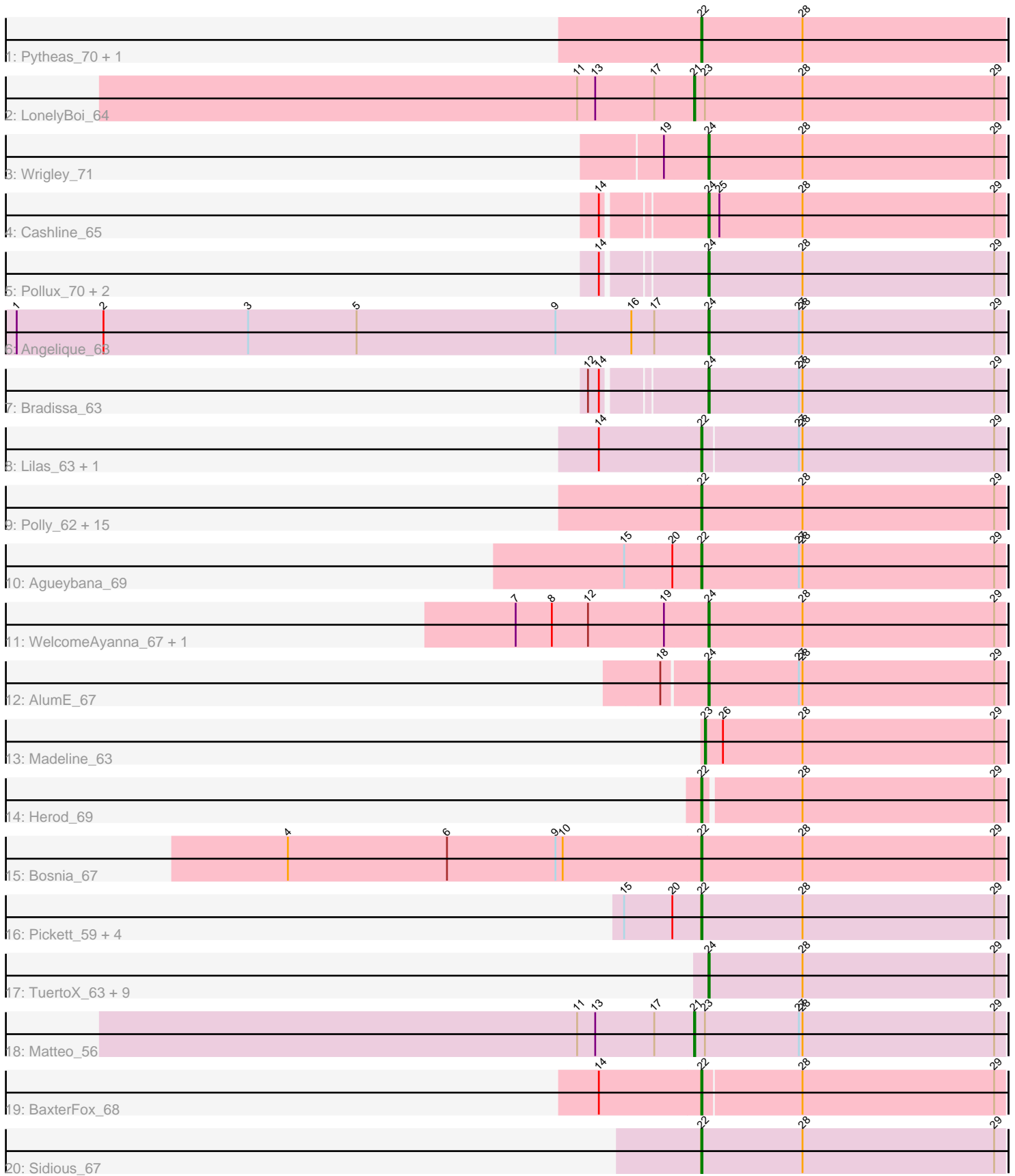


Pham 189792



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 189792 Report

This analysis was run 11/02/24 on database version 579.

Pham number 189792 has 53 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Pytheas\_70, Jablanski\_70
- Track 2 : LonelyBoi\_64
- Track 3 : Wrigley\_71
- Track 4 : Cashline\_65
- Track 5 : Pollux\_70, EdnaMode\_60, Floral\_68
- Track 6 : Angelique\_63
- Track 7 : Bradissa\_63
- Track 8 : Lilas\_63, EnalisNailo\_62
- Track 9 : Polly\_62, Bunnybear\_59, Suscepit\_65, Manasvini\_66, Nymphadora\_69, Antonio\_65, Tayonia\_65, Maridalia\_67, Trumpet\_65, Eviarto\_69, TimTam\_69, BatStarr\_68, Neobush\_67, Zameen\_65, BeeGee\_71, Kita\_66
- Track 10 : Agueybana\_69
- Track 11 : WelcomeAyanna\_67, ThankyouJordi\_67
- Track 12 : AlumE\_67
- Track 13 : Madeline\_63
- Track 14 : Herod\_69
- Track 15 : Bosnia\_67
- Track 16 : Pickett\_59, Yeet412\_60, RavenCo17\_64, EMSquaredA\_66, Marteena\_65
- Track 17 : TuertoX\_63, Gizermo\_63, PantheRoc\_71, Haley23\_63, Bjanes7\_60, Mocha12\_63, Lamberg\_59, Nettuno\_59, Clap\_63, Cynthia\_63
- Track 18 : Matteo\_56
- Track 19 : BaxterFox\_68
- Track 20 : Sidious\_67

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

The start number called the most often in the published annotations is 22, it was called in 30 of the 53 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agueybana\_69, Antonio\_65, BatStarr\_68, BaxterFox\_68, BeeGee\_71, Bosnia\_67, Bunnybear\_59, EMSquaredA\_66, EnalisNailo\_62, Eviarto\_69, Herod\_69, Jablanski\_70, Kita\_66, Lilas\_63, Manasvini\_66, Maridalia\_67, Marteena\_65, Neobush\_67, Nymphadora\_69, Pickett\_59, Polly\_62, Pytheas\_70, RavenCo17\_64,

Sidious\_67, Suscepit\_65, Tayonia\_65, TimTam\_69, Trumpet\_65, Yeet412\_60, Zameen\_65,

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

- 

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

- AlumE\_67, Angelique\_63, Bjanes7\_60, Bradissa\_63, Cashline\_65, Clap\_63, Cynthia\_63, EdnaMode\_60, Floral\_68, Gizermo\_63, Haley23\_63, Lamberg\_59, LonelyBoi\_64, Madeline\_63, Matteo\_56, Mocha12\_63, Nettuno\_59, PantheRoc\_71, Pollux\_70, ThankyouJordi\_67, TuertoX\_63, WelcomeAyanna\_67, Wrigley\_71,

### Summary by start number:

Start 21:

- Found in 2 of 53 ( 3.8% ) of genes in pham
- Manual Annotations of this start: 2 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LonelyBoi\_64 (CY), Matteo\_56 (CZ2),

Start 22:

- Found in 30 of 53 ( 56.6% ) of genes in pham
- Manual Annotations of this start: 30 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agueybana\_69 (CZ1), Antonio\_65 (CZ1), BatStarr\_68 (CZ1), BaxterFox\_68 (CZ3), BeeGee\_71 (CY), Bosnia\_67 (CZ1), Bunnybear\_59 (CZ), EMSquaredA\_66 (CY1), EnalisNailo\_62 (CY1), Eviarto\_69 (CZ1), Herod\_69 (CZ1), Jablanski\_70 (CY), Kita\_66 (CZ1), Lilas\_63 (CY1), Manasvini\_66 (CZ1), Maridalia\_67 (CZ1), Marteena\_65 (CY1), Neobush\_67 (CZ1), Nymphadora\_69 (CZ1), Pickett\_59 (CZ2), Polly\_62 (CZ1), Pytheas\_70 (CY), RavenCo17\_64 (CZ8), Sidious\_67 (CZ7), Suscepit\_65 (CZ1), Tayonia\_65 (CZ1), TimTam\_69 (CZ1), Trumpet\_65 (CZ1), Yeet412\_60 (CZ2), Zameen\_65 (CZ1),

Start 23:

- Found in 3 of 53 ( 5.7% ) of genes in pham
- Manual Annotations of this start: 1 of 53
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Madeline\_63 (CZ1),

Start 24:

- Found in 20 of 53 ( 37.7% ) of genes in pham
- Manual Annotations of this start: 20 of 53
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlumE\_67 (CZ1), Angelique\_63 (CY1), Bjanes7\_60 (CZ2), Bradissa\_63 (CY1), Cashline\_65 (CY), Clap\_63 (CZ2), Cynthia\_63 (CZ2), EdnaMode\_60 (CZ2), Floral\_68 (CY1), Gizermo\_63 (CZ2), Haley23\_63 (CZ2), Lamberg\_59 (CZ2), Mocha12\_63 (CZ2), Nettuno\_59 (CZ2), PantheRoc\_71 (CZ3), Pollux\_70 (CY1), ThankyouJordi\_67 (CZ1), TuertoX\_63 (CZ2), WelcomeAyanna\_67 (CZ1), Wrigley\_71 (CY),

### Summary by clusters:

There are 8 clusters represented in this pham: CY1, CZ2, CZ3, CZ1, CZ8, CZ7, CZ, CY,

Info for manual annotations of cluster CY:

- Start number 21 was manually annotated 1 time for cluster CY.
- Start number 22 was manually annotated 3 times for cluster CY.
- Start number 24 was manually annotated 2 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 22 was manually annotated 4 times for cluster CY1.
- Start number 24 was manually annotated 4 times for cluster CY1.

Info for manual annotations of cluster CZ:

- Start number 22 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 22 was manually annotated 17 times for cluster CZ1.
- Start number 23 was manually annotated 1 time for cluster CZ1.
- Start number 24 was manually annotated 3 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 21 was manually annotated 1 time for cluster CZ2.
- Start number 22 was manually annotated 2 times for cluster CZ2.
- Start number 24 was manually annotated 10 times for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 22 was manually annotated 1 time for cluster CZ3.
- Start number 24 was manually annotated 1 time for cluster CZ3.

Info for manual annotations of cluster CZ7:

- Start number 22 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster CZ8:

- Start number 22 was manually annotated 1 time for cluster CZ8.

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

Gene: Agueybana\_69 Start: 46506, Stop: 46757, Start Num: 22

Candidate Starts for Agueybana\_69:

(15, 46443), (20, 46482), (Start: 22 @46506 has 30 MA's), (27, 46587), (28, 46590), (29, 46749),

Gene: AlumE\_67 Start: 46787, Stop: 47032, Start Num: 24

Candidate Starts for AlumE\_67:

(18, 46751), (Start: 24 @46787 has 20 MA's), (27, 46862), (28, 46865), (29, 47024),

Gene: Angelique\_63 Start: 45248, Stop: 45493, Start Num: 24

Candidate Starts for Angelique\_63:

(1, 44675), (2, 44747), (3, 44867), (5, 44957), (9, 45122), (16, 45185), (17, 45203), (Start: 24 @45248 has 20 MA's), (27, 45323), (28, 45326), (29, 45485),

Gene: Antonio\_65 Start: 44009, Stop: 44260, Start Num: 22

Candidate Starts for Antonio\_65:  
(Start: 22 @44009 has 30 MA's), (28, 44093), (29, 44252),

Gene: BatStarr\_68 Start: 47043, Stop: 47291, Start Num: 22  
Candidate Starts for BatStarr\_68:  
(Start: 22 @47043 has 30 MA's), (28, 47124), (29, 47283),

Gene: BaxterFox\_68 Start: 46523, Stop: 46771, Start Num: 22  
Candidate Starts for BaxterFox\_68:  
(14, 46439), (Start: 22 @46523 has 30 MA's), (28, 46604), (29, 46763),

Gene: BeeGee\_71 Start: 45992, Stop: 46243, Start Num: 22  
Candidate Starts for BeeGee\_71:  
(Start: 22 @45992 has 30 MA's), (28, 46076), (29, 46235),

Gene: Bjaner7\_60 Start: 40715, Stop: 40960, Start Num: 24  
Candidate Starts for Bjaner7\_60:  
(Start: 24 @40715 has 20 MA's), (28, 40793), (29, 40952),

Gene: Bosnia\_67 Start: 47305, Stop: 47556, Start Num: 22  
Candidate Starts for Bosnia\_67:  
(4, 46963), (6, 47095), (9, 47185), (10, 47191), (Start: 22 @47305 has 30 MA's), (28, 47389), (29, 47548),

Gene: Bradissa\_63 Start: 45371, Stop: 45616, Start Num: 24  
Candidate Starts for Bradissa\_63:  
(12, 45284), (14, 45293), (Start: 24 @45371 has 20 MA's), (27, 45446), (28, 45449), (29, 45608),

Gene: Bunnybear\_59 Start: 43728, Stop: 43979, Start Num: 22  
Candidate Starts for Bunnybear\_59:  
(Start: 22 @43728 has 30 MA's), (28, 43812), (29, 43971),

Gene: Cashline\_65 Start: 46170, Stop: 46415, Start Num: 24  
Candidate Starts for Cashline\_65:  
(14, 46092), (Start: 24 @46170 has 20 MA's), (25, 46179), (28, 46248), (29, 46407),

Gene: Clap\_63 Start: 40894, Stop: 41139, Start Num: 24  
Candidate Starts for Clap\_63:  
(Start: 24 @40894 has 20 MA's), (28, 40972), (29, 41131),

Gene: Cynthia\_63 Start: 40892, Stop: 41137, Start Num: 24  
Candidate Starts for Cynthia\_63:  
(Start: 24 @40892 has 20 MA's), (28, 40970), (29, 41129),

Gene: EMSquaredA\_66 Start: 45093, Stop: 45344, Start Num: 22  
Candidate Starts for EMSquaredA\_66:  
(15, 45030), (20, 45069), (Start: 22 @45093 has 30 MA's), (28, 45177), (29, 45336),

Gene: EdnaMode\_60 Start: 40159, Stop: 40404, Start Num: 24  
Candidate Starts for EdnaMode\_60:  
(14, 40081), (Start: 24 @40159 has 20 MA's), (28, 40237), (29, 40396),

Gene: EnalisNailo\_62 Start: 44902, Stop: 45150, Start Num: 22

Candidate Starts for EnalisNailo\_62:

(14, 44818), (Start: 22 @44902 has 30 MA's), (27, 44980), (28, 44983), (29, 45142),

Gene: Eviarto\_69 Start: 47018, Stop: 47266, Start Num: 22

Candidate Starts for Eviarto\_69:

(Start: 22 @47018 has 30 MA's), (28, 47099), (29, 47258),

Gene: Floral\_68 Start: 47328, Stop: 47573, Start Num: 24

Candidate Starts for Floral\_68:

(14, 47250), (Start: 24 @47328 has 20 MA's), (28, 47406), (29, 47565),

Gene: Gizermo\_63 Start: 40894, Stop: 41139, Start Num: 24

Candidate Starts for Gizermo\_63:

(Start: 24 @40894 has 20 MA's), (28, 40972), (29, 41131),

Gene: Haley23\_63 Start: 40894, Stop: 41139, Start Num: 24

Candidate Starts for Haley23\_63:

(Start: 24 @40894 has 20 MA's), (28, 40972), (29, 41131),

Gene: Herod\_69 Start: 47729, Stop: 47974, Start Num: 22

Candidate Starts for Herod\_69:

(Start: 22 @47729 has 30 MA's), (28, 47807), (29, 47966),

Gene: Jablanski\_70 Start: 47824, Stop: 48075, Start Num: 22

Candidate Starts for Jablanski\_70:

(Start: 22 @47824 has 30 MA's), (28, 47908),

Gene: Kita\_66 Start: 44018, Stop: 44269, Start Num: 22

Candidate Starts for Kita\_66:

(Start: 22 @44018 has 30 MA's), (28, 44102), (29, 44261),

Gene: Lamberg\_59 Start: 39403, Stop: 39648, Start Num: 24

Candidate Starts for Lamberg\_59:

(Start: 24 @39403 has 20 MA's), (28, 39481), (29, 39640),

Gene: Lilas\_63 Start: 46440, Stop: 46688, Start Num: 22

Candidate Starts for Lilas\_63:

(14, 46356), (Start: 22 @46440 has 30 MA's), (27, 46518), (28, 46521), (29, 46680),

Gene: LonelyBoi\_64 Start: 46993, Stop: 47250, Start Num: 21

Candidate Starts for LonelyBoi\_64:

(11, 46897), (13, 46912), (17, 46960), (Start: 21 @46993 has 2 MA's), (Start: 23 @47002 has 1 MA's),  
(28, 47083), (29, 47242),

Gene: Madeline\_63 Start: 46342, Stop: 46590, Start Num: 23

Candidate Starts for Madeline\_63:

(Start: 23 @46342 has 1 MA's), (26, 46357), (28, 46423), (29, 46582),

Gene: Manasvini\_66 Start: 44033, Stop: 44284, Start Num: 22

Candidate Starts for Manasvini\_66:

(Start: 22 @44033 has 30 MA's), (28, 44117), (29, 44276),

Gene: Maridalia\_67 Start: 45387, Stop: 45638, Start Num: 22

Candidate Starts for Maridalia\_67:

(Start: 22 @45387 has 30 MA's), (28, 45471), (29, 45630),

Gene: Marteena\_65 Start: 45093, Stop: 45344, Start Num: 22

Candidate Starts for Marteena\_65:

(15, 45030), (20, 45069), (Start: 22 @45093 has 30 MA's), (28, 45177), (29, 45336),

Gene: Matteo\_56 Start: 38069, Stop: 38326, Start Num: 21

Candidate Starts for Matteo\_56:

(11, 37973), (13, 37988), (17, 38036), (Start: 21 @38069 has 2 MA's), (Start: 23 @38078 has 1 MA's), (27, 38156), (28, 38159), (29, 38318),

Gene: Mocha12\_63 Start: 40894, Stop: 41139, Start Num: 24

Candidate Starts for Mocha12\_63:

(Start: 24 @40894 has 20 MA's), (28, 40972), (29, 41131),

Gene: Neobush\_67 Start: 44577, Stop: 44828, Start Num: 22

Candidate Starts for Neobush\_67:

(Start: 22 @44577 has 30 MA's), (28, 44661), (29, 44820),

Gene: Nettuno\_59 Start: 39403, Stop: 39651, Start Num: 24

Candidate Starts for Nettuno\_59:

(Start: 24 @39403 has 20 MA's), (28, 39481), (29, 39640),

Gene: Nymphadora\_69 Start: 47042, Stop: 47290, Start Num: 22

Candidate Starts for Nymphadora\_69:

(Start: 22 @47042 has 30 MA's), (28, 47123), (29, 47282),

Gene: PantheRoc\_71 Start: 47028, Stop: 47273, Start Num: 24

Candidate Starts for PantheRoc\_71:

(Start: 24 @47028 has 20 MA's), (28, 47106), (29, 47265),

Gene: Pickett\_59 Start: 38758, Stop: 39009, Start Num: 22

Candidate Starts for Pickett\_59:

(15, 38695), (20, 38734), (Start: 22 @38758 has 30 MA's), (28, 38842), (29, 39001),

Gene: Pollux\_70 Start: 47328, Stop: 47573, Start Num: 24

Candidate Starts for Pollux\_70:

(14, 47250), (Start: 24 @47328 has 20 MA's), (28, 47406), (29, 47565),

Gene: Polly\_62 Start: 43452, Stop: 43703, Start Num: 22

Candidate Starts for Polly\_62:

(Start: 22 @43452 has 30 MA's), (28, 43536), (29, 43695),

Gene: Pytheas\_70 Start: 47823, Stop: 48074, Start Num: 22

Candidate Starts for Pytheas\_70:

(Start: 22 @47823 has 30 MA's), (28, 47907),

Gene: RavenCo17\_64 Start: 45276, Stop: 45527, Start Num: 22

Candidate Starts for RavenCo17\_64:

(15, 45213), (20, 45252), (Start: 22 @45276 has 30 MA's), (28, 45360), (29, 45519),

Gene: Sidious\_67 Start: 46609, Stop: 46860, Start Num: 22

Candidate Starts for Sidious\_67:  
(Start: 22 @46609 has 30 MA's), (28, 46693), (29, 46852),

Gene: Suscepit\_65 Start: 44010, Stop: 44261, Start Num: 22  
Candidate Starts for Suscepit\_65:  
(Start: 22 @44010 has 30 MA's), (28, 44094), (29, 44253),

Gene: Tayonia\_65 Start: 44009, Stop: 44260, Start Num: 22  
Candidate Starts for Tayonia\_65:  
(Start: 22 @44009 has 30 MA's), (28, 44093), (29, 44252),

Gene: ThankyouJordi\_67 Start: 47522, Stop: 47767, Start Num: 24  
Candidate Starts for ThankyouJordi\_67:  
(7, 47363), (8, 47393), (12, 47423), (19, 47486), (Start: 24 @47522 has 20 MA's), (28, 47600), (29, 47759),

Gene: TimTam\_69 Start: 47042, Stop: 47290, Start Num: 22  
Candidate Starts for TimTam\_69:  
(Start: 22 @47042 has 30 MA's), (28, 47123), (29, 47282),

Gene: Trumpet\_65 Start: 44010, Stop: 44261, Start Num: 22  
Candidate Starts for Trumpet\_65:  
(Start: 22 @44010 has 30 MA's), (28, 44094), (29, 44253),

Gene: TuertoX\_63 Start: 40894, Stop: 41139, Start Num: 24  
Candidate Starts for TuertoX\_63:  
(Start: 24 @40894 has 20 MA's), (28, 40972), (29, 41131),

Gene: WelcomeAyanna\_67 Start: 47669, Stop: 47914, Start Num: 24  
Candidate Starts for WelcomeAyanna\_67:  
(7, 47510), (8, 47540), (12, 47570), (19, 47633), (Start: 24 @47669 has 20 MA's), (28, 47747), (29, 47906),

Gene: Wrigley\_71 Start: 46788, Stop: 47033, Start Num: 24  
Candidate Starts for Wrigley\_71:  
(19, 46752), (Start: 24 @46788 has 20 MA's), (28, 46866), (29, 47025),

Gene: Yeet412\_60 Start: 41044, Stop: 41295, Start Num: 22  
Candidate Starts for Yeet412\_60:  
(15, 40981), (20, 41020), (Start: 22 @41044 has 30 MA's), (28, 41128), (29, 41287),

Gene: Zameen\_65 Start: 44009, Stop: 44260, Start Num: 22  
Candidate Starts for Zameen\_65:  
(Start: 22 @44009 has 30 MA's), (28, 44093), (29, 44252),