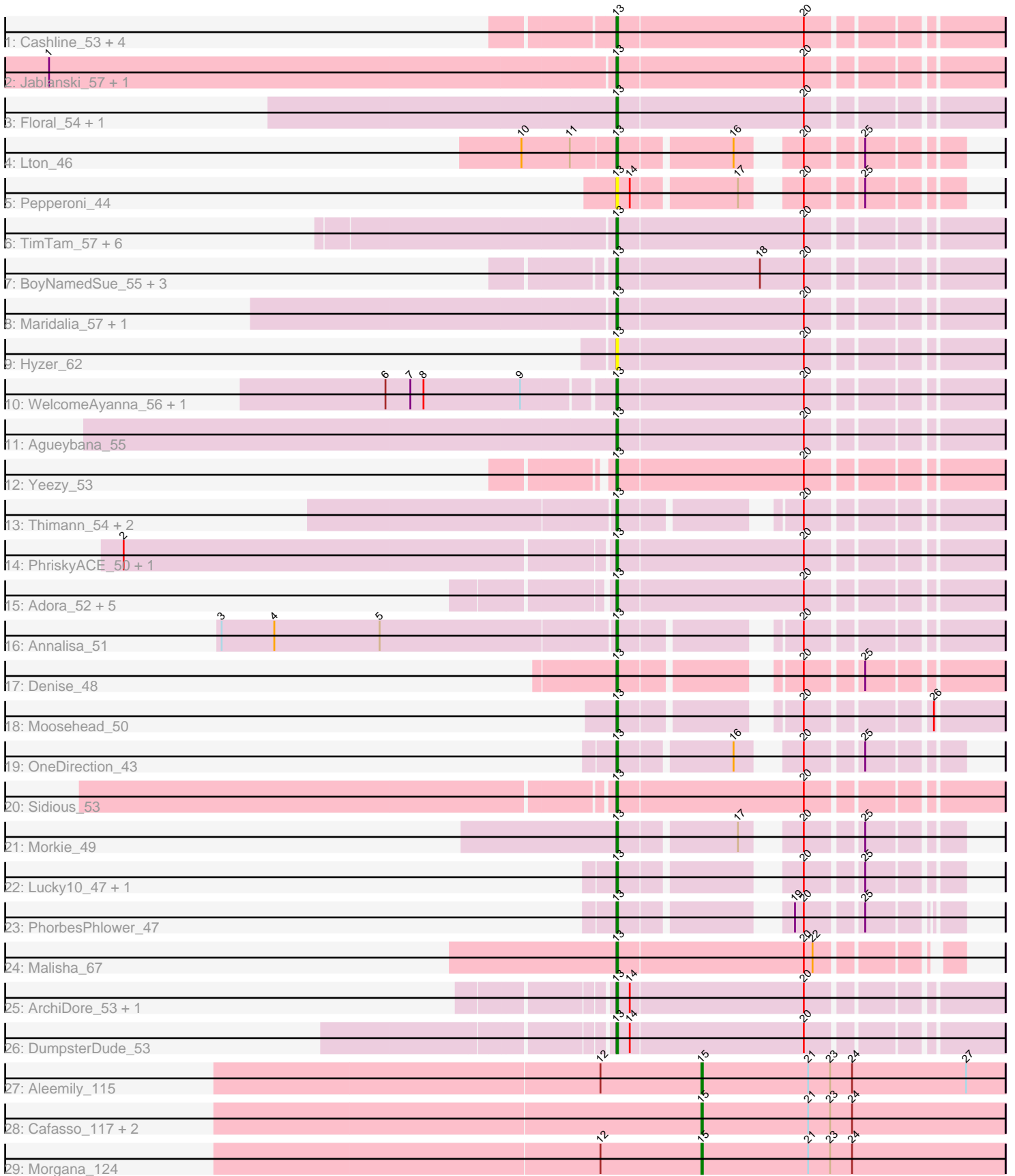


Pham 224609



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 224609 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224609 has 58 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Cashline\_53, Ohgeesy\_54, BaxterFox\_57, Ebert\_54, Madeline\_54
- Track 2 : Jablanski\_57, Pytheas\_57
- Track 3 : Floral\_54, Pollux\_56
- Track 4 : Lton\_46
- Track 5 : Pepperoni\_44
- Track 6 : TimTam\_57, Herod\_55, Eviarto\_57, BatStarr\_56, PantheRoc\_57, Hugley\_53, Nymphadora\_57
- Track 7 : BoyNamedSue\_55, EMsquaredA\_53, AlumE\_55, Marteena\_52
- Track 8 : Maridalia\_57, Bunnybear\_49
- Track 9 : Hyzer\_62
- Track 10 : WelcomeAyanna\_56, ThankyouJordi\_56
- Track 11 : Agueybana\_55
- Track 12 : Yeezy\_53
- Track 13 : Thimann\_54, Oregano\_54, Easley\_49
- Track 14 : PhriskyACE\_50, Powerball\_51
- Track 15 : Adora\_52, Hortense\_55, Mcklovin\_51, Shlim410\_53, Howe\_55, Twinkle\_54
- Track 16 : Annalisa\_51
- Track 17 : Denise\_48
- Track 18 : Moosehead\_50
- Track 19 : OneDirection\_43
- Track 20 : Sidious\_53
- Track 21 : Morkie\_49
- Track 22 : Lucky10\_47, Faith5x5\_42
- Track 23 : PhorbessPhlower\_47
- Track 24 : Malisha\_67
- Track 25 : ArchiDore\_53, Ruthy\_52
- Track 26 : DumpsterDude\_53
- Track 27 : Aleemily\_115
- Track 28 : Cafasso\_117, ModicumRichard\_117, ObLaDi\_116
- Track 29 : Morgana\_124

***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 48 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adora\_52, Agueybana\_55, AlumE\_55, Annalisa\_51, ArchiDore\_53, BatStarr\_56, BaxterFox\_57, BoyNamedSue\_55, Bunnybear\_49, Cashline\_53, Denise\_48, DumpsterDude\_53, EMSquaredA\_53, Easley\_49, Ebert\_54, Eviarto\_57, Faith5x5\_42, Floral\_54, Herod\_55, Hortense\_55, Howe\_55, Hugley\_53, Hyzer\_62, Jablanski\_57, Lton\_46, Lucky10\_47, Madeline\_54, Malisha\_67, Maridalia\_57, Marteena\_52, Mcklovin\_51, Moosehead\_50, Morkie\_49, Nymphadora\_57, Ohgeesy\_54, OneDirection\_43, Oregano\_54, PantheRoc\_57, Pepperoni\_44, PhorbPhlower\_47, PhriskyACE\_50, Pollux\_56, Powerball\_51, Pytheas\_57, Ruthy\_52, Shlim410\_53, Sidious\_53, ThankyouJordi\_56, Thimann\_54, TimTam\_57, Twinkle\_54, WelcomeAyanna\_56, Yeezy\_53,

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

- 

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

- Aleemily\_115, Cafasso\_117, ModicumRichard\_117, Morgana\_124, ObLaDi\_116,

### Summary by start number:

Start 13:

- Found in 53 of 58 ( 91.4% ) of genes in pham
- Manual Annotations of this start: 48 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adora\_52 (CZ4), Agueybana\_55 (CZ1), AlumE\_55 (CZ1), Annalisa\_51 (CZ4), ArchiDore\_53 (DW), BatStarr\_56 (CZ1), BaxterFox\_57 (CZ3), BoyNamedSue\_55 (CZ1), Bunnybear\_49 (CZ), Cashline\_53 (CY), Denise\_48 (CZ5), DumpsterDude\_53 (DW), EMSquaredA\_53 (CY1), Easley\_49 (CZ4), Ebert\_54 (CZ2), Eviarto\_57 (CZ1), Faith5x5\_42 (CZ6), Floral\_54 (CY1), Herod\_55 (CZ1), Hortense\_55 (CZ4), Howe\_55 (CZ4), Hugley\_53 (CZ1), Hyzer\_62 (CZ1), Jablanski\_57 (CY), Lton\_46 (CZ), Lucky10\_47 (DH), Madeline\_54 (CZ1), Malisha\_67 (DN), Maridalia\_57 (CZ1), Marteena\_52 (CY1), Mcklovin\_51 (CZ4), Moosehead\_50 (CZ6), Morkie\_49 (DH), Nymphadora\_57 (CZ1), Ohgeesy\_54 (CZ), OneDirection\_43 (CZ6), Oregano\_54 (CZ4), PantheRoc\_57 (CZ3), Pepperoni\_44 (CZ), PhorbPhlower\_47 (DH), PhriskyACE\_50 (CZ4), Pollux\_56 (CY1), Powerball\_51 (CZ4), Pytheas\_57 (CY), Ruthy\_52 (DW), Shlim410\_53 (CZ4), Sidious\_53 (CZ7), ThankyouJordi\_56 (CZ1), Thimann\_54 (CZ4), TimTam\_57 (CZ1), Twinkle\_54 (CZ4), WelcomeAyanna\_56 (CZ1), Yeezy\_53 (CZ3),

Start 15:

- Found in 5 of 58 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 4 of 52
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aleemily\_115 (DZ), Cafasso\_117 (DZ), ModicumRichard\_117 (DZ), Morgana\_124 (DZ), ObLaDi\_116 (DZ),

### Summary by clusters:

There are 14 clusters represented in this pham: DN, CY1, DH, CZ2, CZ3, CZ1, CZ6, CZ7, CZ4, CZ5, CZ, CY, DZ, DW,

Info for manual annotations of cluster CY:

- Start number 13 was manually annotated 3 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 13 was manually annotated 4 times for cluster CY1.

Info for manual annotations of cluster CZ:

- Start number 13 was manually annotated 3 times for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 13 was manually annotated 12 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 13 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ3:

- Start number 13 was manually annotated 3 times for cluster CZ3.

Info for manual annotations of cluster CZ4:

- Start number 13 was manually annotated 11 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 13 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 13 was manually annotated 3 times for cluster CZ6.

Info for manual annotations of cluster CZ7:

- Start number 13 was manually annotated 1 time for cluster CZ7.

Info for manual annotations of cluster DH:

- Start number 13 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

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

Info for manual annotations of cluster DW:

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

Info for manual annotations of cluster DZ:

- Start number 15 was manually annotated 4 times for cluster DZ.

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

Gene: Adora\_52 Start: 38735, Stop: 38977, Start Num: 13

Candidate Starts for Adora\_52:

(Start: 13 @38735 has 48 MA's), (20, 38861),

Gene: Agueybana\_55 Start: 39414, Stop: 39656, Start Num: 13

Candidate Starts for Agueybana\_55:

(Start: 13 @39414 has 48 MA's), (20, 39540),

Gene: Aleemily\_115 Start: 64180, Stop: 63974, Start Num: 15

Candidate Starts for Aleemily\_115:

(12, 64249), (Start: 15 @64180 has 4 MA's), (21, 64108), (23, 64093), (24, 64078), (27, 64000),

Gene: AlumE\_55 Start: 39196, Stop: 39438, Start Num: 13

Candidate Starts for AlumE\_55:

(Start: 13 @39196 has 48 MA's), (18, 39292), (20, 39322),

Gene: Annalisa\_51 Start: 35580, Stop: 35795, Start Num: 13

Candidate Starts for Annalisa\_51:

(3, 35316), (4, 35352), (5, 35424), (Start: 13 @35580 has 48 MA's), (20, 35679),

Gene: ArchiDore\_53 Start: 39524, Stop: 39766, Start Num: 13

Candidate Starts for ArchiDore\_53:

(Start: 13 @39524 has 48 MA's), (14, 39533), (20, 39650),

Gene: BatStarr\_56 Start: 40720, Stop: 40962, Start Num: 13

Candidate Starts for BatStarr\_56:

(Start: 13 @40720 has 48 MA's), (20, 40846),

Gene: BaxterFox\_57 Start: 40474, Stop: 40716, Start Num: 13

Candidate Starts for BaxterFox\_57:

(Start: 13 @40474 has 48 MA's), (20, 40600),

Gene: BoyNamedSue\_55 Start: 39196, Stop: 39438, Start Num: 13

Candidate Starts for BoyNamedSue\_55:

(Start: 13 @39196 has 48 MA's), (18, 39292), (20, 39322),

Gene: Bunnybear\_49 Start: 37204, Stop: 37446, Start Num: 13

Candidate Starts for Bunnybear\_49:

(Start: 13 @37204 has 48 MA's), (20, 37330),

Gene: Cafasso\_117 Start: 64785, Stop: 64579, Start Num: 15

Candidate Starts for Cafasso\_117:

(Start: 15 @64785 has 4 MA's), (21, 64713), (23, 64698), (24, 64683),

Gene: Cashline\_53 Start: 39714, Stop: 39956, Start Num: 13

Candidate Starts for Cashline\_53:

(Start: 13 @39714 has 48 MA's), (20, 39840),

Gene: Denise\_48 Start: 33091, Stop: 33306, Start Num: 13

Candidate Starts for Denise\_48:

(Start: 13 @33091 has 48 MA's), (20, 33190), (25, 33223),

Gene: DumpsterDude\_53 Start: 41558, Stop: 41800, Start Num: 13

Candidate Starts for DumpsterDude\_53:

(Start: 13 @41558 has 48 MA's), (14, 41567), (20, 41684),

Gene: EMSquaredA\_53 Start: 38371, Stop: 38613, Start Num: 13

Candidate Starts for EMSquaredA\_53:

(Start: 13 @38371 has 48 MA's), (18, 38467), (20, 38497),

Gene: Easley\_49 Start: 35528, Stop: 35743, Start Num: 13  
Candidate Starts for Easley\_49:  
(Start: 13 @35528 has 48 MA's), (20, 35627),

Gene: Ebert\_54 Start: 34571, Stop: 34813, Start Num: 13  
Candidate Starts for Ebert\_54:  
(Start: 13 @34571 has 48 MA's), (20, 34697),

Gene: Eviarto\_57 Start: 40695, Stop: 40937, Start Num: 13  
Candidate Starts for Eviarto\_57:  
(Start: 13 @40695 has 48 MA's), (20, 40821),

Gene: Faith5x5\_42 Start: 30278, Stop: 30463, Start Num: 13  
Candidate Starts for Faith5x5\_42:  
(Start: 13 @30278 has 48 MA's), (20, 30377), (25, 30410),

Gene: Floral\_54 Start: 40277, Stop: 40519, Start Num: 13  
Candidate Starts for Floral\_54:  
(Start: 13 @40277 has 48 MA's), (20, 40403),

Gene: Herod\_55 Start: 40739, Stop: 40981, Start Num: 13  
Candidate Starts for Herod\_55:  
(Start: 13 @40739 has 48 MA's), (20, 40865),

Gene: Hortense\_55 Start: 40090, Stop: 40332, Start Num: 13  
Candidate Starts for Hortense\_55:  
(Start: 13 @40090 has 48 MA's), (20, 40216),

Gene: Howe\_55 Start: 40090, Stop: 40332, Start Num: 13  
Candidate Starts for Howe\_55:  
(Start: 13 @40090 has 48 MA's), (20, 40216),

Gene: Hugley\_53 Start: 40719, Stop: 40961, Start Num: 13  
Candidate Starts for Hugley\_53:  
(Start: 13 @40719 has 48 MA's), (20, 40845),

Gene: Hyzer\_62 Start: 42111, Stop: 42353, Start Num: 13  
Candidate Starts for Hyzer\_62:  
(Start: 13 @42111 has 48 MA's), (20, 42237),

Gene: Jablanski\_57 Start: 41777, Stop: 42019, Start Num: 13  
Candidate Starts for Jablanski\_57:  
(1, 41396), (Start: 13 @41777 has 48 MA's), (20, 41903),

Gene: Lton\_46 Start: 30324, Stop: 30512, Start Num: 13  
Candidate Starts for Lton\_46:  
(10, 30261), (11, 30294), (Start: 13 @30324 has 48 MA's), (16, 30396), (20, 30423), (25, 30456),

Gene: Lucky10\_47 Start: 33042, Stop: 33230, Start Num: 13  
Candidate Starts for Lucky10\_47:  
(Start: 13 @33042 has 48 MA's), (20, 33141), (25, 33174),

Gene: Madeline\_54 Start: 39604, Stop: 39846, Start Num: 13  
Candidate Starts for Madeline\_54:  
(Start: 13 @39604 has 48 MA's), (20, 39730),

Gene: Malisha\_67 Start: 41399, Stop: 41608, Start Num: 13  
Candidate Starts for Malisha\_67:  
(Start: 13 @41399 has 48 MA's), (20, 41525), (22, 41531),

Gene: Maridalia\_57 Start: 38950, Stop: 39192, Start Num: 13  
Candidate Starts for Maridalia\_57:  
(Start: 13 @38950 has 48 MA's), (20, 39076),

Gene: Marteena\_52 Start: 38371, Stop: 38613, Start Num: 13  
Candidate Starts for Marteena\_52:  
(Start: 13 @38371 has 48 MA's), (18, 38467), (20, 38497),

Gene: Mcklovin\_51 Start: 41557, Stop: 41799, Start Num: 13  
Candidate Starts for Mcklovin\_51:  
(Start: 13 @41557 has 48 MA's), (20, 41683),

Gene: ModicumRichard\_117 Start: 65073, Stop: 64867, Start Num: 15  
Candidate Starts for ModicumRichard\_117:  
(Start: 15 @65073 has 4 MA's), (21, 65001), (23, 64986), (24, 64971),

Gene: Moosehead\_50 Start: 31430, Stop: 31645, Start Num: 13  
Candidate Starts for Moosehead\_50:  
(Start: 13 @31430 has 48 MA's), (20, 31529), (26, 31601),

Gene: Morgana\_124 Start: 67243, Stop: 67037, Start Num: 15  
Candidate Starts for Morgana\_124:  
(12, 67312), (Start: 15 @67243 has 4 MA's), (21, 67171), (23, 67156), (24, 67141),

Gene: Morkie\_49 Start: 32379, Stop: 32567, Start Num: 13  
Candidate Starts for Morkie\_49:  
(Start: 13 @32379 has 48 MA's), (17, 32454), (20, 32478), (25, 32511),

Gene: Nymphadora\_57 Start: 40719, Stop: 40961, Start Num: 13  
Candidate Starts for Nymphadora\_57:  
(Start: 13 @40719 has 48 MA's), (20, 40845),

Gene: ObLaDi\_116 Start: 64475, Stop: 64269, Start Num: 15  
Candidate Starts for ObLaDi\_116:  
(Start: 15 @64475 has 4 MA's), (21, 64403), (23, 64388), (24, 64373),

Gene: Ohgeesy\_54 Start: 38818, Stop: 39060, Start Num: 13  
Candidate Starts for Ohgeesy\_54:  
(Start: 13 @38818 has 48 MA's), (20, 38944),

Gene: OneDirection\_43 Start: 29772, Stop: 29960, Start Num: 13  
Candidate Starts for OneDirection\_43:  
(Start: 13 @29772 has 48 MA's), (16, 29844), (20, 29871), (25, 29904),

Gene: Oregano\_54 Start: 36212, Stop: 36427, Start Num: 13

Candidate Starts for Oregano\_54:  
(Start: 13 @36212 has 48 MA's), (20, 36311),

Gene: PantheRoc\_57 Start: 39540, Stop: 39782, Start Num: 13  
Candidate Starts for PantheRoc\_57:  
(Start: 13 @39540 has 48 MA's), (20, 39666),

Gene: Pepperoni\_44 Start: 31534, Stop: 31722, Start Num: 13  
Candidate Starts for Pepperoni\_44:  
(Start: 13 @31534 has 48 MA's), (14, 31543), (17, 31609), (20, 31633), (25, 31666),

Gene: PhorbesPhlower\_47 Start: 31528, Stop: 31713, Start Num: 13  
Candidate Starts for PhorbesPhlower\_47:  
(Start: 13 @31528 has 48 MA's), (19, 31621), (20, 31627), (25, 31660),

Gene: PhriskyACE\_50 Start: 36177, Stop: 36419, Start Num: 13  
Candidate Starts for PhriskyACE\_50:  
(2, 35853), (Start: 13 @36177 has 48 MA's), (20, 36303),

Gene: Pollux\_56 Start: 40277, Stop: 40519, Start Num: 13  
Candidate Starts for Pollux\_56:  
(Start: 13 @40277 has 48 MA's), (20, 40403),

Gene: Powerball\_51 Start: 36303, Stop: 36545, Start Num: 13  
Candidate Starts for Powerball\_51:  
(2, 35979), (Start: 13 @36303 has 48 MA's), (20, 36429),

Gene: Pytheas\_57 Start: 41776, Stop: 42018, Start Num: 13  
Candidate Starts for Pytheas\_57:  
(1, 41395), (Start: 13 @41776 has 48 MA's), (20, 41902),

Gene: Ruthy\_52 Start: 39090, Stop: 39332, Start Num: 13  
Candidate Starts for Ruthy\_52:  
(Start: 13 @39090 has 48 MA's), (14, 39099), (20, 39216),

Gene: Shlim410\_53 Start: 40090, Stop: 40332, Start Num: 13  
Candidate Starts for Shlim410\_53:  
(Start: 13 @40090 has 48 MA's), (20, 40216),

Gene: Sidious\_53 Start: 38484, Stop: 38726, Start Num: 13  
Candidate Starts for Sidious\_53:  
(Start: 13 @38484 has 48 MA's), (20, 38610),

Gene: ThankyouJordi\_56 Start: 40759, Stop: 41001, Start Num: 13  
Candidate Starts for ThankyouJordi\_56:  
(6, 40612), (7, 40627), (8, 40636), (9, 40702), (Start: 13 @40759 has 48 MA's), (20, 40885),

Gene: Thimann\_54 Start: 37092, Stop: 37307, Start Num: 13  
Candidate Starts for Thimann\_54:  
(Start: 13 @37092 has 48 MA's), (20, 37191),

Gene: TimTam\_57 Start: 40719, Stop: 40961, Start Num: 13  
Candidate Starts for TimTam\_57:



(Start: 13 @40719 has 48 MA's), (20, 40845),

Gene: Twinkle\_54 Start: 41149, Stop: 41391, Start Num: 13

Candidate Starts for Twinkle\_54:

(Start: 13 @41149 has 48 MA's), (20, 41275),

Gene: WelcomeAyanna\_56 Start: 40906, Stop: 41148, Start Num: 13

Candidate Starts for WelcomeAyanna\_56:

(6, 40759), (7, 40774), (8, 40783), (9, 40849), (Start: 13 @40906 has 48 MA's), (20, 41032),

Gene: Yeezy\_53 Start: 37368, Stop: 37610, Start Num: 13

Candidate Starts for Yeezy\_53:

(Start: 13 @37368 has 48 MA's), (20, 37494),