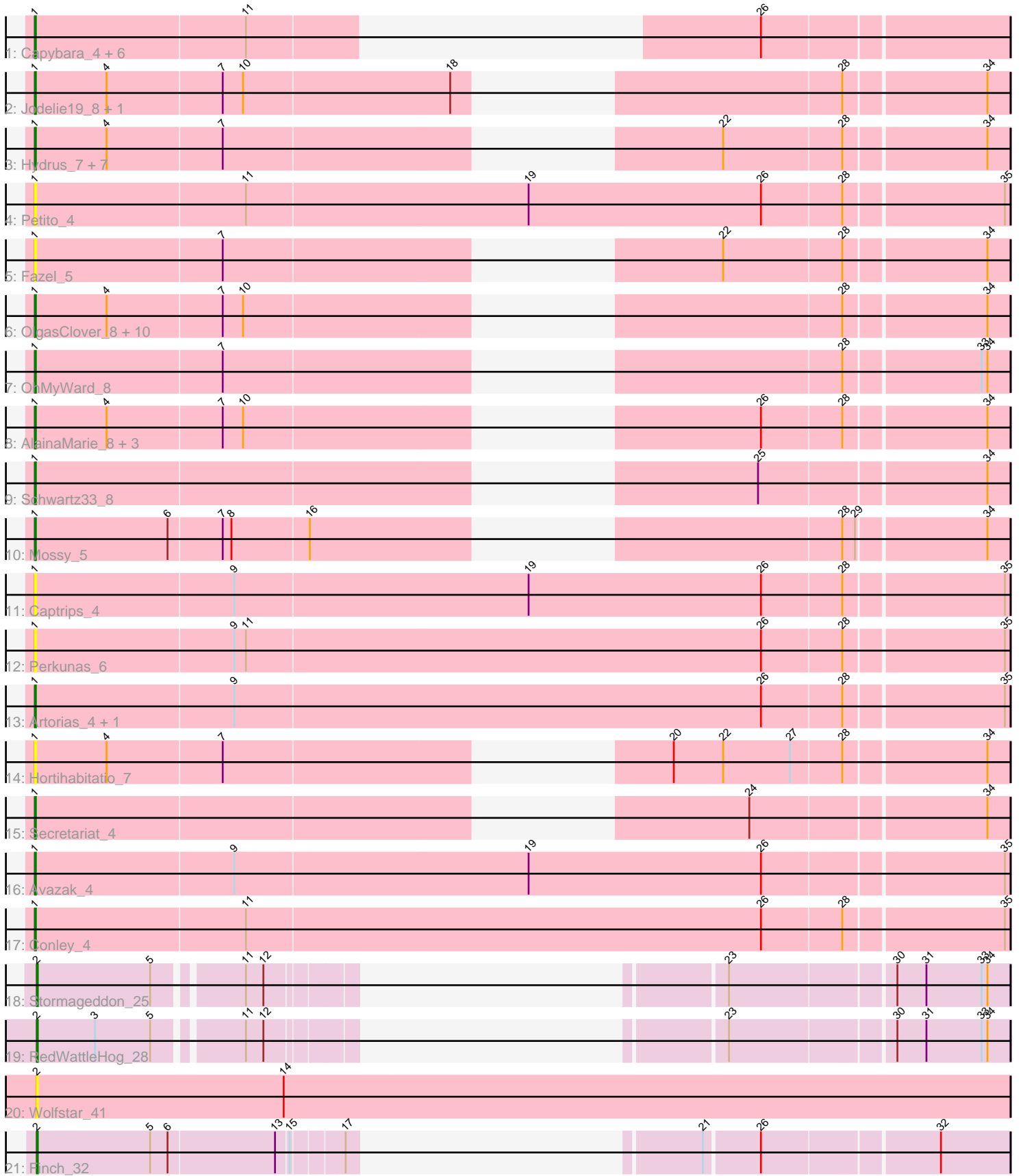


Pham 163675



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 163675 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163675 has 49 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Capybara\_4, Magel\_4, Odesza\_4, Roney\_4, Kerry\_4, Gill\_4, Gravy\_4
- Track 2 : Jodelie19\_8, TenaciousP\_9
- Track 3 : Hydrus\_7, Phepper\_8, Kenosha\_5, Madvan\_8, Crocheter\_7, Zeph\_7, Untouchable\_7, Pherobrine\_5
- Track 4 : Petito\_4
- Track 5 : Fazel\_5
- Track 6 : OlgasClover\_8, Eddiemania\_7, Burley\_8, Vardy\_8, BluerMoon\_9, Aflac\_8, Figliar\_8, Duffington\_8, Nadmeg\_8, Runhaar\_8, Rickmore\_7
- Track 7 : OhMyWard\_8
- Track 8 : AlainaMarie\_8, EndAve\_8, Nithya\_8, Chikenjars\_8
- Track 9 : Schwartz33\_8
- Track 10 : Mossy\_5
- Track 11 : Captrips\_4
- Track 12 : Perkunas\_6
- Track 13 : Artorias\_4, FortCran\_4
- Track 14 : Hortihabitatio\_7
- Track 15 : Secretariat\_4
- Track 16 : Avazak\_4
- Track 17 : Conley\_4
- Track 18 : Stormageddon\_25
- Track 19 : RedWattleHog\_28
- Track 20 : Wolfstar\_41
- Track 21 : Finch\_32

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

The start number called the most often in the published annotations is 1, it was called in 33 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aflac\_8, AlainaMarie\_8, Artorias\_4, Avazak\_4, BluerMoon\_9, Burley\_8, Captrips\_4, Capybara\_4, Chikenjars\_8, Conley\_4, Crocheter\_7, Duffington\_8, Eddiemania\_7, EndAve\_8, Fazel\_5, Figliar\_8, FortCran\_4, Gill\_4, Gravy\_4, Hortihabitatio\_7, Hydrus\_7, Jodelie19\_8, Kenosha\_5, Kerry\_4, Madvan\_8, Magel\_4, Mossy\_5,

Nadmeg\_8, Nithya\_8, Odesza\_4, OhMyWard\_8, OlgasClover\_8, Perkunas\_6, Petite\_4, Phepper\_8, Pherobrine\_5, Rickmore\_7, Roney\_4, Runhaar\_8, Schwartz33\_8, Secretariat\_4, TenaciousP\_9, Untouchable\_7, Vardy\_8, Zeph\_7,

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

- 

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

- Finch\_32, RedWattleHog\_28, Stormageddon\_25, Wolfstar\_41,

### Summary by start number:

Start 1:

- Found in 45 of 49 ( 91.8% ) of genes in pham
- Manual Annotations of this start: 33 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aflac\_8 (DJ), AlainaMarie\_8 (DJ), Artorias\_4 (DJ), Avazak\_4 (DJ), BluerMoon\_9 (DJ), Burley\_8 (DJ), Captrips\_4 (DJ), Capybara\_4 (DJ), Chikenjars\_8 (DJ), Conley\_4 (DJ), Crocheter\_7 (DJ), Duffington\_8 (DJ), Eddiemania\_7 (DJ), EndAve\_8 (DJ), Fazel\_5 (DJ), Figliar\_8 (DJ), FortCran\_4 (DJ), Gill\_4 (DJ), Gravy\_4 (DJ), Hortihabitatio\_7 (DJ), Hydrus\_7 (DJ), Jodelie19\_8 (DJ), Kenosha\_5 (DJ), Kerry\_4 (DJ), Madvan\_8 (DJ), Magel\_4 (DJ), Mossy\_5 (DJ), Nadmeg\_8 (DJ), Nithya\_8 (DJ), Odesza\_4 (DJ), OhMyWard\_8 (DJ), OlgasClover\_8 (DJ), Perkunas\_6 (DJ), Petite\_4 (DJ), Phepper\_8 (DJ), Pherobrine\_5 (DJ), Rickmore\_7 (DJ), Roney\_4 (DJ), Runhaar\_8 (DJ), Schwartz33\_8 (DJ), Secretariat\_4 (DJ), TenaciousP\_9 (DJ), Untouchable\_7 (DJ), Vardy\_8 (DJ), Zeph\_7 (DJ),

Start 2:

- Found in 4 of 49 ( 8.2% ) of genes in pham
- Manual Annotations of this start: 3 of 36
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch\_32 (singleton), RedWattleHog\_28 (DX), Stormageddon\_25 (DX), Wolfstar\_41 (ED),

### Summary by clusters:

There are 4 clusters represented in this pham: ED, singleton, DJ, DX,

Info for manual annotations of cluster DJ:

- Start number 1 was manually annotated 33 times for cluster DJ.

Info for manual annotations of cluster DX:

- Start number 2 was manually annotated 2 times for cluster DX.

### Gene Information:

Gene: Aflac\_8 Start: 3585, Stop: 4418, Start Num: 1

Candidate Starts for Aflac\_8:

(Start: 1 @3585 has 33 MA's), (4, 3657), (7, 3774), (10, 3795), (28, 4257), (34, 4395),

Gene: AlainaMarie\_8 Start: 3576, Stop: 4409, Start Num: 1  
Candidate Starts for AlainaMarie\_8:  
(Start: 1 @3576 has 33 MA's), (4, 3648), (7, 3765), (10, 3786), (26, 4167), (28, 4248), (34, 4386),

Gene: Artorias\_4 Start: 1145, Stop: 2128, Start Num: 1  
Candidate Starts for Artorias\_4:  
(Start: 1 @1145 has 33 MA's), (9, 1346), (26, 1886), (28, 1967), (35, 2123),

Gene: Avazak\_4 Start: 1145, Stop: 2128, Start Num: 1  
Candidate Starts for Avazak\_4:  
(Start: 1 @1145 has 33 MA's), (9, 1346), (19, 1646), (26, 1886), (35, 2123),

Gene: BluerMoon\_9 Start: 3579, Stop: 4412, Start Num: 1  
Candidate Starts for BluerMoon\_9:  
(Start: 1 @3579 has 33 MA's), (4, 3651), (7, 3768), (10, 3789), (28, 4251), (34, 4389),

Gene: Burley\_8 Start: 3582, Stop: 4415, Start Num: 1  
Candidate Starts for Burley\_8:  
(Start: 1 @3582 has 33 MA's), (4, 3654), (7, 3771), (10, 3792), (28, 4254), (34, 4392),

Gene: Captrips\_4 Start: 1145, Stop: 2128, Start Num: 1  
Candidate Starts for Captrips\_4:  
(Start: 1 @1145 has 33 MA's), (9, 1346), (19, 1646), (26, 1886), (28, 1967), (35, 2123),

Gene: Capybara\_4 Start: 1145, Stop: 1834, Start Num: 1  
Candidate Starts for Capybara\_4:  
(Start: 1 @1145 has 33 MA's), (11, 1358), (26, 1592),

Gene: Chikenjars\_8 Start: 3576, Stop: 4409, Start Num: 1  
Candidate Starts for Chikenjars\_8:  
(Start: 1 @3576 has 33 MA's), (4, 3648), (7, 3765), (10, 3786), (26, 4167), (28, 4248), (34, 4386),

Gene: Conley\_4 Start: 1146, Stop: 2129, Start Num: 1  
Candidate Starts for Conley\_4:  
(Start: 1 @1146 has 33 MA's), (11, 1359), (26, 1887), (28, 1968), (35, 2124),

Gene: Crocheter\_7 Start: 2509, Stop: 3342, Start Num: 1  
Candidate Starts for Crocheter\_7:  
(Start: 1 @2509 has 33 MA's), (4, 2581), (7, 2698), (22, 3061), (28, 3181), (34, 3319),

Gene: Duffington\_8 Start: 3561, Stop: 4394, Start Num: 1  
Candidate Starts for Duffington\_8:  
(Start: 1 @3561 has 33 MA's), (4, 3633), (7, 3750), (10, 3771), (28, 4233), (34, 4371),

Gene: Eddiemania\_7 Start: 2767, Stop: 3600, Start Num: 1  
Candidate Starts for Eddiemania\_7:  
(Start: 1 @2767 has 33 MA's), (4, 2839), (7, 2956), (10, 2977), (28, 3439), (34, 3577),

Gene: EndAve\_8 Start: 3576, Stop: 4409, Start Num: 1  
Candidate Starts for EndAve\_8:  
(Start: 1 @3576 has 33 MA's), (4, 3648), (7, 3765), (10, 3786), (26, 4167), (28, 4248), (34, 4386),

Gene: Fazel\_5 Start: 2306, Stop: 3139, Start Num: 1

Candidate Starts for Fazel\_5:

(Start: 1 @2306 has 33 MA's), (7, 2495), (22, 2858), (28, 2978), (34, 3116),

Gene: Figliar\_8 Start: 3585, Stop: 4418, Start Num: 1

Candidate Starts for Figliar\_8:

(Start: 1 @3585 has 33 MA's), (4, 3657), (7, 3774), (10, 3795), (28, 4257), (34, 4395),

Gene: Finch\_32 Start: 27174, Stop: 27863, Start Num: 2

Candidate Starts for Finch\_32:

(Start: 2 @27174 has 3 MA's), (5, 27291), (6, 27309), (13, 27417), (15, 27429), (17, 27477), (21, 27567), (26, 27621), (32, 27792),

Gene: FortCran\_4 Start: 1145, Stop: 2128, Start Num: 1

Candidate Starts for FortCran\_4:

(Start: 1 @1145 has 33 MA's), (9, 1346), (26, 1886), (28, 1967), (35, 2123),

Gene: Gill\_4 Start: 1145, Stop: 1834, Start Num: 1

Candidate Starts for Gill\_4:

(Start: 1 @1145 has 33 MA's), (11, 1358), (26, 1592),

Gene: Gravy\_4 Start: 1145, Stop: 1834, Start Num: 1

Candidate Starts for Gravy\_4:

(Start: 1 @1145 has 33 MA's), (11, 1358), (26, 1592),

Gene: Hortihabitatio\_7 Start: 2863, Stop: 3696, Start Num: 1

Candidate Starts for Hortihabitatio\_7:

(Start: 1 @2863 has 33 MA's), (4, 2935), (7, 3052), (20, 3364), (22, 3415), (27, 3484), (28, 3535), (34, 3673),

Gene: Hydrus\_7 Start: 2767, Stop: 3600, Start Num: 1

Candidate Starts for Hydrus\_7:

(Start: 1 @2767 has 33 MA's), (4, 2839), (7, 2956), (22, 3319), (28, 3439), (34, 3577),

Gene: Jodelie19\_8 Start: 3579, Stop: 4412, Start Num: 1

Candidate Starts for Jodelie19\_8:

(Start: 1 @3579 has 33 MA's), (4, 3651), (7, 3768), (10, 3789), (18, 3999), (28, 4251), (34, 4389),

Gene: Kenosha\_5 Start: 1368, Stop: 2201, Start Num: 1

Candidate Starts for Kenosha\_5:

(Start: 1 @1368 has 33 MA's), (4, 1440), (7, 1557), (22, 1920), (28, 2040), (34, 2178),

Gene: Kerry\_4 Start: 1145, Stop: 1834, Start Num: 1

Candidate Starts for Kerry\_4:

(Start: 1 @1145 has 33 MA's), (11, 1358), (26, 1592),

Gene: Madvan\_8 Start: 3582, Stop: 4415, Start Num: 1

Candidate Starts for Madvan\_8:

(Start: 1 @3582 has 33 MA's), (4, 3654), (7, 3771), (22, 4134), (28, 4254), (34, 4392),

Gene: Magel\_4 Start: 1145, Stop: 1834, Start Num: 1

Candidate Starts for Magel\_4:

(Start: 1 @1145 has 33 MA's), (11, 1358), (26, 1592),

Gene: Mossy\_5 Start: 1428, Stop: 2261, Start Num: 1  
Candidate Starts for Mossy\_5:  
(Start: 1 @1428 has 33 MA's), (6, 1563), (7, 1617), (8, 1626), (16, 1704), (28, 2100), (29, 2112), (34, 2238),

Gene: Nadmeg\_8 Start: 3583, Stop: 4416, Start Num: 1  
Candidate Starts for Nadmeg\_8:  
(Start: 1 @3583 has 33 MA's), (4, 3655), (7, 3772), (10, 3793), (28, 4255), (34, 4393),

Gene: Nithya\_8 Start: 3576, Stop: 4409, Start Num: 1  
Candidate Starts for Nithya\_8:  
(Start: 1 @3576 has 33 MA's), (4, 3648), (7, 3765), (10, 3786), (26, 4167), (28, 4248), (34, 4386),

Gene: Odesza\_4 Start: 1145, Stop: 1834, Start Num: 1  
Candidate Starts for Odesza\_4:  
(Start: 1 @1145 has 33 MA's), (11, 1358), (26, 1592),

Gene: OhMyWard\_8 Start: 3580, Stop: 4413, Start Num: 1  
Candidate Starts for OhMyWard\_8:  
(Start: 1 @3580 has 33 MA's), (7, 3769), (28, 4252), (33, 4384), (34, 4390),

Gene: OlgasClover\_8 Start: 3576, Stop: 4409, Start Num: 1  
Candidate Starts for OlgasClover\_8:  
(Start: 1 @3576 has 33 MA's), (4, 3648), (7, 3765), (10, 3786), (28, 4248), (34, 4386),

Gene: Perkunas\_6 Start: 1664, Stop: 2647, Start Num: 1  
Candidate Starts for Perkunas\_6:  
(Start: 1 @1664 has 33 MA's), (9, 1865), (11, 1877), (26, 2405), (28, 2486), (35, 2642),

Gene: Petite\_4 Start: 1340, Stop: 2323, Start Num: 1  
Candidate Starts for Petite\_4:  
(Start: 1 @1340 has 33 MA's), (11, 1553), (19, 1841), (26, 2081), (28, 2162), (35, 2318),

Gene: Phepper\_8 Start: 3582, Stop: 4415, Start Num: 1  
Candidate Starts for Phepper\_8:  
(Start: 1 @3582 has 33 MA's), (4, 3654), (7, 3771), (22, 4134), (28, 4254), (34, 4392),

Gene: Pherobrine\_5 Start: 1339, Stop: 2172, Start Num: 1  
Candidate Starts for Pherobrine\_5:  
(Start: 1 @1339 has 33 MA's), (4, 1411), (7, 1528), (22, 1891), (28, 2011), (34, 2149),

Gene: RedWattleHog\_28 Start: 28686, Stop: 29360, Start Num: 2  
Candidate Starts for RedWattleHog\_28:  
(Start: 2 @28686 has 3 MA's), (3, 28746), (5, 28803), (11, 28884), (12, 28902), (23, 29085), (30, 29244), (31, 29274), (33, 29331), (34, 29337),

Gene: Rickmore\_7 Start: 2144, Stop: 2977, Start Num: 1  
Candidate Starts for Rickmore\_7:  
(Start: 1 @2144 has 33 MA's), (4, 2216), (7, 2333), (10, 2354), (28, 2816), (34, 2954),

Gene: Roney\_4 Start: 1145, Stop: 1834, Start Num: 1  
Candidate Starts for Roney\_4:  
(Start: 1 @1145 has 33 MA's), (11, 1358), (26, 1592),

Gene: Runhaar\_8 Start: 3582, Stop: 4415, Start Num: 1

Candidate Starts for Runhaar\_8:

(Start: 1 @3582 has 33 MA's), (4, 3654), (7, 3771), (10, 3792), (28, 4254), (34, 4392),

Gene: Schwartz33\_8 Start: 3598, Stop: 4431, Start Num: 1

Candidate Starts for Schwartz33\_8:

(Start: 1 @3598 has 33 MA's), (25, 4186), (34, 4408),

Gene: Secretariat\_4 Start: 1204, Stop: 2037, Start Num: 1

Candidate Starts for Secretariat\_4:

(Start: 1 @1204 has 33 MA's), (24, 1783), (34, 2014),

Gene: Stormageddon\_25 Start: 28669, Stop: 29343, Start Num: 2

Candidate Starts for Stormageddon\_25:

(Start: 2 @28669 has 3 MA's), (5, 28786), (11, 28867), (12, 28885), (23, 29068), (30, 29227), (31, 29257), (33, 29314), (34, 29320),

Gene: TenaciousP\_9 Start: 3579, Stop: 4412, Start Num: 1

Candidate Starts for TenaciousP\_9:

(Start: 1 @3579 has 33 MA's), (4, 3651), (7, 3768), (10, 3789), (18, 3999), (28, 4251), (34, 4389),

Gene: Untouchable\_7 Start: 2508, Stop: 3341, Start Num: 1

Candidate Starts for Untouchable\_7:

(Start: 1 @2508 has 33 MA's), (4, 2580), (7, 2697), (22, 3060), (28, 3180), (34, 3318),

Gene: Vardy\_8 Start: 3581, Stop: 4414, Start Num: 1

Candidate Starts for Vardy\_8:

(Start: 1 @3581 has 33 MA's), (4, 3653), (7, 3770), (10, 3791), (28, 4253), (34, 4391),

Gene: Wolfstar\_41 Start: 19173, Stop: 20177, Start Num: 2

Candidate Starts for Wolfstar\_41:

(Start: 2 @19173 has 3 MA's), (14, 19428),

Gene: Zeph\_7 Start: 2767, Stop: 3600, Start Num: 1

Candidate Starts for Zeph\_7:

(Start: 1 @2767 has 33 MA's), (4, 2839), (7, 2956), (22, 3319), (28, 3439), (34, 3577),