



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 192764 Report

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

Pham number 192764 has 34 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Magel\_75, Odesza\_73, Roney\_74, Kerry\_73, Tanis\_74, Capybara\_74, Gravy\_73, Gill\_74
- Track 2 : Zeph\_76
- Track 3 : Vardy\_73
- Track 4 : Arataki\_71, Madvan\_74, Runhaar\_73, Phepper\_75, Untouchable\_76
- Track 5 : Duffington\_74
- Track 6 : Chikenjars\_73
- Track 7 : JulesRay\_78, Captrips\_75, NoPickles\_75, Avazak\_77
- Track 8 : Nithya\_73, AlainaMarie\_73
- Track 9 : Burley\_74
- Track 10 : EndAve\_75
- Track 11 : Conley\_74
- Track 12 : OlgasClover\_75
- Track 13 : Kenosha\_73
- Track 14 : Perkunas\_77
- Track 15 : ShaggyRogers\_77
- Track 16 : Artorias\_76, FortCran\_76
- Track 17 : Gusicorn\_78
- Track 18 : Petite\_78

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

The start number called the most often in the published annotations is 25, it was called in 14 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artorias\_76, Avazak\_77, Captrips\_75, Capybara\_74, FortCran\_76, Gill\_74, Gravy\_73, JulesRay\_78, Kerry\_73, Magel\_75, NoPickles\_75, Odesza\_73, Perkunas\_77, Petite\_78, Roney\_74, Tanis\_74,

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

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

- AlainaMarie\_73, Arataki\_71, Burley\_74, Chikenjars\_73, Conley\_74, Duffington\_74, EndAve\_75, Gusicorn\_78, Kenosha\_73, Madvan\_74, Nithya\_73, OlgasClover\_75, Phepper\_75, Runhaar\_73, ShaggyRogers\_77, Untouchable\_76, Vardy\_73, Zeph\_76,

### Summary by start number:

#### Start 22:

- Found in 13 of 34 ( 38.2% ) of genes in pham
- Manual Annotations of this start: 10 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlainaMarie\_73 (DJ), Arataki\_71 (DJ), Burley\_74 (DJ), EndAve\_75 (DJ), Gusicorn\_78 (DJ), Madvan\_74 (DJ), Nithya\_73 (DJ), Phepper\_75 (DJ), Runhaar\_73 (DJ), ShaggyRogers\_77 (DJ), Untouchable\_76 (DJ), Vardy\_73 (DJ), Zeph\_76 (DJ),

#### Start 23:

- Found in 4 of 34 ( 11.8% ) of genes in pham
- Manual Annotations of this start: 4 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chikenjars\_73 (DJ), Duffington\_74 (DJ), Kenosha\_73 (DJ), OlgasClover\_75 (DJ),

#### Start 24:

- Found in 1 of 34 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 1 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Conley\_74 (DJ),

#### Start 25:

- Found in 16 of 34 ( 47.1% ) of genes in pham
- Manual Annotations of this start: 14 of 29
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artorias\_76 (DJ), Avazak\_77 (DJ), Captrips\_75 (DJ), Copybara\_74 (DJ), FortCran\_76 (DJ), Gill\_74 (DJ), Gravy\_73 (DJ), JulesRay\_78 (DJ), Kerry\_73 (DJ), Magel\_75 (DJ), NoPickles\_75 (DJ), Odesza\_73 (DJ), Perkunas\_77 (DJ), Petito\_78 (DJ), Roney\_74 (DJ), Tanis\_74 (DJ),

### Summary by clusters:

There is one cluster represented in this pham: DJ

#### Info for manual annotations of cluster DJ:

- Start number 22 was manually annotated 10 times for cluster DJ.
- Start number 23 was manually annotated 4 times for cluster DJ.
- Start number 24 was manually annotated 1 time for cluster DJ.
- Start number 25 was manually annotated 14 times for cluster DJ.

### Gene Information:

Gene: AlainaMarie\_73 Start: 50890, Stop: 51117, Start Num: 22

Candidate Starts for AlainaMarie\_73:

(17, 50857), (Start: 22 @50890 has 10 MA's), (26, 50926), (27, 50929), (32, 50965), (36, 51004),

Gene: Arataki\_71 Start: 50324, Stop: 50554, Start Num: 22

Candidate Starts for Arataki\_71:

(1, 50066), (3, 50096), (4, 50102), (11, 50246), (12, 50258), (Start: 22 @50324 has 10 MA's), (26, 50360), (27, 50363), (36, 50438), (40, 50507),

Gene: Artorias\_76 Start: 50584, Stop: 50784, Start Num: 25

Candidate Starts for Artorias\_76:

(Start: 25 @50584 has 14 MA's), (33, 50656), (35, 50668), (39, 50722),

Gene: Avazak\_77 Start: 51266, Stop: 51466, Start Num: 25

Candidate Starts for Avazak\_77:

(Start: 25 @51266 has 14 MA's), (33, 51338), (39, 51404),

Gene: Burley\_74 Start: 50340, Stop: 50570, Start Num: 22

Candidate Starts for Burley\_74:

(1, 50082), (2, 50106), (4, 50118), (11, 50262), (12, 50274), (Start: 22 @50340 has 10 MA's), (26, 50376), (27, 50379), (36, 50454), (40, 50523),

Gene: Captrips\_75 Start: 50414, Stop: 50614, Start Num: 25

Candidate Starts for Captrips\_75:

(Start: 25 @50414 has 14 MA's), (33, 50486), (39, 50552),

Gene: Capybara\_74 Start: 50251, Stop: 50451, Start Num: 25

Candidate Starts for Capybara\_74:

(Start: 25 @50251 has 14 MA's), (33, 50323), (35, 50335),

Gene: Chikenjars\_73 Start: 51135, Stop: 51365, Start Num: 23

Candidate Starts for Chikenjars\_73:

(18, 51099), (Start: 23 @51135 has 4 MA's), (26, 51171), (27, 51174), (34, 51222), (36, 51249),

Gene: Conley\_74 Start: 50831, Stop: 51028, Start Num: 24

Candidate Starts for Conley\_74:

(13, 50750), (14, 50762), (Start: 24 @50831 has 1 MA's), (28, 50867), (33, 50900), (35, 50912),

Gene: Duffington\_74 Start: 51067, Stop: 51279, Start Num: 23

Candidate Starts for Duffington\_74:

(15, 51016), (18, 51031), (Start: 23 @51067 has 4 MA's), (29, 51127), (38, 51202), (41, 51256),

Gene: EndAve\_75 Start: 51080, Stop: 51307, Start Num: 22

Candidate Starts for EndAve\_75:

(17, 51047), (Start: 22 @51080 has 10 MA's), (26, 51116), (27, 51119), (29, 51140), (36, 51194),

Gene: FortCran\_76 Start: 50584, Stop: 50784, Start Num: 25

Candidate Starts for FortCran\_76:

(Start: 25 @50584 has 14 MA's), (33, 50656), (35, 50668), (39, 50722),

Gene: Gill\_74 Start: 50263, Stop: 50463, Start Num: 25

Candidate Starts for Gill\_74:

(Start: 25 @50263 has 14 MA's), (33, 50335), (35, 50347),

Gene: Gravy\_73 Start: 49941, Stop: 50141, Start Num: 25

Candidate Starts for Gravy\_73:  
(Start: 25 @49941 has 14 MA's), (33, 50013), (35, 50025),

Gene: Gusicorn\_78 Start: 50705, Stop: 50938, Start Num: 22  
Candidate Starts for Gusicorn\_78:  
(12, 50639), (Start: 22 @50705 has 10 MA's), (27, 50744), (30, 50771), (37, 50840),

Gene: JulesRay\_78 Start: 50933, Stop: 51133, Start Num: 25  
Candidate Starts for JulesRay\_78:  
(Start: 25 @50933 has 14 MA's), (33, 51005), (39, 51071),

Gene: Kenosha\_73 Start: 50932, Stop: 51162, Start Num: 23  
Candidate Starts for Kenosha\_73:  
(17, 50899), (20, 50911), (Start: 23 @50932 has 4 MA's), (26, 50968), (27, 50971), (30, 50995), (36, 51046), (40, 51115),

Gene: Kerry\_73 Start: 50004, Stop: 50204, Start Num: 25  
Candidate Starts for Kerry\_73:  
(Start: 25 @50004 has 14 MA's), (33, 50076), (35, 50088),

Gene: Madvan\_74 Start: 50396, Stop: 50626, Start Num: 22  
Candidate Starts for Madvan\_74:  
(1, 50138), (3, 50168), (4, 50174), (11, 50318), (12, 50330), (Start: 22 @50396 has 10 MA's), (26, 50432), (27, 50435), (36, 50510), (40, 50579),

Gene: Magel\_75 Start: 50178, Stop: 50378, Start Num: 25  
Candidate Starts for Magel\_75:  
(Start: 25 @50178 has 14 MA's), (33, 50250), (35, 50262),

Gene: Nithya\_73 Start: 50778, Stop: 51005, Start Num: 22  
Candidate Starts for Nithya\_73:  
(17, 50745), (Start: 22 @50778 has 10 MA's), (26, 50814), (27, 50817), (32, 50853), (36, 50892),

Gene: NoPickles\_75 Start: 50100, Stop: 50300, Start Num: 25  
Candidate Starts for NoPickles\_75:  
(Start: 25 @50100 has 14 MA's), (33, 50172), (39, 50238),

Gene: Odesza\_73 Start: 50122, Stop: 50322, Start Num: 25  
Candidate Starts for Odesza\_73:  
(Start: 25 @50122 has 14 MA's), (33, 50194), (35, 50206),

Gene: OlgasClover\_75 Start: 51639, Stop: 51869, Start Num: 23  
Candidate Starts for OlgasClover\_75:  
(15, 51588), (18, 51603), (Start: 23 @51639 has 4 MA's), (26, 51675), (27, 51678), (31, 51705), (34, 51726), (36, 51753), (40, 51822),

Gene: Perkunas\_77 Start: 50320, Stop: 50520, Start Num: 25  
Candidate Starts for Perkunas\_77:  
(5, 50089), (6, 50101), (7, 50104), (8, 50107), (9, 50179), (10, 50191), (16, 50260), (19, 50284), (21, 50302), (Start: 25 @50320 has 14 MA's), (32, 50386), (33, 50392), (35, 50404),

Gene: Petite\_78 Start: 51778, Stop: 51978, Start Num: 25  
Candidate Starts for Petite\_78:

(Start: 25 @51778 has 14 MA's), (28, 51817), (33, 51850), (35, 51862),

Gene: Phepper\_75 Start: 50638, Stop: 50868, Start Num: 22

Candidate Starts for Phepper\_75:

(1, 50380), (3, 50410), (4, 50416), (11, 50560), (12, 50572), (Start: 22 @50638 has 10 MA's), (26, 50674), (27, 50677), (36, 50752), (40, 50821),

Gene: Roney\_74 Start: 50288, Stop: 50488, Start Num: 25

Candidate Starts for Roney\_74:

(Start: 25 @50288 has 14 MA's), (33, 50360), (35, 50372),

Gene: Runhaar\_73 Start: 50447, Stop: 50677, Start Num: 22

Candidate Starts for Runhaar\_73:

(1, 50189), (3, 50219), (4, 50225), (11, 50369), (12, 50381), (Start: 22 @50447 has 10 MA's), (26, 50483), (27, 50486), (36, 50561), (40, 50630),

Gene: ShaggyRogers\_77 Start: 50438, Stop: 50668, Start Num: 22

Candidate Starts for ShaggyRogers\_77:

(12, 50372), (Start: 22 @50438 has 10 MA's), (27, 50477), (34, 50525), (36, 50552), (41, 50627),

Gene: Tanis\_74 Start: 50108, Stop: 50308, Start Num: 25

Candidate Starts for Tanis\_74:

(Start: 25 @50108 has 14 MA's), (33, 50180), (35, 50192),

Gene: Untouchable\_76 Start: 51635, Stop: 51865, Start Num: 22

Candidate Starts for Untouchable\_76:

(1, 51377), (3, 51407), (4, 51413), (11, 51557), (12, 51569), (Start: 22 @51635 has 10 MA's), (26, 51671), (27, 51674), (36, 51749), (40, 51818),

Gene: Vardy\_73 Start: 50334, Stop: 50564, Start Num: 22

Candidate Starts for Vardy\_73:

(1, 50076), (2, 50100), (3, 50106), (4, 50112), (11, 50256), (12, 50268), (Start: 22 @50334 has 10 MA's), (26, 50370), (27, 50373), (36, 50448), (40, 50517),

Gene: Zeph\_76 Start: 51472, Stop: 51702, Start Num: 22

Candidate Starts for Zeph\_76:

(1, 51214), (4, 51250), (11, 51394), (12, 51406), (Start: 22 @51472 has 10 MA's), (26, 51508), (27, 51511), (36, 51586), (40, 51655),