Pham 3343


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 3343 Report

This analysis was run 04/05/24 on database version 557.
Pham number 3343 has 25 members, 2 are drafts.
Phages represented in each track:

- Track 1 : Lucky2013_87, Ariel_89, MiaZeal_90
- Track 2 : EricMillard_88, Rednō2_86, Halleỳ_96, Bombitas_83, NihilNomen_96,

BAKA_96, Duke13_9 $\overline{0}$, Pound_86

- Track 3 : Beem 95
- Track 4 : Thibaūlt 79
- Track 5 : DmpstrDiver 96
- Track 6 : KashFlow_85
- Track 7 : Courthouse_85, Superphikiman_87
- Track 8 : Klein_95, Dāllas_96, Dove_82, Ōdette_94
- Track 9 : Omega_98
- Track 10 : LittleE_93
- Track 11 : Minerva_94
- Track 12 : Constella_80


## 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 13 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BAKA_96, Bombitas_83, Courthouse_85, Duke13_90, EricMillard_88, Halley_96, Minerva_94, NihilNomen_96, Omega_98, Pound_8 $\overline{6}$, Redno2_86, Superphikiman_87, Thibault_79,

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

- Ariel_89, Beem_95, Constella_80, Dallas_96, Dove_82, Klein_95, Lucky2013_87, MiaZeal_90, Odette_94,

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

- DmpstrDiver_96, KashFlow_85, LittleE_93,


## Summary by start number:

Start 1:

- Found in 22 of 25 ( 88.0\% ) of genes in pham
- Manual Annotations of this start: 13 of 23
- Called $59.1 \%$ of time when present
- Phage (with cluster) where this start called: BAKA_96 (J), Bombitas_83 (J), Courthouse_85 (J), Duke13_90 (J), EricMillard_88(J), Halley_96 (J), Minerva_94 (J), NihilNomen_96 (J), Omega_98 (J), Pound_86 (J), Redno2_86 (J), Superphikiman_87 (J), Thibault_79 (J),


## Start 2:

- Found in 25 of 25 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 7 of 23
- Called $28.0 \%$ of time when present
- Phage (with cluster) where this start called: Ariel_89 (J), Beem_95 (J),

DmpstrDiver_96 (J), KashFlow_85 (J), LittleE_93 (J), Lucky2013_87 (J), MiaZeal_90 (J),

Start 5:

- Found in 25 of 25 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called $16.0 \%$ of time when present
- Phage (with cluster) where this start called: Dallas_96 (J), Dove_82 (J), Klein_95 (J), Odette_94 (J),

Start 7:

- Found in 16 of 25 ( 64.0\% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called $6.2 \%$ of time when present
- Phage (with cluster) where this start called: Constella_80 (J),


## Summary by clusters:

There is one cluster represented in this pham: J
Info for manual annotations of cluster J:
-Start number 1 was manually annotated 13 times for cluster J.
-Start number 2 was manually annotated 7 times for cluster J.

- Start number 5 was manually annotated 2 times for cluster J.
-Start number 7 was manually annotated 1 time for cluster J.


## Gene Information:

Gene: Ariel_89 Start: 52530, Stop: 52781, Start Num: 2
Candidate Starts for Ariel_89:
(Start: 1 @52527 has 13 MA's), (Start: 2 @ 52530 has 7 MA's), (Start: 5 @52560 has 2 MA's), (6, 52563), (10, 52623), (11, 52644), (13, 52683), (15, 52746),

Gene: BAKA_96 Start: 58432, Stop: 58683, Start Num: 1
Candidate Starts for BAKA_96:
(Start: 1 @58432 has 13 MA's), (Start: 2 @58435 has 7 MA's), (Start: 5 @58465 has 2 MA's), (6, 58468), (Start: 7 @58480 has 1 MA's), (10, 58528), (11, 58549),

Gene: Beem_95 Start: 58162, Stop: 58410, Start Num: 2
Candidate Starts for Beem_95:
(Start: 1 @58159 has 13 MA's), (Start: 2 @58162 has 7 MA's), (Start: 5 @58192 has 2 MA's), (6, 58195), (Start: 7 @58207 has 1 MA's), (10, 58255), (11, 58276),

Gene: Bombitas_83 Start: 55322, Stop: 55573, Start Num: 1
Candidate Starts for Bombitas_83:
(Start: 1 @55322 has 13 MA's), (Start: 2 @55325 has 7 MA's), (Start: 5 @55355 has 2 MA's), (6, 55358), (Start: 7 @55370 has 1 MA's), (10, 55418), (11, 55439),

Gene: Constella_80 Start: 52376, Stop: 52579, Start Num: 7
Candidate Starts for Constella_80:
(Start: 1 @52328 has 13 MA's), (Start: 2 @52331 has 7 MA's), (Start: 5 @52361 has 2 MA's), (6, 52364), (Start: 7 @52376 has 1 MA's), (10, 52424), (11, 52445),

Gene: Courthouse_85 Start: 52127, Stop: 52381, Start Num: 1
Candidate Starts for Courthouse_85:
(Start: 1 @52127 has 13 MA's), (Start: 2 @ 52130 has 7 MA's), (Start: 5 @52160 has 2 MA's), (6, 52163), (10, 52223), (11, 52244), (13, 52283), (15, 52346),

Gene: Dallas_96 Start: 58200, Stop: 58418, Start Num: 5
Candidate Starts for Dallas_96:
(Start: 1 @58167 has 13 MA's), (Start: 2 @58170 has 7 MA's), (Start: 5 @58200 has 2 MA's), (6, 58203), (Start: 7 @58215 has 1 MA's), (10, 58263), (11, 58284),

Gene: DmpstrDiver_96 Start: 57595, Stop: 57843, Start Num: 2
Candidate Starts for DmpstrDiver_96:
(Start: 2 @57595 has 7 MA's), (Start: 5 @57625 has 2 MA's), (6, 57628), (8, 57643), (10, 57688), (11, 57709),

Gene: Dove_82 Start: 53621, Stop: 53839, Start Num: 5
Candidate Starts for Dove_82:
(Start: 1 @53588 has 13 MA's), (Start: 2 @53591 has 7 MA's), (Start: 5 @53621 has 2 MA's), (6, 53624), (Start: 7 @53636 has 1 MA's), (10, 53684), (11, 53705),

Gene: Duke13_90 Start: 56099, Stop: 56350, Start Num: 1
Candidate Starts for Duke13_90:
(Start: 1 @56099 has 13 MA's), (Start: 2 @56102 has 7 MA's), (Start: 5 @56132 has 2 MA's), (6, 56135), (Start: 7 @56147 has 1 MA's), (10, 56195), (11, 56216),

Gene: EricMillard_88 Start: 57227, Stop: 57478, Start Num: 1
Candidate Starts for EricMillard_88:
(Start: 1 @57227 has 13 MA's), (Start: 2 @57230 has 7 MA's), (Start: 5 @57260 has 2 MA's), (6, 57263), (Start: 7 @57275 has 1 MA's), (10, 57323), (11, 57344),

Gene: Halley_96 Start: 58160, Stop: 58411, Start Num: 1
Candidate Starts for Halley_96:
(Start: 1 @58160 has 13 MA's), (Start: 2 @58163 has 7 MA's), (Start: 5 @58193 has 2 MA's), (6, 58196), (Start: 7 @58208 has 1 MA's), (10, 58256), (11, 58277),

Gene: KashFlow_85 Start: 52660, Stop: 52911, Start Num: 2 Candidate Starts for KashFlow_85:
(Start: 2 @52660 has 7 MA's), (Start: 5 @52690 has 2 MA's), (6, 52693), (8, 52708), (10, 52753), (11, 52774), (13, 52813), (15, 52876),

Gene: Klein_95 Start: 57193, Stop: 57411, Start Num: 5
Candidate Starts for Klein_95:
(Start: 1 @57160 has 13 MA's), (Start: 2 @57163 has 7 MA's), (Start: 5 @57193 has 2 MA's), (6, 57196), (Start: 7 @57208 has 1 MA's), (10, 57256), (11, 57277),

Gene: LittleE_93 Start: 56226, Stop: 56477, Start Num: 2
Candidate Starts for LittleE_93:
(Start: 2 @56226 has 7 MA's), (Start: 5 @56256 has 2 MA's), (6, 56259), (10, 56319), (11, 56340), (13, 56379), (15, 56442),

Gene: Lucky2013_87 Start: 52546, Stop: 52797, Start Num: 2
Candidate Starts for Lucky2013_87:
(Start: 1 @52543 has 13 MA's), (Start: 2 @ 52546 has 7 MA's), (Start: 5 @52576 has 2 MA's), (6, 52579), (10, 52639), (11, 52660), (13, 52699), (15, 52762),

Gene: MiaZeal_90 Start: 53202, Stop: 53453, Start Num: 2 Candidate Starts for MiaZeal_90:
(Start: 1 @53199 has 13 MA's), (Start: 2 @53202 has 7 MA's), (Start: 5 @53232 has 2 MA's), (6, 53235), (10, 53295), (11, 53316), (13, 53355), (15, 53418),

Gene: Minerva_94 Start: 58106, Stop: 58357, Start Num: 1 Candidate Starts for Minerva_94:
(Start: 1 @58106 has 13 MA's), (Start: 2 @58109 has 7 MA's), (3, 58121), (4, 58124), (Start: 5
@58139 has 2 MA's), (6, 58142), (9, 58160), (13, 58259), (15, 58322),
Gene: NihilNomen_96 Start: 58246, Stop: 58497, Start Num: 1
Candidate Starts for NihilNomen_96:
(Start: 1 @ 58246 has 13 MA's), (Start: 2 @58249 has 7 MA's), (Start: 5 @58279 has 2 MA's), (6, 58282), (Start: 7 @58294 has 1 MA's), (10, 58342), (11, 58363),

Gene: Odette_94 Start: 57322, Stop: 57540, Start Num: 5
Candidate Starts for Odette_94:
(Start: 1 @57289 has 13 MA's), (Start: 2 @57292 has 7 MA's), (Start: 5 @57322 has 2 MA's), (6, 57325), (Start: 7 @57337 has 1 MA's), (10, 57385), (11, 57406),

Gene: Omega_98 Start: 57999, Stop: 58250, Start Num: 1
Candidate Starts for Omega_98:
(Start: 1 @57999 has 13 MA's), (Start: 2 @58002 has 7 MA's), (Start: 5 @58032 has 2 MA's), (6, 58035), (Start: 7 @58047 has 1 MA's), (10, 58095), (11, 58116), (12, 58137), (13, 58152), (14, 58164), $(15,58215)$,

Gene: Pound_86 Start: 57458, Stop: 57709, Start Num: 1
Candidate Starts for Pound_86:
(Start: 1 @57458 has 13 MA's), (Start: 2 @57461 has 7 MA's), (Start: 5 @57491 has 2 MA's), (6, 57494), (Start: 7 @57506 has 1 MA's), (10, 57554), (11, 57575),

Gene: Redno2_86 Start: 53980, Stop: 54231, Start Num: 1
Candidate Starts for Redno2_86:
(Start: 1 @53980 has 13 MA's), (Start: 2 @53983 has 7 MA's), (Start: 5 @54013 has 2 MA's), (6, 54016), (Start: 7 @54028 has 1 MA's), (10, 54076), (11, 54097),

Gene: Superphikiman_87 Start: 52409, Stop: 52663, Start Num: 1
Candidate Starts for Superphikiman_87:
(Start: 1 @52409 has 13 MA's), (Start: 2 @52412 has 7 MA's), (Start: 5 @52442 has 2 MA's), (6, 52445), (10, 52505), (11, 52526), (13, 52565), (15, 52628),

Gene: Thibault_79 Start: 52945, Stop: 53196, Start Num: 1
Candidate Starts for Thibault_79:
(Start: 1 @52945 has 13 MA's), (Start: 2 @52948 has 7 MA's), (Start: 5 @52978 has 2 MA's), (6, 52981), (Start: 7 @52993 has 1 MA's), (10, 53041), (11, 53062), (14, 53110),

