Pham 87050


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 87050 Report

This analysis was run 04/05/24 on database version 557.
Pham number 87050 has 16 members, 2 are drafts.
Phages represented in each track:

- Track 1 : LittleE_191, Courthouse_186, MiaZeal_192, Ariel_190
- Track 2 : Thibaūlt_170, Squint_184, Porcelain_188, Hannaconda_180,

KashFlow_185, Lucky2013_184

- Track 3 :-Constella_183, Ōdette_190
- Track 4 : ThreeRngTarjay_186
- Track 5 : Dove_180
- Track 6 : Omega_196
- Track 7 : Superphikiman_186


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

The start number called the most often in the published annotations is 6 , it was called in 7 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Hannaconda_180, KashFlow_185, Lucky2013_184, Omega_196, Porcelain_188, Squint_184, Thibault_170,

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

- Ariel_190, Courthouse_186, LittleE_191, MiaZeal_192, Superphikiman_186,

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

- Constella_183, Dove_180, Odette_190, ThreeRngTarjay_186,


## Summary by start number:

Start 3:

- Found in 6 of 16 ( $37.5 \%$ ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called $16.7 \%$ of time when present
- Phage (with cluster) where this start called: Superphikiman_186 (J),

Start 4:

- Found in 5 of 16 ( $31.2 \%$ ) of genes in pham
- Manual Annotations of this start: 4 of 14
- Called $80.0 \%$ of time when present
- Phage (with cluster) where this start called: Ariel_190 (J), Courthouse_186 (J), LittleE_191 (J), MiaZeal_192 (J),

Start 6:

- Found in 12 of 16 ( $75.0 \%$ ) of genes in pham
- Manual Annotations of this start: 7 of 14
- Called $58.3 \%$ of time when present
- Phage (with cluster) where this start called: Hannaconda_180 (J), KashFlow_185 (J), Lucky2013_184 (J), Omega_196 (J), Porcelain_188 (J), Squint_184 (J), Thibault_170 (J),

Start 7:

- Found in 4 of 16 ( $25.0 \%$ ) of genes in pham
- Manual Annotations of this start: 2 of 14
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: Constella_183 (J), Dove_180 (J), Odette_190 (J), ThreeRngTarjay_186 (J),


## Summary by clusters:

There is one cluster represented in this pham: J
Info for manual annotations of cluster J:

- Start number 3 was manually annotated 1 time for cluster J.
- Start number 4 was manually annotated 4 times for cluster J.
- Start number 6 was manually annotated 7 times for cluster J.
-Start number 7 was manually annotated 2 times for cluster J.


## Gene Information:

Gene: Ariel_190 Start: 92422, Stop: 92874, Start Num: 4
Candidate Starts for Ariel_190:
(Start: 3 @92338 has 1 MA's), (Start: 4 @92422 has 4 MA's), (Start: 6 @92434 has 7 MA's), (9, 92491), (10, 92530), (12, 92623), (15, 92740), (16, 92743), (18, 92860), (19, 92863),

Gene: Constella_183 Start: 95080, Stop: 95517, Start Num: 7
Candidate Starts for Constella_183:
(1, 94822), (2, 94840), (Start: 7 @95080 has 2 MA's), (8, 95110), (11, 95248), (12, 95266), (13, 95323), (14, 95377), (17, 95425), (18, 95503), (19, 95506),

Gene: Courthouse_186 Start: 92871, Stop: 93323, Start Num: 4
Candidate Starts for Courthouse_186:
(Start: 3 @92787 has 1 MA's), (Start: 4 @92871 has 4 MA's), (Start: 6 @92883 has 7 MA's), (9, 92940), (10, 92979), (12, 93072), (15, 93189), (16, 93192), (18, 93309), (19, 93312),

Gene: Dove_180 Start: 90941, Stop: 91378, Start Num: 7
Candidate Starts for Dove_180:
(Start: 7 @90941 has 2 MA's), (8, 90971), (9, 90995), (11, 91109), (12, 91127), (13, 91184), (14, 91238), (17, 91286), (18, 91364), (19, 91367),

Gene: Hannaconda_180 Start: 94909, Stop: 95349, Start Num: 6
Candidate Starts for Hannaconda_180:
(5, 94903), (Start: 6 @94909 has 7 MA's), (9, 94966), (10, 95005), (12, 95098), (15, 95215), (16, 95218), (18, 95335), (19, 95338),

Gene: KashFlow_185 Start: 94722, Stop: 95162, Start Num: 6
Candidate Starts for KashFlow_185:
(5, 94716), (Start: 6 @94722 has 7 MA's), (9, 94779), (10, 94818), (12, 94911), (15, 95028), (16, 95031), (18, 95148), (19, 95151),

Gene: LittleE_191 Start: 95109, Stop: 95561, Start Num: 4
Candidate Starts for LittleE_191:
(Start: 3 @95025 has 1 MA's), (Start: 4 @95109 has 4 MA's), (Start: 6 @95121 has 7 MA's), ( 9 , 95178), (10, 95217), (12, 95310), (15, 95427), (16, 95430), (18, 95547), (19, 95550),

Gene: Lucky2013_184 Start: 91824, Stop: 92264, Start Num: 6
Candidate Starts for Lucky2013_184:
(5, 91818), (Start: 6 @91824 has 7 MA's), (9, 91881), (10, 91920), (12, 92013), (15, 92130), (16, 92133), (18, 92250), (19, 92253),

Gene: MiaZeal_192 Start: 93088, Stop: 93540, Start Num: 4
Candidate Starts for MiaZeal_192:
(Start: 3 @93004 has 1 MA's), (Start: 4 @93088 has 4 MA's), (Start: 6 @93100 has 7 MA's), ( 9 , 93157), (10, 93196), (12, 93289), (15, 93406), (16, 93409), (18, 93526), (19, 93529),

Gene: Odette_190 Start: 97109, Stop: 97546, Start Num: 7
Candidate Starts for Odette_190:
(1, 96851), (2, 96869), (Start: 7 @97109 has 2 MA's), (8, 97139), (11, 97277), (12, 97295), (13, 97352), (14, 97406), (17, 97454), (18, 97532), (19, 97535),

Gene: Omega_196 Start: 96623, Stop: 97063, Start Num: 6 Candidate Starts for Omega_196:
(Start: 3 @96527 has 1 MA's), (5, 96617), (Start: 6 @96623 has 7 MA's), (9, 96680), (10, 96719), (12, 96812), (15, 96929), (16, 96932), (18, 97049), (19, 97052),

Gene: Porcelain_188 Start: 92770, Stop: 93210, Start Num: 6 Candidate Starts for Porcelain_188:
(5, 92764), (Start: 6 @92770 has 7 MA's), (9, 92827), (10, 92866), (12, 92959), (15, 93076), (16, 93079), (18, 93196), (19, 93199),

Gene: Squint_184 Start: 92711, Stop: 93151, Start Num: 6 Candidate Starts for Squint_184:
(5, 92705), (Start: 6 @92711 has 7 MA's), (9, 92768), (10, 92807), (12, 92900), (15, 93017), (16, 93020), (18, 93137), (19, 93140),

Gene: Superphikiman_186 Start: 92482, Stop: 93018, Start Num: 3
Candidate Starts for Superphikiman_186:
(Start: 3 @92482 has 1 MA's), (Start: 4 @92566 has 4 MA's), (Start: 6 @92578 has 7 MA's), ( 9 , 92635), (10, 92674), (12, 92767), (15, 92884), (16, 92887), (18, 93004), (19, 93007),

Gene: Thibault_170 Start: 91951, Stop: 92391, Start Num: 6 Candidate Starts for Thibault_170:
(5, 91945), (Start: 6 @91951 has 7 MA's), (9, 92008), (10, 92047), (12, 92140), (15, 92257), (16, 92260), (18, 92377), (19, 92380),

Gene: ThreeRngTarjay_186 Start: 96459, Stop: 96896, Start Num: 7 Candidate Starts for ThreeRngTarjay_186:
(1, 96201), (2, 96219), (Start: 7 @96459 has 2 MA's), (8, 96489), (11, 96627), (13, 96702), (14, 96756), (17, 96804), (18, 96882), (19, 96885),

