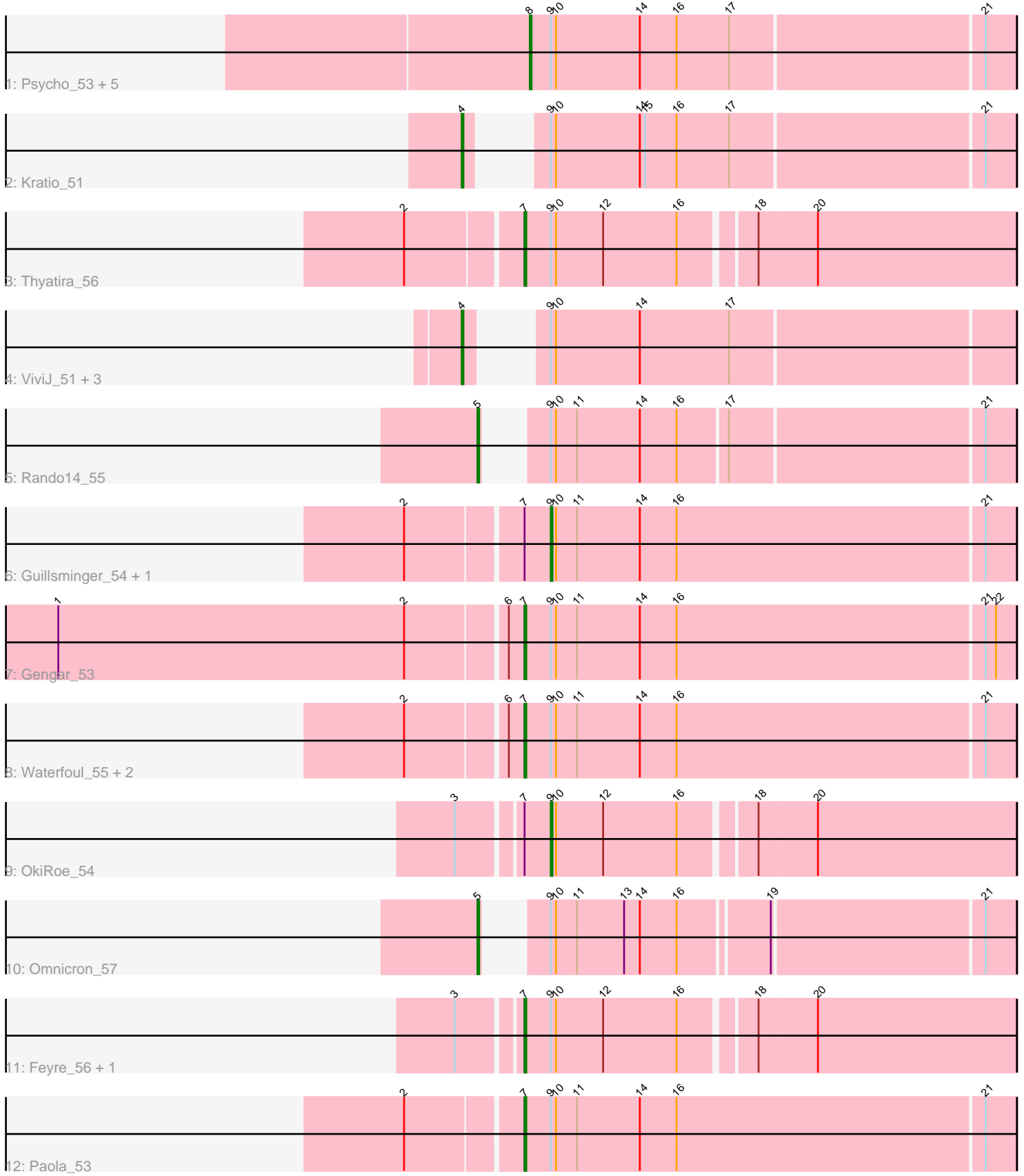


# Pham 216512



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 216512 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216512 has 24 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Psycho\_53, Neighly\_55, AlleyCat\_55, Larva\_54, Edugator\_52, Dadosky\_55
- Track 2 : Kratio\_51
- Track 3 : Thyatira\_56
- Track 4 : ViviJ\_51, Collard\_51, InvictusManeo\_51, Agent47\_53
- Track 5 : Rando14\_55
- Track 6 : Guillsminger\_54, Leston\_53
- Track 7 : Gengar\_53
- Track 8 : Waterfoul\_55, SoSeph\_54, Heftyboy\_54
- Track 9 : OkiRoe\_54
- Track 10 : Omnicron\_57
- Track 11 : Feyre\_56, Miryou\_57
- Track 12 : Paola\_53

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

The start number called the most often in the published annotations is 7, it was called in 8 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Feyre\_56, Gengar\_53, Heftyboy\_54, Miryou\_57, Paola\_53, SoSeph\_54, Thyatira\_56, Waterfoul\_55,

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

- Guillsminger\_54, Leston\_53, OkiRoe\_54,

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

- Agent47\_53, AlleyCat\_55, Collard\_51, Dadosky\_55, Edugator\_52, InvictusManeo\_51, Kratio\_51, Larva\_54, Neighly\_55, Omnicron\_57, Psycho\_53, Rando14\_55, ViviJ\_51,

### **Summary by start number:**

Start 4:

- Found in 5 of 24 ( 20.8% ) of genes in pham
- Manual Annotations of this start: 4 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Agent47\_53 (K5), Collard\_51 (K5), InvictusManeo\_51 (K5), Kratio\_51 (K5), ViviJ\_51 (K5),

#### Start 5:

- Found in 2 of 24 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 2 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Omnicron\_57 (K5), Rando14\_55 (K5),

#### Start 7:

- Found in 11 of 24 ( 45.8% ) of genes in pham
- Manual Annotations of this start: 8 of 22
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Feyre\_56 (K5), Gengar\_53 (K5), Heftyboy\_54 (K5), Miryou\_57 (K5), Paola\_53 (K5), SoSeph\_54 (K5), Thyatira\_56 (K5), Waterfoul\_55 (K5),

#### Start 8:

- Found in 6 of 24 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 5 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlleyCat\_55 (K5), Dadosky\_55 (K5), Edugator\_52 (K5), Larva\_54 (K5), Neighly\_55 (K3), Psycho\_53 (K5),

#### Start 9:

- Found in 24 of 24 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 22
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Guillsminger\_54 (K5), Leston\_53 (K5), OkiRoe\_54 (K5),

### **Summary by clusters:**

There are 2 clusters represented in this pham: K3, K5,

#### Info for manual annotations of cluster K5:

- Start number 4 was manually annotated 4 times for cluster K5.
- Start number 5 was manually annotated 2 times for cluster K5.
- Start number 7 was manually annotated 8 times for cluster K5.
- Start number 8 was manually annotated 5 times for cluster K5.
- Start number 9 was manually annotated 3 times for cluster K5.

### **Gene Information:**

Gene: Agent47\_53 Start: 38092, Stop: 38367, Start Num: 4

Candidate Starts for Agent47\_53:

(Start: 4 @38092 has 4 MA's), (Start: 9 @38107 has 3 MA's), (10, 38110), (14, 38158), (17, 38209),

Gene: AlleyCat\_55 Start: 38399, Stop: 38671, Start Num: 8

Candidate Starts for AlleyCat\_55:

(Start: 8 @38399 has 5 MA's), (Start: 9 @38411 has 3 MA's), (10, 38414), (14, 38462), (16, 38483), (17, 38513), (21, 38654),

Gene: Collard\_51 Start: 38053, Stop: 38328, Start Num: 4

Candidate Starts for Collard\_51:

(Start: 4 @38053 has 4 MA's), (Start: 9 @38068 has 3 MA's), (10, 38071), (14, 38119), (17, 38170),

Gene: Dadosky\_55 Start: 38401, Stop: 38673, Start Num: 8

Candidate Starts for Dadosky\_55:

(Start: 8 @38401 has 5 MA's), (Start: 9 @38413 has 3 MA's), (10, 38416), (14, 38464), (16, 38485), (17, 38515), (21, 38656),

Gene: Edugator\_52 Start: 39822, Stop: 40094, Start Num: 8

Candidate Starts for Edugator\_52:

(Start: 8 @39822 has 5 MA's), (Start: 9 @39834 has 3 MA's), (10, 39837), (14, 39885), (16, 39906), (17, 39936), (21, 40077),

Gene: Feyre\_56 Start: 41781, Stop: 42053, Start Num: 7

Candidate Starts for Feyre\_56:

(3, 41748), (Start: 7 @41781 has 8 MA's), (Start: 9 @41796 has 3 MA's), (10, 41799), (12, 41826), (16, 41868), (18, 41907), (20, 41940),

Gene: Gengar\_53 Start: 39794, Stop: 40072, Start Num: 7

Candidate Starts for Gengar\_53:

(1, 39533), (2, 39731), (6, 39785), (Start: 7 @39794 has 8 MA's), (Start: 9 @39809 has 3 MA's), (10, 39812), (11, 39824), (14, 39860), (16, 39881), (21, 40055), (22, 40061),

Gene: Guillsminger\_54 Start: 39780, Stop: 40043, Start Num: 9

Candidate Starts for Guillsminger\_54:

(2, 39702), (Start: 7 @39765 has 8 MA's), (Start: 9 @39780 has 3 MA's), (10, 39783), (11, 39795), (14, 39831), (16, 39852), (21, 40026),

Gene: Heftyboy\_54 Start: 40137, Stop: 40415, Start Num: 7

Candidate Starts for Heftyboy\_54:

(2, 40074), (6, 40128), (Start: 7 @40137 has 8 MA's), (Start: 9 @40152 has 3 MA's), (10, 40155), (11, 40167), (14, 40203), (16, 40224), (21, 40398),

Gene: InvictusManeo\_51 Start: 38096, Stop: 38371, Start Num: 4

Candidate Starts for InvictusManeo\_51:

(Start: 4 @38096 has 4 MA's), (Start: 9 @38111 has 3 MA's), (10, 38114), (14, 38162), (17, 38213),

Gene: Kratio\_51 Start: 37838, Stop: 38113, Start Num: 4

Candidate Starts for Kratio\_51:

(Start: 4 @37838 has 4 MA's), (Start: 9 @37853 has 3 MA's), (10, 37856), (14, 37904), (15, 37907), (16, 37925), (17, 37955), (21, 38096),

Gene: Larva\_54 Start: 39273, Stop: 39545, Start Num: 8

Candidate Starts for Larva\_54:

(Start: 8 @39273 has 5 MA's), (Start: 9 @39285 has 3 MA's), (10, 39288), (14, 39336), (16, 39357), (17, 39387), (21, 39528),

Gene: Leston\_53 Start: 39909, Stop: 40172, Start Num: 9

Candidate Starts for Leston\_53:

(2, 39831), (Start: 7 @39894 has 8 MA's), (Start: 9 @39909 has 3 MA's), (10, 39912), (11, 39924), (14, 39960), (16, 39981), (21, 40155),

Gene: Miryou\_57 Start: 42497, Stop: 42769, Start Num: 7

Candidate Starts for Miryou\_57:

(3, 42464), (Start: 7 @42497 has 8 MA's), (Start: 9 @42512 has 3 MA's), (10, 42515), (12, 42542), (16, 42584), (18, 42623), (20, 42656),

Gene: Neighly\_55 Start: 39272, Stop: 39544, Start Num: 8

Candidate Starts for Neighly\_55:

(Start: 8 @39272 has 5 MA's), (Start: 9 @39284 has 3 MA's), (10, 39287), (14, 39335), (16, 39356), (17, 39386), (21, 39527),

Gene: OkiRoe\_54 Start: 40183, Stop: 40440, Start Num: 9

Candidate Starts for OkiRoe\_54:

(3, 40135), (Start: 7 @40168 has 8 MA's), (Start: 9 @40183 has 3 MA's), (10, 40186), (12, 40213), (16, 40255), (18, 40294), (20, 40327),

Gene: Omnicron\_57 Start: 40271, Stop: 40540, Start Num: 5

Candidate Starts for Omnicron\_57:

(Start: 5 @40271 has 2 MA's), (Start: 9 @40286 has 3 MA's), (10, 40289), (11, 40301), (13, 40328), (14, 40337), (16, 40358), (19, 40406), (21, 40523),

Gene: Paola\_53 Start: 39765, Stop: 40043, Start Num: 7

Candidate Starts for Paola\_53:

(2, 39702), (Start: 7 @39765 has 8 MA's), (Start: 9 @39780 has 3 MA's), (10, 39783), (11, 39795), (14, 39831), (16, 39852), (21, 40026),

Gene: Psycho\_53 Start: 38398, Stop: 38670, Start Num: 8

Candidate Starts for Psycho\_53:

(Start: 8 @38398 has 5 MA's), (Start: 9 @38410 has 3 MA's), (10, 38413), (14, 38461), (16, 38482), (17, 38512), (21, 38653),

Gene: Rando14\_55 Start: 37968, Stop: 38240, Start Num: 5

Candidate Starts for Rando14\_55:

(Start: 5 @37968 has 2 MA's), (Start: 9 @37983 has 3 MA's), (10, 37986), (11, 37998), (14, 38034), (16, 38055), (17, 38082), (21, 38223),

Gene: SoSeph\_54 Start: 40137, Stop: 40415, Start Num: 7

Candidate Starts for SoSeph\_54:

(2, 40074), (6, 40128), (Start: 7 @40137 has 8 MA's), (Start: 9 @40152 has 3 MA's), (10, 40155), (11, 40167), (14, 40203), (16, 40224), (21, 40398),

Gene: Thyatira\_56 Start: 42101, Stop: 42373, Start Num: 7

Candidate Starts for Thyatira\_56:

(2, 42038), (Start: 7 @42101 has 8 MA's), (Start: 9 @42116 has 3 MA's), (10, 42119), (12, 42146), (16, 42188), (18, 42227), (20, 42260),

Gene: ViviJ\_51 Start: 37853, Stop: 38128, Start Num: 4

Candidate Starts for ViviJ\_51:

(Start: 4 @37853 has 4 MA's), (Start: 9 @37868 has 3 MA's), (10, 37871), (14, 37919), (17, 37970),

Gene: Waterfoul\_55 Start: 40199, Stop: 40477, Start Num: 7

Candidate Starts for Waterfoul\_55:

(2, 40136), (6, 40190), (Start: 7 @40199 has 8 MA's), (Start: 9 @40214 has 3 MA's), (10, 40217), (11, 40229), (14, 40265), (16, 40286), (21, 40460),