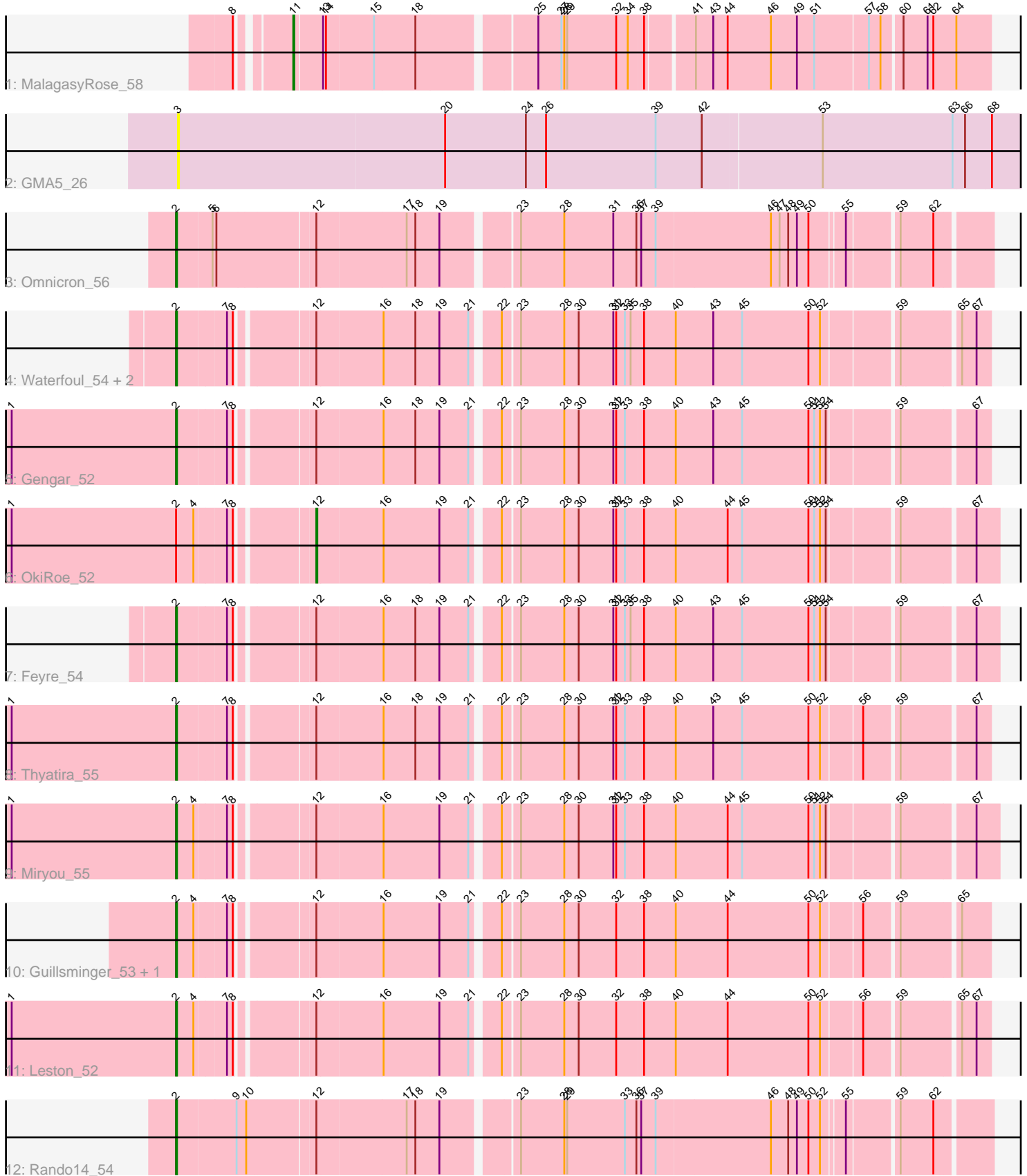


Pham 200715



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 200715 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200715 has 15 members, 1 are drafts.

Phages represented in each track:

- Track 1 : MalagasyRose\_58
- Track 2 : GMA5\_26
- Track 3 : Omnicron\_56
- Track 4 : Waterfoul\_54, SoSeph\_53, Heftyboy\_53
- Track 5 : Gengar\_52
- Track 6 : OkiRoe\_52
- Track 7 : Feyre\_54
- Track 8 : Thyatira\_55
- Track 9 : Miryou\_55
- Track 10 : Guillsminger\_53, Paola\_52
- Track 11 : Leston\_52
- Track 12 : Rando14\_54

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

The start number called the most often in the published annotations is 2, it was called in 12 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Feyre\_54, Gengar\_52, Guillsminger\_53, Heftyboy\_53, Leston\_52, Miryou\_55, Omnicron\_56, Paola\_52, Rando14\_54, SoSeph\_53, Thyatira\_55, Waterfoul\_54,

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

- OkiRoe\_52,

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

- GMA5\_26, MalagasyRose\_58,

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

Start 2:

- Found in 13 of 15 ( 86.7% ) of genes in pham
- Manual Annotations of this start: 12 of 14
- Called 92.3% of time when present

- Phage (with cluster) where this start called: Feyre\_54 (K5), Gengar\_52 (K5), Guillsminger\_53 (K5), Heftyboy\_53 (K5), Leston\_52 (K5), Miryou\_55 (K5), Omnicron\_56 (K5), Paola\_52 (K5), Rando14\_54 (K5), SoSeph\_53 (K5), Thyatira\_55 (K5), Waterfoul\_54 (K5),

#### Start 3:

- Found in 1 of 15 ( 6.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA5\_26 (CW2),

#### Start 11:

- Found in 1 of 15 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose\_58 (AG),

#### Start 12:

- Found in 13 of 15 ( 86.7% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 7.7% of time when present
- Phage (with cluster) where this start called: OkiRoe\_52 (K5),

### **Summary by clusters:**

There are 3 clusters represented in this pham: CW2, AG, K5,

Info for manual annotations of cluster AG:

- Start number 11 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K5:

- Start number 2 was manually annotated 12 times for cluster K5.
- Start number 12 was manually annotated 1 time for cluster K5.

### **Gene Information:**

Gene: Feyre\_54 Start: 40604, Stop: 41392, Start Num: 2

Candidate Starts for Feyre\_54:

(Start: 2 @40604 has 12 MA's), (7, 40652), (8, 40658), (Start: 12 @40727 has 1 MA's), (16, 40793), (18, 40826), (19, 40850), (21, 40880), (22, 40904), (23, 40919), (28, 40964), (30, 40979), (31, 41015), (32, 41018), (33, 41027), (35, 41033), (38, 41045), (40, 41078), (43, 41117), (45, 41147), (50, 41216), (51, 41222), (52, 41228), (54, 41234), (59, 41300), (67, 41369),

Gene: GMA5\_26 Start: 16193, Stop: 17065, Start Num: 3

Candidate Starts for GMA5\_26:

(3, 16193), (20, 16469), (24, 16553), (26, 16574), (39, 16688), (42, 16736), (53, 16856), (63, 16991), (66, 17003), (68, 17030),

Gene: Gengar\_52 Start: 39018, Stop: 39797, Start Num: 2

Candidate Starts for Gengar\_52:

(1, 38847), (Start: 2 @39018 has 12 MA's), (7, 39066), (8, 39072), (Start: 12 @39141 has 1 MA's), (16, 39207), (18, 39240), (19, 39264), (21, 39294), (22, 39318), (23, 39333), (28, 39378), (30, 39393), (31, 39429), (32, 39432), (33, 39441), (38, 39459), (40, 39492), (43, 39531), (45, 39561), (50, 39630), (51, 39636), (52, 39642), (54, 39648), (59, 39714), (67, 39783),

Gene: Guillsminger\_53 Start: 38989, Stop: 39768, Start Num: 2

Candidate Starts for Guillsminger\_53:

(Start: 2 @38989 has 12 MA's), (4, 39007), (7, 39037), (8, 39043), (Start: 12 @39112 has 1 MA's), (16, 39178), (19, 39235), (21, 39265), (22, 39289), (23, 39304), (28, 39349), (30, 39364), (32, 39403), (38, 39430), (40, 39463), (44, 39517), (50, 39601), (52, 39613), (56, 39652), (59, 39685), (65, 39739),

Gene: Heftyboy\_53 Start: 39361, Stop: 40140, Start Num: 2

Candidate Starts for Heftyboy\_53:

(Start: 2 @39361 has 12 MA's), (7, 39409), (8, 39415), (Start: 12 @39484 has 1 MA's), (16, 39550), (18, 39583), (19, 39607), (21, 39637), (22, 39661), (23, 39676), (28, 39721), (30, 39736), (31, 39772), (32, 39775), (33, 39784), (35, 39790), (38, 39802), (40, 39835), (43, 39874), (45, 39904), (50, 39973), (52, 39985), (59, 40057), (65, 40111), (67, 40126),

Gene: Leston\_52 Start: 39118, Stop: 39897, Start Num: 2

Candidate Starts for Leston\_52:

(1, 38947), (Start: 2 @39118 has 12 MA's), (4, 39136), (7, 39166), (8, 39172), (Start: 12 @39241 has 1 MA's), (16, 39307), (19, 39364), (21, 39394), (22, 39418), (23, 39433), (28, 39478), (30, 39493), (32, 39532), (38, 39559), (40, 39592), (44, 39646), (50, 39730), (52, 39742), (56, 39781), (59, 39814), (65, 39868), (67, 39883),

Gene: MalagasyRose\_58 Start: 39058, Stop: 39738, Start Num: 11

Candidate Starts for MalagasyRose\_58:

(8, 39016), (Start: 11 @39058 has 1 MA's), (13, 39085), (14, 39088), (15, 39136), (18, 39178), (25, 39289), (27, 39313), (28, 39316), (29, 39319), (32, 39370), (34, 39382), (38, 39397), (41, 39442), (43, 39460), (44, 39475), (46, 39520), (49, 39547), (51, 39565), (57, 39619), (58, 39631), (60, 39649), (61, 39673), (62, 39679), (64, 39703),

Gene: Miryou\_55 Start: 41320, Stop: 42108, Start Num: 2

Candidate Starts for Miryou\_55:

(1, 41149), (Start: 2 @41320 has 12 MA's), (4, 41338), (7, 41368), (8, 41374), (Start: 12 @41443 has 1 MA's), (16, 41509), (19, 41566), (21, 41596), (22, 41620), (23, 41635), (28, 41680), (30, 41695), (31, 41731), (32, 41734), (33, 41743), (38, 41761), (40, 41794), (44, 41848), (45, 41863), (50, 41932), (51, 41938), (52, 41944), (54, 41950), (59, 42016), (67, 42085),

Gene: OkiRoe\_52 Start: 39114, Stop: 39779, Start Num: 12

Candidate Starts for OkiRoe\_52:

(1, 38820), (Start: 2 @38991 has 12 MA's), (4, 39009), (7, 39039), (8, 39045), (Start: 12 @39114 has 1 MA's), (16, 39180), (19, 39237), (21, 39267), (22, 39291), (23, 39306), (28, 39351), (30, 39366), (31, 39402), (32, 39405), (33, 39414), (38, 39432), (40, 39465), (44, 39519), (45, 39534), (50, 39603), (51, 39609), (52, 39615), (54, 39621), (59, 39687), (67, 39756),

Gene: Omnicron\_56 Start: 39478, Stop: 40266, Start Num: 2

Candidate Starts for Omnicron\_56:

(Start: 2 @39478 has 12 MA's), (5, 39514), (6, 39517), (Start: 12 @39613 has 1 MA's), (17, 39703), (18, 39712), (19, 39736), (23, 39805), (28, 39850), (31, 39901), (36, 39925), (37, 39928), (39, 39943), (46, 40060), (47, 40069), (48, 40078), (49, 40087), (50, 40099), (55, 40132), (59, 40180), (62, 40213),

Gene: Paola\_52 Start: 38989, Stop: 39768, Start Num: 2

Candidate Starts for Paola\_52:

(Start: 2 @38989 has 12 MA's), (4, 39007), (7, 39037), (8, 39043), (Start: 12 @39112 has 1 MA's), (16, 39178), (19, 39235), (21, 39265), (22, 39289), (23, 39304), (28, 39349), (30, 39364), (32, 39403), (38, 39430), (40, 39463), (44, 39517), (50, 39601), (52, 39613), (56, 39652), (59, 39685), (65, 39739),

Gene: Rando14\_54 Start: 37175, Stop: 37963, Start Num: 2

Candidate Starts for Rando14\_54:

(Start: 2 @37175 has 12 MA's), (9, 37235), (10, 37244), (Start: 12 @37310 has 1 MA's), (17, 37400), (18, 37409), (19, 37433), (23, 37502), (28, 37547), (29, 37550), (33, 37610), (36, 37622), (37, 37625), (39, 37640), (46, 37757), (48, 37775), (49, 37784), (50, 37796), (52, 37808), (55, 37829), (59, 37877), (62, 37910),

Gene: SoSeph\_53 Start: 39361, Stop: 40140, Start Num: 2

Candidate Starts for SoSeph\_53:

(Start: 2 @39361 has 12 MA's), (7, 39409), (8, 39415), (Start: 12 @39484 has 1 MA's), (16, 39550), (18, 39583), (19, 39607), (21, 39637), (22, 39661), (23, 39676), (28, 39721), (30, 39736), (31, 39772), (32, 39775), (33, 39784), (35, 39790), (38, 39802), (40, 39835), (43, 39874), (45, 39904), (50, 39973), (52, 39985), (59, 40057), (65, 40111), (67, 40126),

Gene: Thyatira\_55 Start: 41325, Stop: 42104, Start Num: 2

Candidate Starts for Thyatira\_55:

(1, 41154), (Start: 2 @41325 has 12 MA's), (7, 41373), (8, 41379), (Start: 12 @41448 has 1 MA's), (16, 41514), (18, 41547), (19, 41571), (21, 41601), (22, 41625), (23, 41640), (28, 41685), (30, 41700), (31, 41736), (32, 41739), (33, 41748), (38, 41766), (40, 41799), (43, 41838), (45, 41868), (50, 41937), (52, 41949), (56, 41988), (59, 42021), (67, 42090),

Gene: Waterfoul\_54 Start: 39423, Stop: 40202, Start Num: 2

Candidate Starts for Waterfoul\_54:

(Start: 2 @39423 has 12 MA's), (7, 39471), (8, 39477), (Start: 12 @39546 has 1 MA's), (16, 39612), (18, 39645), (19, 39669), (21, 39699), (22, 39723), (23, 39738), (28, 39783), (30, 39798), (31, 39834), (32, 39837), (33, 39846), (35, 39852), (38, 39864), (40, 39897), (43, 39936), (45, 39966), (50, 40035), (52, 40047), (59, 40119), (65, 40173), (67, 40188),