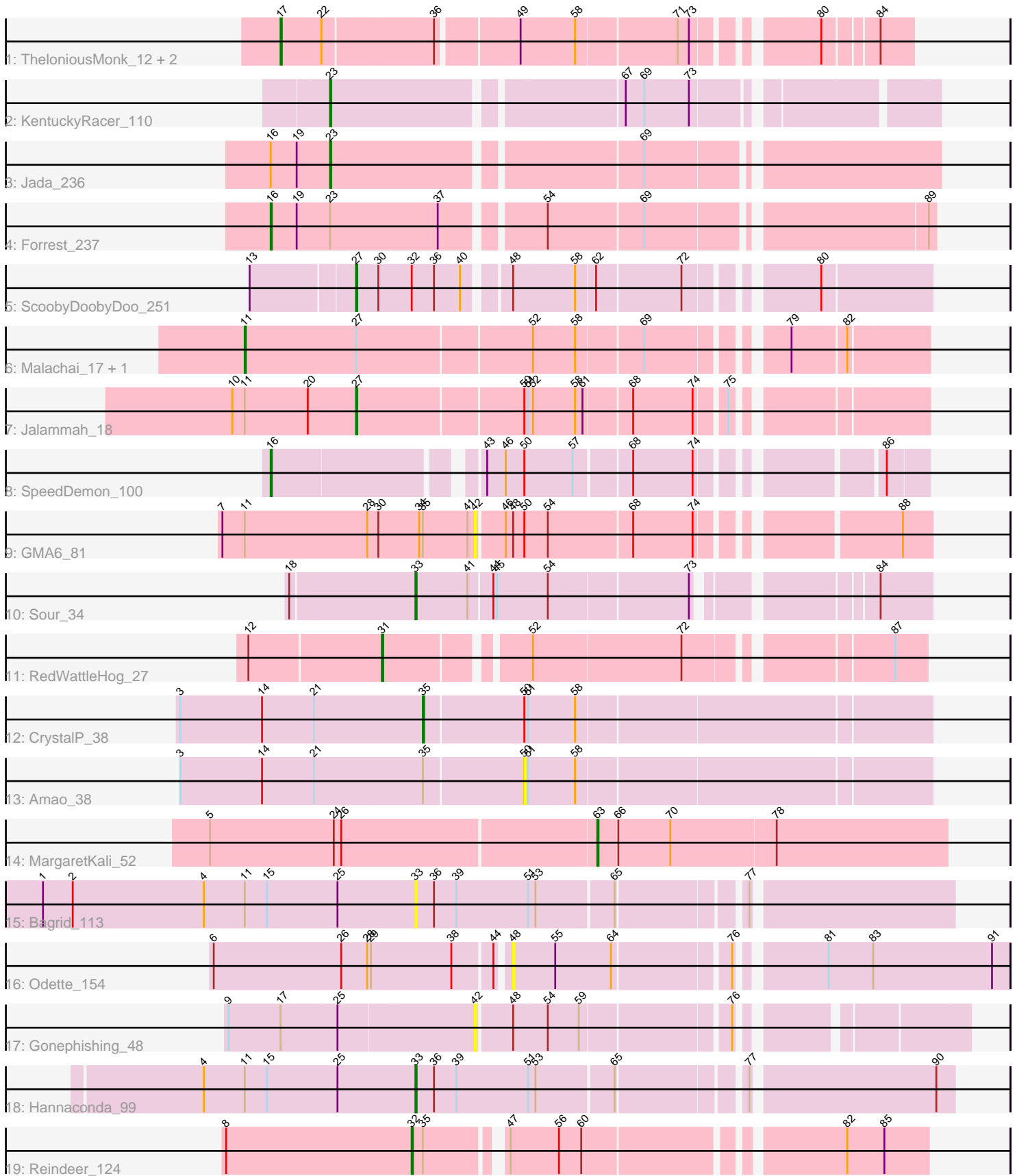


Pham 203286



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 203286 Report

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

Pham number 203286 has 22 members, 5 are drafts.

Phages represented in each track:

- Track 1 : TheloniousMonk\_12, Target\_12, Gwendoluna\_12
- Track 2 : KentuckyRacer\_110
- Track 3 : Jada\_236
- Track 4 : Forrest\_237
- Track 5 : ScoobyDoobyDoo\_251
- Track 6 : Malachai\_17, Begonia\_17
- Track 7 : Jalammah\_18
- Track 8 : SpeedDemon\_100
- Track 9 : GMA6\_81
- Track 10 : Sour\_34
- Track 11 : RedWattleHog\_27
- Track 12 : CrystalP\_38
- Track 13 : Amao\_38
- Track 14 : MargaretKali\_52
- Track 15 : Bagrid\_113
- Track 16 : Odette\_154
- Track 17 : Gonephishing\_48
- Track 18 : Hannaconda\_99
- Track 19 : Reindeer\_124

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

The start number called the most often in the published annotations is 17, it was called in 3 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Gwendoluna\_12, Target\_12, TheloniousMonk\_12,

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

- Gonephishing\_48,

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

- Amao\_38, Bagrid\_113, Begonia\_17, CrystalP\_38, Forrest\_237, GMA6\_81, Hannaconda\_99, Jada\_236, Jalammah\_18, KentuckyRacer\_110, Malachai\_17,

MargaretKali\_52, Odette\_154, RedWattleHog\_27, Reindeer\_124, ScoobyDoobyDoo\_251, Sour\_34, SpeedDemon\_100,

### Summary by start number:

#### Start 11:

- Found in 6 of 22 ( 27.3% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Begonia\_17 (CV), Malachai\_17 (CV),

#### Start 16:

- Found in 3 of 22 ( 13.6% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Forrest\_237 (BK1), SpeedDemon\_100 (DL),

#### Start 17:

- Found in 4 of 22 ( 18.2% ) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Gwendoluna\_12 (A1), Target\_12 (A1), TheloniousMonk\_12 (A1),

#### Start 23:

- Found in 3 of 22 ( 13.6% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Jada\_236 (BK1), KentuckyRacer\_110 (BE2),

#### Start 27:

- Found in 4 of 22 ( 18.2% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Jalammah\_18 (CV), ScoobyDoobyDoo\_251 (C2),

#### Start 31:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RedWattleHog\_27 (DX),

#### Start 32:

- Found in 2 of 22 ( 9.1% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Reindeer\_124 (M1),

#### Start 33:

- Found in 3 of 22 ( 13.6% ) of genes in pham

- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bagrid\_113 (J), Hannaconda\_99 (J), Sour\_34 (DR),

Start 35:

- Found in 4 of 22 ( 18.2% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 25.0% of time when present
- Phage (with cluster) where this start called: CrystalP\_38 (E),

Start 42:

- Found in 2 of 22 ( 9.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6\_81 (DQ), Gonephishing\_48 (J),

Start 48:

- Found in 4 of 22 ( 18.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Odette\_154 (J),

Start 50:

- Found in 5 of 22 ( 22.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Amao\_38 (E),

Start 63:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MargaretKali\_52 (FB),

### **Summary by clusters:**

There are 13 clusters represented in this pham: DL, E, J, A1, FB, M1, BK1, DX, BE2, C2, DR, CV, DQ,

Info for manual annotations of cluster A1:

- Start number 17 was manually annotated 3 times for cluster A1.

Info for manual annotations of cluster BE2:

- Start number 23 was manually annotated 1 time for cluster BE2.

Info for manual annotations of cluster BK1:

- Start number 16 was manually annotated 1 time for cluster BK1.
- Start number 23 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster C2:

- Start number 27 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CV:

- Start number 11 was manually annotated 2 times for cluster CV.
- Start number 27 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DL:

- Start number 16 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DR:

- Start number 33 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster DX:

- Start number 31 was manually annotated 1 time for cluster DX.

Info for manual annotations of cluster E:

- Start number 35 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster FB:

- Start number 63 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster J:

- Start number 33 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster M1:

- Start number 32 was manually annotated 1 time for cluster M1.

### ***Gene Information:***

Gene: Amao\_38 Start: 33060, Stop: 32746, Start Num: 50

Candidate Starts for Amao\_38:

(3, 33333), (14, 33267), (21, 33225), (Start: 35 @33138 has 1 MA's), (50, 33060), (51, 33057), (58, 33021),

Gene: Bagrid\_113 Start: 63671, Stop: 64075, Start Num: 33

Candidate Starts for Bagrid\_113:

(1, 63371), (2, 63395), (4, 63500), (Start: 11 @63533 has 2 MA's), (15, 63551), (25, 63608), (Start: 33 @63671 has 2 MA's), (36, 63686), (39, 63704), (51, 63761), (53, 63767), (65, 63827), (77, 63920),

Gene: Begonia\_17 Start: 10279, Stop: 10785, Start Num: 11

Candidate Starts for Begonia\_17:

(Start: 11 @10279 has 2 MA's), (Start: 27 @10369 has 2 MA's), (52, 10504), (58, 10537), (69, 10588), (79, 10681), (82, 10723),

Gene: CrystalP\_38 Start: 33934, Stop: 33542, Start Num: 35

Candidate Starts for CrystalP\_38:

(3, 34129), (14, 34063), (21, 34021), (Start: 35 @33934 has 1 MA's), (50, 33856), (51, 33853), (58, 33817),

Gene: Forrest\_237 Start: 114096, Stop: 114590, Start Num: 16

Candidate Starts for Forrest\_237:

(Start: 16 @114096 has 2 MA's), (19, 114117), (Start: 23 @114144 has 2 MA's), (37, 114231), (54, 114303), (69, 114378), (89, 114585),

Gene: GMA6\_81 Start: 64168, Stop: 64497, Start Num: 42

Candidate Starts for GMA6\_81:

(7, 63964), (Start: 11 @63982 has 2 MA's), (28, 64081), (30, 64090), (34, 64123), (Start: 35 @64126 has 1 MA's), (41, 64162), (42, 64168), (46, 64189), (48, 64195), (50, 64204), (54, 64222), (68, 64288), (74, 64336), (88, 64474),

Gene: Gonephishing\_48 Start: 38804, Stop: 38457, Start Num: 42

Candidate Starts for Gonephishing\_48:

(9, 38996), (Start: 17 @38954 has 3 MA's), (25, 38909), (42, 38804), (48, 38777), (54, 38750), (59, 38726), (76, 38615),

Gene: Gwendoluna\_12 Start: 7666, Stop: 8121, Start Num: 17

Candidate Starts for Gwendoluna\_12:

(Start: 17 @7666 has 3 MA's), (22, 7699), (36, 7786), (49, 7846), (58, 7888), (71, 7966), (73, 7975), (80, 8056), (84, 8095),

Gene: Hannaconda\_99 Start: 57411, Stop: 57815, Start Num: 33

Candidate Starts for Hannaconda\_99:

(4, 57240), (Start: 11 @57273 has 2 MA's), (15, 57291), (25, 57348), (Start: 33 @57411 has 2 MA's), (36, 57426), (39, 57444), (51, 57501), (53, 57507), (65, 57567), (77, 57660), (90, 57801),

Gene: Jada\_236 Start: 113382, Stop: 113834, Start Num: 23

Candidate Starts for Jada\_236:

(Start: 16 @113334 has 2 MA's), (19, 113355), (Start: 23 @113382 has 2 MA's), (69, 113616),

Gene: Jalammah\_18 Start: 10634, Stop: 11050, Start Num: 27

Candidate Starts for Jalammah\_18:

(10, 10535), (Start: 11 @10544 has 2 MA's), (20, 10595), (Start: 27 @10634 has 2 MA's), (50, 10763), (51, 10766), (52, 10769), (58, 10802), (61, 10808), (68, 10844), (74, 10892), (75, 10913),

Gene: KentuckyRacer\_110 Start: 73819, Stop: 74262, Start Num: 23

Candidate Starts for KentuckyRacer\_110:

(Start: 23 @73819 has 2 MA's), (67, 74038), (69, 74053), (73, 74089),

Gene: Malachai\_17 Start: 10279, Stop: 10785, Start Num: 11

Candidate Starts for Malachai\_17:

(Start: 11 @10279 has 2 MA's), (Start: 27 @10369 has 2 MA's), (52, 10504), (58, 10537), (69, 10588), (79, 10681), (82, 10723),

Gene: MargaretKali\_52 Start: 31304, Stop: 31582, Start Num: 63

Candidate Starts for MargaretKali\_52:

(5, 30998), (24, 31097), (26, 31103), (Start: 63 @31304 has 1 MA's), (66, 31319), (70, 31361), (78, 31445),

Gene: Odette\_154 Start: 81698, Stop: 82069, Start Num: 48

Candidate Starts for Odette\_154:

(6, 81470), (26, 81572), (28, 81593), (29, 81596), (38, 81659), (44, 81689), (48, 81698), (55, 81731), (64, 81776), (76, 81863), (81, 81923), (83, 81959), (91, 82055),

Gene: RedWattleHog\_27 Start: 28545, Stop: 28156, Start Num: 31

Candidate Starts for RedWattleHog\_27:

(12, 28650), (Start: 31 @28545 has 1 MA's), (52, 28443), (72, 28326), (87, 28179),

Gene: Reindeer\_124 Start: 66316, Stop: 66687, Start Num: 32

Candidate Starts for Reindeer\_124:

(8, 66166), (Start: 32 @66316 has 1 MA's), (Start: 35 @66325 has 1 MA's), (47, 66379), (56, 66418), (60, 66436), (82, 66622), (85, 66652),

Gene: ScoobyDoobyDoo\_251 Start: 151338, Stop: 151754, Start Num: 27

Candidate Starts for ScoobyDoobyDoo\_251:

(13, 151257), (Start: 27 @151338 has 2 MA's), (30, 151356), (Start: 32 @151383 has 1 MA's), (36, 151401), (40, 151422), (48, 151452), (58, 151500), (62, 151515), (72, 151581), (80, 151668),

Gene: Sour\_34 Start: 32659, Stop: 32288, Start Num: 33

Candidate Starts for Sour\_34:

(18, 32755), (Start: 33 @32659 has 2 MA's), (41, 32617), (44, 32599), (45, 32596), (54, 32557), (73, 32449), (84, 32329),

Gene: SpeedDemon\_100 Start: 4893, Stop: 5351, Start Num: 16

Candidate Starts for SpeedDemon\_100:

(Start: 16 @4893 has 2 MA's), (43, 5040), (46, 5055), (50, 5070), (57, 5109), (68, 5151), (74, 5199), (86, 5319),

Gene: Target\_12 Start: 7244, Stop: 7699, Start Num: 17

Candidate Starts for Target\_12:

(Start: 17 @7244 has 3 MA's), (22, 7277), (36, 7364), (49, 7424), (58, 7466), (71, 7544), (73, 7553), (80, 7634), (84, 7673),

Gene: TheloniousMonk\_12 Start: 7471, Stop: 7926, Start Num: 17

Candidate Starts for TheloniousMonk\_12:

(Start: 17 @7471 has 3 MA's), (22, 7504), (36, 7591), (49, 7651), (58, 7693), (71, 7771), (73, 7780), (80, 7861), (84, 7900),