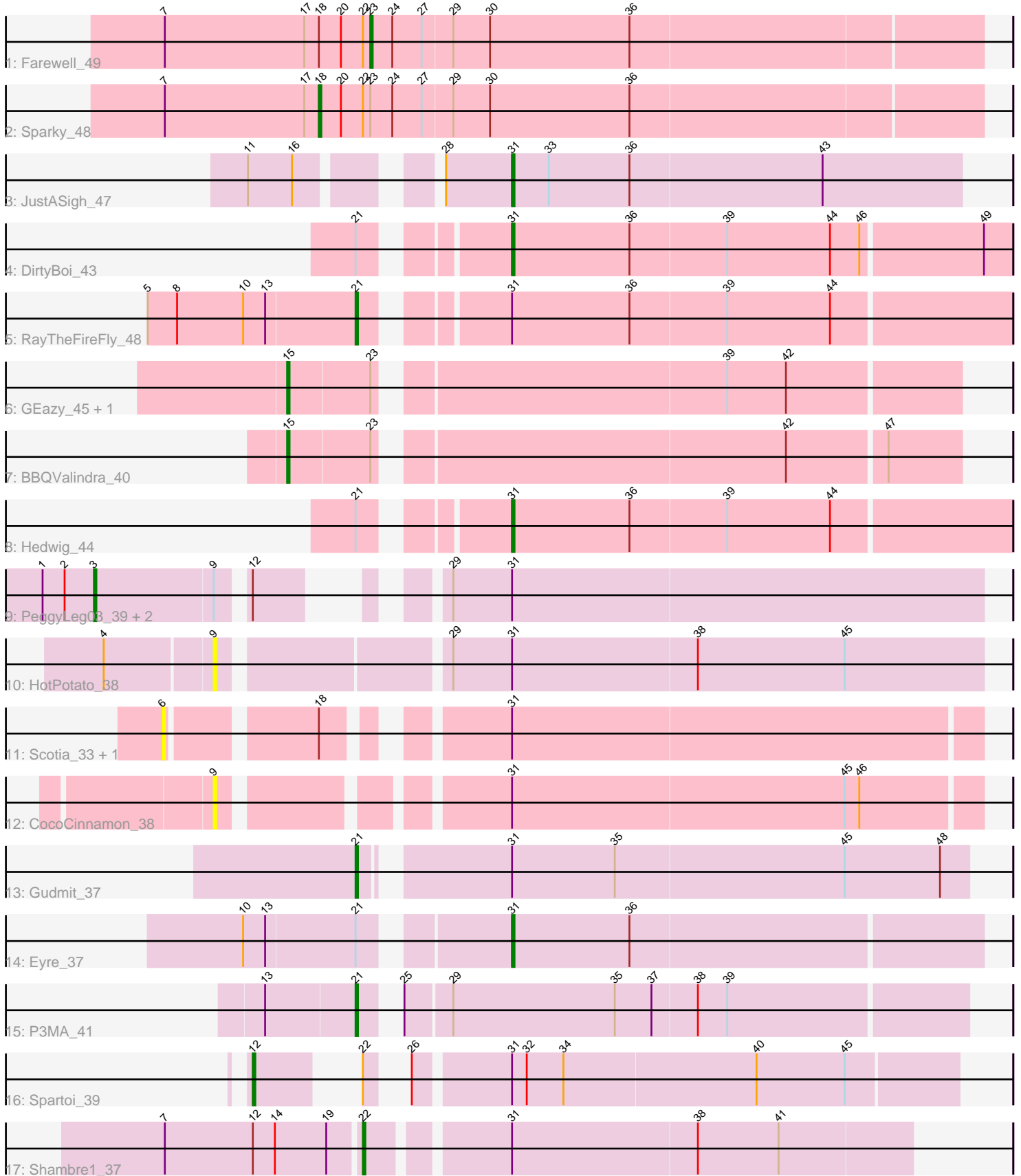


Pham 224888



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 224888 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224888 has 21 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Farewell\_49
- Track 2 : Sparky\_48
- Track 3 : JustASigh\_47
- Track 4 : DirtyBoi\_43
- Track 5 : RayTheFireFly\_48
- Track 6 : GEazy\_45, HannahD\_43
- Track 7 : BBQValindra\_40
- Track 8 : Hedwig\_44
- Track 9 : PeggyLeg03\_39, Pucara\_36, Karkharias\_39
- Track 10 : HotPotato\_38
- Track 11 : Scotia\_33, NoSwimming\_35
- Track 12 : CocoCinnamon\_38
- Track 13 : Gudmit\_37
- Track 14 : Eyre\_37
- Track 15 : P3MA\_41
- Track 16 : Spartoi\_39
- Track 17 : Shambre1\_37

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

The start number called the most often in the published annotations is 31, it was called in 4 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- DirtyBoi\_43, Eyre\_37, Hedwig\_44, JustASigh\_47,

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

- CocoCinnamon\_38, Gudmit\_37, HotPotato\_38, Karkharias\_39, NoSwimming\_35, PeggyLeg03\_39, Pucara\_36, RayTheFireFly\_48, Scotia\_33, Shambre1\_37, Spartoi\_39,

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

- BBQValindra\_40, Farewell\_49, GEazy\_45, HannahD\_43, P3MA\_41, Sparky\_48,

## Summary by start number:

### Start 3:

- Found in 3 of 21 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Karkharias\_39 (FA), PeggyLeg03\_39 (FA), Pucara\_36 (FA),

### Start 6:

- Found in 2 of 21 ( 9.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NoSwimming\_35 (FO), Scotia\_33 (FO),

### Start 9:

- Found in 5 of 21 ( 23.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 40.0% of time when present
- Phage (with cluster) where this start called: CocoCinnamon\_38 (FO), HotPotato\_38 (FA),

### Start 12:

- Found in 5 of 21 ( 23.8% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Spartoi\_39 (singleton),

### Start 15:

- Found in 3 of 21 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BBQValindra\_40 (DB), GEazy\_45 (DB), HannahD\_43 (DB),

### Start 18:

- Found in 4 of 21 ( 19.0% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Sparky\_48 (AF),

### Start 21:

- Found in 6 of 21 ( 28.6% ) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gudmit\_37 (singleton), P3MA\_41 (singleton), RayTheFireFly\_48 (DB),

### Start 22:

- Found in 4 of 21 ( 19.0% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Shambre1\_37 (singleton),

Start 23:

- Found in 5 of 21 ( 23.8% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Farewell\_49 (AF),

Start 31:

- Found in 15 of 21 ( 71.4% ) of genes in pham
- Manual Annotations of this start: 4 of 16
- Called 26.7% of time when present
- Phage (with cluster) where this start called: DirtyBoi\_43 (DB), Eyre\_37 (singleton), Hedwig\_44 (DB), JustASigh\_47 (AH),

**Summary by clusters:**

There are 6 clusters represented in this pham: singleton, AF, AH, DB, FA, FO,

Info for manual annotations of cluster AF:

- Start number 18 was manually annotated 1 time for cluster AF.
- Start number 23 was manually annotated 1 time for cluster AF.

Info for manual annotations of cluster AH:

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

Info for manual annotations of cluster DB:

- Start number 15 was manually annotated 3 times for cluster DB.
- Start number 21 was manually annotated 1 time for cluster DB.
- Start number 31 was manually annotated 2 times for cluster DB.

Info for manual annotations of cluster FA:

- Start number 3 was manually annotated 2 times for cluster FA.

**Gene Information:**

Gene: BBQValindra\_40 Start: 33028, Stop: 33285, Start Num: 15

Candidate Starts for BBQValindra\_40:

(Start: 15 @33028 has 3 MA's), (Start: 23 @33061 has 1 MA's), (42, 33217), (47, 33256),

Gene: CocoCinnamon\_38 Start: 26265, Stop: 26552, Start Num: 9

Candidate Starts for CocoCinnamon\_38:

(9, 26265), (Start: 31 @26364 has 4 MA's), (45, 26499), (46, 26505),

Gene: DirtyBoi\_43 Start: 31965, Stop: 32165, Start Num: 31

Candidate Starts for DirtyBoi\_43:

(Start: 21 @31917 has 3 MA's), (Start: 31 @31965 has 4 MA's), (36, 32013), (39, 32052), (44, 32094), (46, 32106), (49, 32154),

Gene: Eyre\_37 Start: 28147, Stop: 28335, Start Num: 31

Candidate Starts for Eyre\_37:

(10, 28051), (13, 28060), (Start: 21 @28096 has 3 MA's), (Start: 31 @28147 has 4 MA's), (36, 28195),

Gene: Farewell\_49 Start: 36104, Stop: 36349, Start Num: 23

Candidate Starts for Farewell\_49:

(7, 36020), (17, 36077), (Start: 18 @36083 has 1 MA's), (20, 36092), (Start: 22 @36101 has 1 MA's), (Start: 23 @36104 has 1 MA's), (24, 36113), (27, 36125), (29, 36137), (30, 36152), (36, 36209),

Gene: GEazy\_45 Start: 32607, Stop: 32864, Start Num: 15

Candidate Starts for GEazy\_45:

(Start: 15 @32607 has 3 MA's), (Start: 23 @32640 has 1 MA's), (39, 32772), (42, 32796),

Gene: Gudmit\_37 Start: 27130, Stop: 27366, Start Num: 21

Candidate Starts for Gudmit\_37:

(Start: 21 @27130 has 3 MA's), (Start: 31 @27181 has 4 MA's), (35, 27223), (45, 27316), (48, 27355),

Gene: HannahD\_43 Start: 31974, Stop: 32231, Start Num: 15

Candidate Starts for HannahD\_43:

(Start: 15 @31974 has 3 MA's), (Start: 23 @32007 has 1 MA's), (39, 32139), (42, 32163),

Gene: Hedwig\_44 Start: 32388, Stop: 32588, Start Num: 31

Candidate Starts for Hedwig\_44:

(Start: 21 @32340 has 3 MA's), (Start: 31 @32388 has 4 MA's), (36, 32436), (39, 32475), (44, 32517),

Gene: HotPotato\_38 Start: 28340, Stop: 28639, Start Num: 9

Candidate Starts for HotPotato\_38:

(4, 28298), (9, 28340), (29, 28424), (Start: 31 @28448 has 4 MA's), (38, 28523), (45, 28583),

Gene: JustASigh\_47 Start: 34656, Stop: 34838, Start Num: 31

Candidate Starts for JustASigh\_47:

(11, 34569), (16, 34587), (28, 34629), (Start: 31 @34656 has 4 MA's), (33, 34671), (36, 34704), (43, 34782),

Gene: Karkharias\_39 Start: 28202, Stop: 28516, Start Num: 3

Candidate Starts for Karkharias\_39:

(1, 28181), (2, 28190), (Start: 3 @28202 has 2 MA's), (9, 28250), (Start: 12 @28259 has 1 MA's), (29, 28301), (Start: 31 @28325 has 4 MA's),

Gene: NoSwimming\_35 Start: 27992, Stop: 28291, Start Num: 6

Candidate Starts for NoSwimming\_35:

(6, 27992), (Start: 18 @28046 has 1 MA's), (Start: 31 @28103 has 4 MA's),

Gene: P3MA\_41 Start: 31039, Stop: 31272, Start Num: 21

Candidate Starts for P3MA\_41:

(13, 31003), (Start: 21 @31039 has 3 MA's), (25, 31048), (29, 31066), (35, 31132), (37, 31147), (38, 31165), (39, 31177),

Gene: PeggyLeg03\_39 Start: 28437, Stop: 28751, Start Num: 3

Candidate Starts for PeggyLeg03\_39:

(1, 28416), (2, 28425), (Start: 3 @28437 has 2 MA's), (9, 28485), (Start: 12 @28494 has 1 MA's), (29, 28536), (Start: 31 @28560 has 4 MA's),

Gene: Pucara\_36 Start: 28042, Stop: 28356, Start Num: 3

Candidate Starts for Pucara\_36:

(1, 28021), (2, 28030), (Start: 3 @28042 has 2 MA's), (9, 28090), (Start: 12 @28099 has 1 MA's), (29, 28141), (Start: 31 @28165 has 4 MA's),

Gene: RayTheFireFly\_48 Start: 33514, Stop: 33762, Start Num: 21

Candidate Starts for RayTheFireFly\_48:

(5, 33430), (8, 33442), (10, 33469), (13, 33478), (Start: 21 @33514 has 3 MA's), (Start: 31 @33562 has 4 MA's), (36, 33610), (39, 33649), (44, 33691),

Gene: Scotia\_33 Start: 27033, Stop: 27332, Start Num: 6

Candidate Starts for Scotia\_33:

(6, 27033), (Start: 18 @27087 has 1 MA's), (Start: 31 @27144 has 4 MA's),

Gene: Shambre1\_37 Start: 25536, Stop: 25748, Start Num: 22

Candidate Starts for Shambre1\_37:

(7, 25458), (Start: 12 @25494 has 1 MA's), (14, 25503), (19, 25524), (Start: 22 @25536 has 1 MA's), (Start: 31 @25587 has 4 MA's), (38, 25662), (41, 25695),

Gene: Sparky\_48 Start: 36514, Stop: 36780, Start Num: 18

Candidate Starts for Sparky\_48:

(7, 36451), (17, 36508), (Start: 18 @36514 has 1 MA's), (20, 36523), (Start: 22 @36532 has 1 MA's), (Start: 23 @36535 has 1 MA's), (24, 36544), (27, 36556), (29, 36568), (30, 36583), (36, 36640),

Gene: Spartoi\_39 Start: 26733, Stop: 26978, Start Num: 12

Candidate Starts for Spartoi\_39:

(Start: 12 @26733 has 1 MA's), (Start: 22 @26757 has 1 MA's), (26, 26763), (Start: 31 @26799 has 4 MA's), (32, 26805), (34, 26820), (40, 26898), (45, 26934),