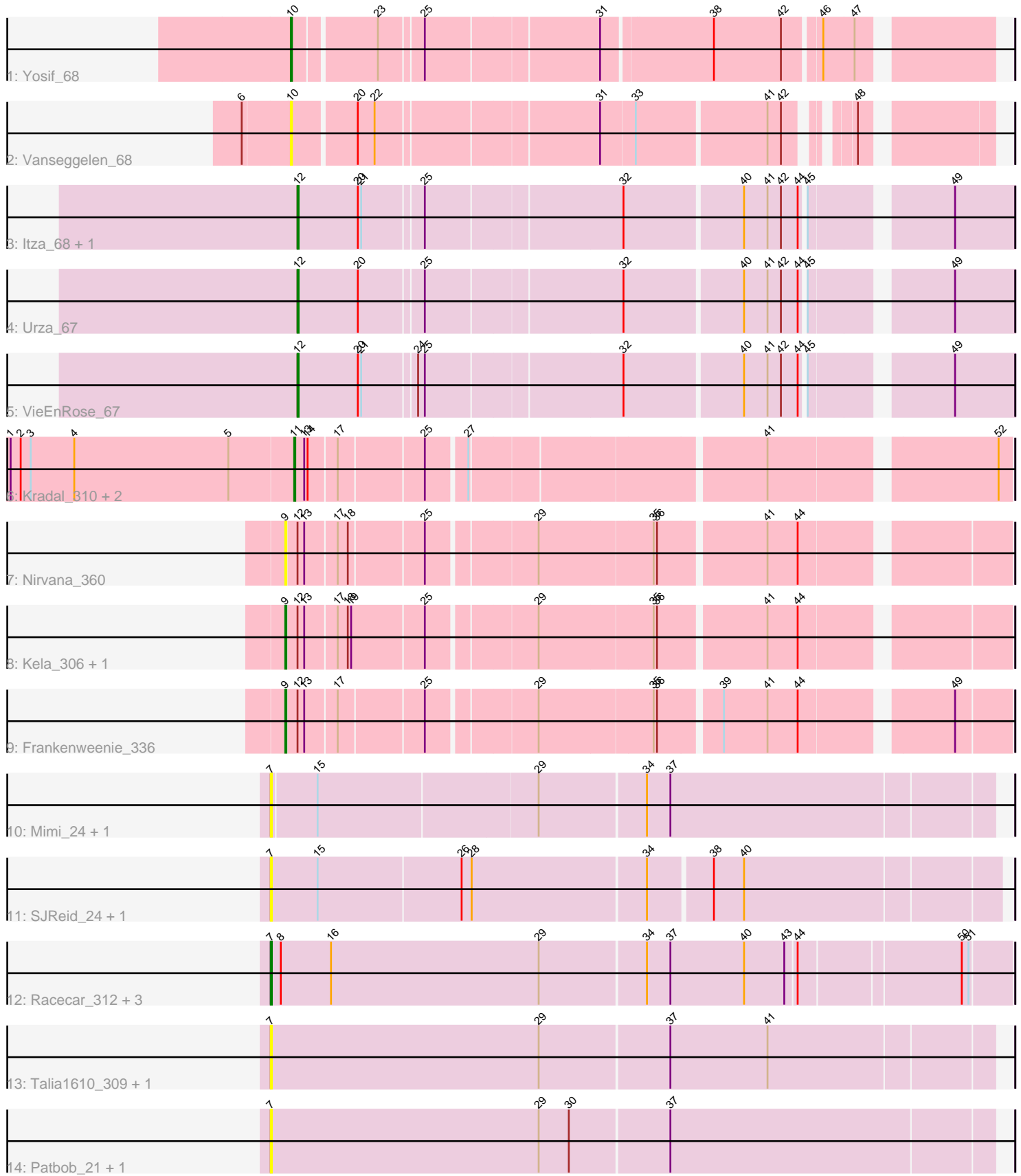


# Pham 150632



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 150632 Report

This analysis was run 04/28/24 on database version 559.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 150632 has 25 members, 12 are drafts.

Phages represented in each track:

- Track 1 : Yosif\_68
- Track 2 : Vanseggelen\_68
- Track 3 : Itza\_68, Celia\_65
- Track 4 : Urza\_67
- Track 5 : VieEnRose\_67
- Track 6 : Kradal\_310, EhyElimayoE\_313, Satis\_310
- Track 7 : Nirvana\_360
- Track 8 : Kela\_306, JustBecause\_308
- Track 9 : Frankenweenie\_336
- Track 10 : Mimi\_24, Mimi\_314
- Track 11 : SJReid\_24, SJReid\_335
- Track 12 : Racecar\_312, Bloom\_24, Bloom\_311, Racecar\_23
- Track 13 : Talia1610\_309, Talia1610\_22
- Track 14 : Patbob\_21, Patbob\_311

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

The start number called the most often in the published annotations is 12, it was called in 4 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Celia\_65, Itza\_68, Urza\_67, VieEnRose\_67,

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

- Frankenweenie\_336, JustBecause\_308, Kela\_306, Nirvana\_360,

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

- Bloom\_24, Bloom\_311, EhyElimayoE\_313, Kradal\_310, Mimi\_24, Mimi\_314, Patbob\_21, Patbob\_311, Racecar\_23, Racecar\_312, SJReid\_24, SJReid\_335, Satis\_310, Talia1610\_22, Talia1610\_309, Vanseggelen\_68, Yosif\_68,

## Summary by start number:

### Start 7:

- Found in 12 of 25 ( 48.0% ) of genes in pham
- Manual Annotations of this start: 2 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bloom\_24 (FC), Bloom\_311 (FC), Mimi\_24 (FC), Mimi\_314 (FC), Patbob\_21 (FC), Patbob\_311 (FC), Racecar\_23 (FC), Racecar\_312 (FC), SJReid\_24 (FC), SJReid\_335 (FC), Talia1610\_22 (FC), Talia1610\_309 (FC),

### Start 9:

- Found in 4 of 25 ( 16.0% ) of genes in pham
- Manual Annotations of this start: 3 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Frankenweenie\_336 (BM), JustBecause\_308 (BM), Kela\_306 (BM), Nirvana\_360 (BM),

### Start 10:

- Found in 2 of 25 ( 8.0% ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Vanseggelen\_68 (BD3), Yosif\_68 (BD3),

### Start 11:

- Found in 3 of 25 ( 12.0% ) of genes in pham
- Manual Annotations of this start: 3 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE\_313 (BM), Kradal\_310 (BM), Satis\_310 (BM),

### Start 12:

- Found in 8 of 25 ( 32.0% ) of genes in pham
- Manual Annotations of this start: 4 of 13
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Celia\_65 (BD6), Itza\_68 (BD6), Urza\_67 (BD6), VieEnRose\_67 (BD6),

## Summary by clusters:

There are 4 clusters represented in this pham: FC, BM, BD6, BD3,

Info for manual annotations of cluster BD3:

- Start number 10 was manually annotated 1 time for cluster BD3.

Info for manual annotations of cluster BD6:

- Start number 12 was manually annotated 4 times for cluster BD6.

Info for manual annotations of cluster BM:

- Start number 9 was manually annotated 3 times for cluster BM.
- Start number 11 was manually annotated 3 times for cluster BM.

Info for manual annotations of cluster FC:

- Start number 7 was manually annotated 2 times for cluster FC.

### **Gene Information:**

Gene: Bloom\_24 Start: 10896, Stop: 11540, Start Num: 7

Candidate Starts for Bloom\_24:

(Start: 7 @10896 has 2 MA's), (8, 10905), (16, 10950), (29, 11136), (34, 11229), (37, 11250), (40, 11316), (43, 11352), (44, 11361), (50, 11499), (51, 11505),

Gene: Bloom\_311 Start: 184371, Stop: 185015, Start Num: 7

Candidate Starts for Bloom\_311:

(Start: 7 @184371 has 2 MA's), (8, 184380), (16, 184425), (29, 184611), (34, 184704), (37, 184725), (40, 184791), (43, 184827), (44, 184836), (50, 184974), (51, 184980),

Gene: Celia\_65 Start: 44395, Stop: 43802, Start Num: 12

Candidate Starts for Celia\_65:

(Start: 12 @44395 has 4 MA's), (20, 44341), (21, 44338), (25, 44287), (32, 44119), (40, 44017), (41, 43996), (42, 43984), (44, 43969), (45, 43966), (49, 43855),

Gene: EhyElimayoE\_313 Start: 170133, Stop: 169549, Start Num: 11

Candidate Starts for EhyElimayoE\_313:

(1, 170385), (2, 170376), (3, 170367), (4, 170328), (5, 170190), (Start: 11 @170133 has 3 MA's), (13, 170124), (14, 170121), (17, 170097), (25, 170025), (27, 169992), (41, 169746), (52, 169560),

Gene: Frankenweenie\_336 Start: 182525, Stop: 181935, Start Num: 9

Candidate Starts for Frankenweenie\_336:

(Start: 9 @182525 has 3 MA's), (Start: 12 @182516 has 4 MA's), (13, 182510), (17, 182483), (25, 182411), (29, 182321), (35, 182222), (36, 182219), (39, 182168), (41, 182129), (44, 182102), (49, 181982),

Gene: Itza\_68 Start: 44328, Stop: 43735, Start Num: 12

Candidate Starts for Itza\_68:

(Start: 12 @44328 has 4 MA's), (20, 44274), (21, 44271), (25, 44220), (32, 44052), (40, 43950), (41, 43929), (42, 43917), (44, 43902), (45, 43899), (49, 43788),

Gene: JustBecause\_308 Start: 166368, Stop: 165775, Start Num: 9

Candidate Starts for JustBecause\_308:

(Start: 9 @166368 has 3 MA's), (Start: 12 @166359 has 4 MA's), (13, 166353), (17, 166326), (18, 166317), (19, 166314), (25, 166251), (29, 166161), (35, 166062), (36, 166059), (41, 165969), (44, 165942),

Gene: Kela\_306 Start: 167263, Stop: 166670, Start Num: 9

Candidate Starts for Kela\_306:

(Start: 9 @167263 has 3 MA's), (Start: 12 @167254 has 4 MA's), (13, 167248), (17, 167221), (18, 167212), (19, 167209), (25, 167146), (29, 167056), (35, 166957), (36, 166954), (41, 166864), (44, 166837),

Gene: Kradal\_310 Start: 170130, Stop: 169546, Start Num: 11

Candidate Starts for Kradal\_310:

(1, 170382), (2, 170373), (3, 170364), (4, 170325), (5, 170187), (Start: 11 @170130 has 3 MA's), (13, 170121), (14, 170118), (17, 170094), (25, 170022), (27, 169989), (41, 169743), (52, 169557),

Gene: Mimi\_24 Start: 10326, Stop: 10952, Start Num: 7

Candidate Starts for Mimi\_24:

(Start: 7 @10326 has 2 MA's), (15, 10365), (29, 10557), (34, 10650), (37, 10671),

Gene: Mimi\_314 Start: 182986, Stop: 183612, Start Num: 7

Candidate Starts for Mimi\_314:

(Start: 7 @182986 has 2 MA's), (15, 183025), (29, 183217), (34, 183310), (37, 183331),

Gene: Nirvana\_360 Start: 185496, Stop: 184906, Start Num: 9

Candidate Starts for Nirvana\_360:

(Start: 9 @185496 has 3 MA's), (Start: 12 @185487 has 4 MA's), (13, 185481), (17, 185454), (18, 185445), (25, 185382), (29, 185292), (35, 185193), (36, 185190), (41, 185100), (44, 185073),

Gene: Patbob\_21 Start: 10846, Stop: 11484, Start Num: 7

Candidate Starts for Patbob\_21:

(Start: 7 @10846 has 2 MA's), (29, 11086), (30, 11113), (37, 11200),

Gene: Patbob\_311 Start: 186305, Stop: 186943, Start Num: 7

Candidate Starts for Patbob\_311:

(Start: 7 @186305 has 2 MA's), (29, 186545), (30, 186572), (37, 186659),

Gene: Racecar\_312 Start: 184605, Stop: 185249, Start Num: 7

Candidate Starts for Racecar\_312:

(Start: 7 @184605 has 2 MA's), (8, 184614), (16, 184659), (29, 184845), (34, 184938), (37, 184959), (40, 185025), (43, 185061), (44, 185070), (50, 185208), (51, 185214),

Gene: Racecar\_23 Start: 10896, Stop: 11540, Start Num: 7

Candidate Starts for Racecar\_23:

(Start: 7 @10896 has 2 MA's), (8, 10905), (16, 10950), (29, 11136), (34, 11229), (37, 11250), (40, 11316), (43, 11352), (44, 11361), (50, 11499), (51, 11505),

Gene: SJReid\_24 Start: 10577, Stop: 11209, Start Num: 7

Candidate Starts for SJReid\_24:

(Start: 7 @10577 has 2 MA's), (15, 10619), (26, 10745), (28, 10754), (34, 10907), (38, 10961), (40, 10988),

Gene: SJReid\_335 Start: 183416, Stop: 184048, Start Num: 7

Candidate Starts for SJReid\_335:

(Start: 7 @183416 has 2 MA's), (15, 183458), (26, 183584), (28, 183593), (34, 183746), (38, 183800), (40, 183827),

Gene: Satis\_310 Start: 170467, Stop: 169883, Start Num: 11

Candidate Starts for Satis\_310:

(1, 170719), (2, 170710), (3, 170701), (4, 170662), (5, 170524), (Start: 11 @170467 has 3 MA's), (13, 170458), (14, 170455), (17, 170431), (25, 170359), (27, 170326), (41, 170080), (52, 169894),

Gene: Talia1610\_309 Start: 184802, Stop: 185437, Start Num: 7

Candidate Starts for Talia1610\_309:

(Start: 7 @184802 has 2 MA's), (29, 185042), (37, 185156), (41, 185243),

Gene: Talia1610\_22 Start: 10330, Stop: 10965, Start Num: 7

Candidate Starts for Talia1610\_22:

(Start: 7 @10330 has 2 MA's), (29, 10570), (37, 10684), (41, 10771),

Gene: Urza\_67 Start: 44349, Stop: 43756, Start Num: 12

Candidate Starts for Urza\_67:

(Start: 12 @44349 has 4 MA's), (20, 44295), (25, 44241), (32, 44073), (40, 43971), (41, 43950), (42, 43938), (44, 43923), (45, 43920), (49, 43809),

Gene: Vanseggelen\_68 Start: 43163, Stop: 42615, Start Num: 10

Candidate Starts for Vanseggelen\_68:

(6, 43202), (Start: 10 @43163 has 1 MA's), (20, 43109), (22, 43094), (31, 42908), (33, 42878), (41, 42767), (42, 42755), (48, 42716),

Gene: VieEnRose\_67 Start: 44202, Stop: 43609, Start Num: 12

Candidate Starts for VieEnRose\_67:

(Start: 12 @44202 has 4 MA's), (20, 44148), (21, 44145), (24, 44100), (25, 44094), (32, 43926), (40, 43824), (41, 43803), (42, 43791), (44, 43776), (45, 43773), (49, 43662),

Gene: Yosif\_68 Start: 44529, Stop: 43960, Start Num: 10

Candidate Starts for Yosif\_68:

(Start: 10 @44529 has 1 MA's), (23, 44460), (25, 44424), (31, 44277), (38, 44184), (42, 44124), (46, 44094), (47, 44067),