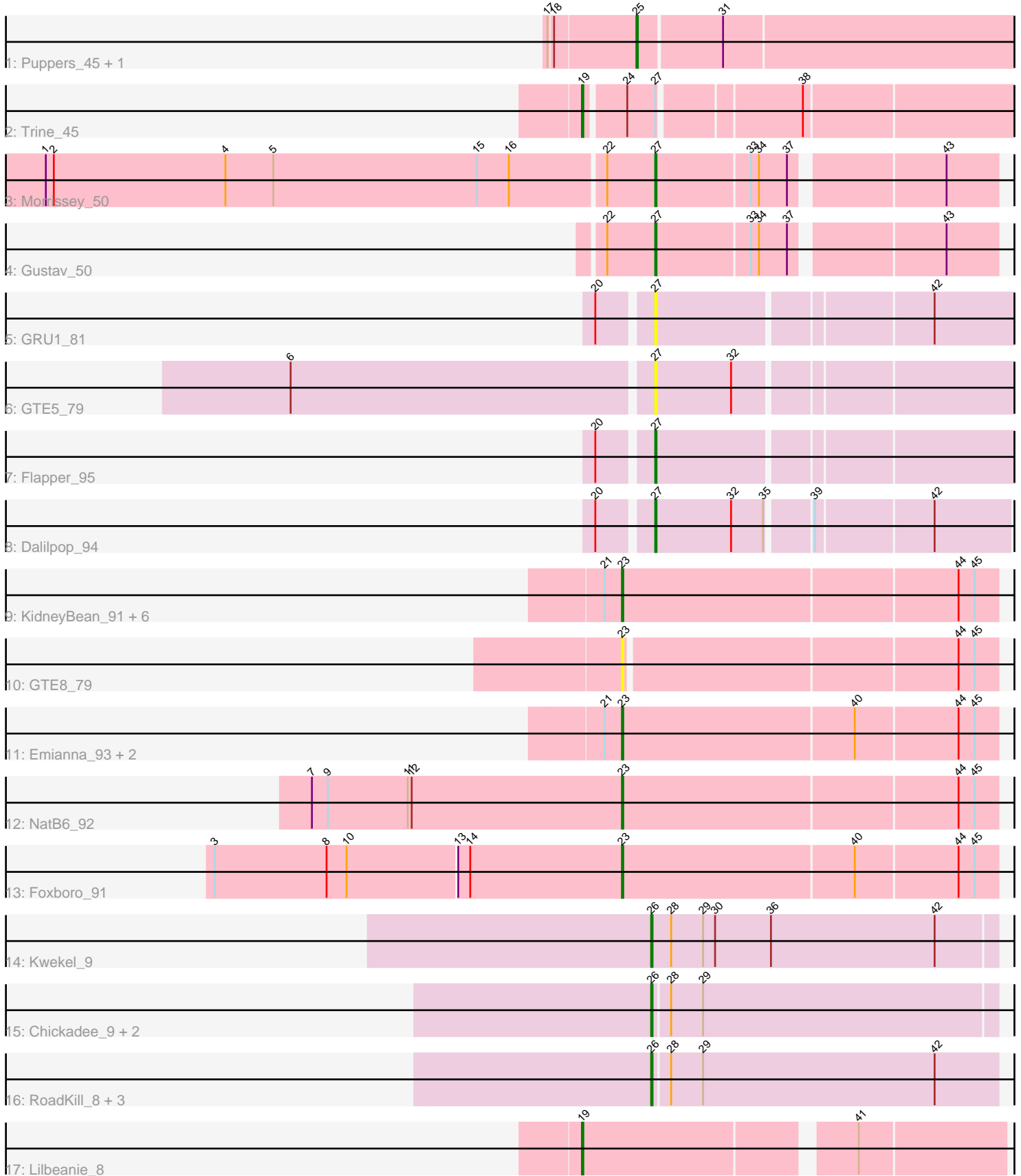


Pham 224790



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 224790 Report

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

Pham number 224790 has 31 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Puppies\_45, Widow\_46
- Track 2 : Trine\_45
- Track 3 : Morrissey\_50
- Track 4 : Gustav\_50
- Track 5 : GRU1\_81
- Track 6 : GTE5\_79
- Track 7 : Flapper\_95
- Track 8 : Dalilpop\_94
- Track 9 : KidneyBean\_91, Arti\_89, Wheezy\_90, GrootJr\_93, Phomeo\_91, Tracker\_91, NovumRegina\_91
- Track 10 : GTE8\_79
- Track 11 : Emianna\_93, Jifall16\_91, Kurt\_93
- Track 12 : NatB6\_92
- Track 13 : Foxboro\_91
- Track 14 : Kwekel\_9
- Track 15 : Chickadee\_9, GTE6\_10, Tiamoceli\_10
- Track 16 : RoadKill\_8, Twonlo\_8, EdmundFerry\_8, Dexdert\_10
- Track 17 : Lilbeanie\_8

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

The start number called the most often in the published annotations is 23, it was called in 11 of the 26 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arti\_89, Emianna\_93, Foxboro\_91, GTE8\_79, GrootJr\_93, Jifall16\_91, KidneyBean\_91, Kurt\_93, NatB6\_92, NovumRegina\_91, Phomeo\_91, Tracker\_91, Wheezy\_90,

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

- 

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

- Chickadee\_9, Dalilpop\_94, Dextert\_10, EdmundFerry\_8, Flapper\_95, GRU1\_81, GTE5\_79, GTE6\_10, Gustav\_50, Kwekel\_9, Lilbeanie\_8, Morrissey\_50, Puppets\_45, RoadKill\_8, Tiamoceli\_10, Trine\_45, Twonlo\_8, Widow\_46,

### Summary by start number:

#### Start 19:

- Found in 2 of 31 ( 6.5% ) of genes in pham
- Manual Annotations of this start: 2 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lilbeanie\_8 (DE5), Trine\_45 (CD),

#### Start 23:

- Found in 13 of 31 ( 41.9% ) of genes in pham
- Manual Annotations of this start: 11 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arti\_89 (CR2), Emianna\_93 (CR2), Foxboro\_91 (CR2), GTE8\_79 (CR2), GrootJr\_93 (CR2), Jifall16\_91 (CR2), KidneyBean\_91 (CR2), Kurt\_93 (CR2), NatB6\_92 (CR2), NovumRegina\_91 (CR2), Phomeo\_91 (CR2), Tracker\_91 (CR2), Wheezy\_90 (CR2),

#### Start 25:

- Found in 2 of 31 ( 6.5% ) of genes in pham
- Manual Annotations of this start: 2 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Puppets\_45 (CD), Widow\_46 (CD),

#### Start 26:

- Found in 8 of 31 ( 25.8% ) of genes in pham
- Manual Annotations of this start: 7 of 26
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chickadee\_9 (DE3), Dextert\_10 (DE3), EdmundFerry\_8 (DE3), GTE6\_10 (DE3), Kwekel\_9 (DE3), RoadKill\_8 (DE3), Tiamoceli\_10 (DE3), Twonlo\_8 (DE3),

#### Start 27:

- Found in 7 of 31 ( 22.6% ) of genes in pham
- Manual Annotations of this start: 4 of 26
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Dalilpop\_94 (CR1), Flapper\_95 (CR1), GRU1\_81 (CR1), GTE5\_79 (CR1), Gustav\_50 (CD), Morrissey\_50 (CD),

### Summary by clusters:

There are 5 clusters represented in this pham: CR2, DE3, DE5, CR1, CD,

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

- Start number 19 was manually annotated 1 time for cluster CD.
- Start number 25 was manually annotated 2 times for cluster CD.
- Start number 27 was manually annotated 2 times for cluster CD.

#### Info for manual annotations of cluster CR1:

- Start number 27 was manually annotated 2 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 23 was manually annotated 11 times for cluster CR2.

Info for manual annotations of cluster DE3:

- Start number 26 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE5:

- Start number 19 was manually annotated 1 time for cluster DE5.

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

Gene: Arti\_89 Start: 65186, Stop: 65461, Start Num: 23

Candidate Starts for Arti\_89:

(21, 65174), (Start: 23 @65186 has 11 MA's), (44, 65432), (45, 65444),

Gene: Chickadee\_9 Start: 4117, Stop: 4371, Start Num: 26

Candidate Starts for Chickadee\_9:

(Start: 26 @4117 has 7 MA's), (28, 4129), (29, 4153),

Gene: Dalilpop\_94 Start: 65641, Stop: 65892, Start Num: 27

Candidate Starts for Dalilpop\_94:

(20, 65605), (Start: 27 @65641 has 4 MA's), (32, 65698), (35, 65722), (39, 65752), (42, 65836),

Gene: Dextert\_10 Start: 4578, Stop: 4823, Start Num: 26

Candidate Starts for Dextert\_10:

(Start: 26 @4578 has 7 MA's), (28, 4590), (29, 4605), (42, 4779),

Gene: EdmundFerry\_8 Start: 4127, Stop: 4381, Start Num: 26

Candidate Starts for EdmundFerry\_8:

(Start: 26 @4127 has 7 MA's), (28, 4139), (29, 4163), (42, 4337),

Gene: Emianna\_93 Start: 66881, Stop: 67156, Start Num: 23

Candidate Starts for Emianna\_93:

(21, 66869), (Start: 23 @66881 has 11 MA's), (40, 67052), (44, 67127), (45, 67139),

Gene: Flapper\_95 Start: 66149, Stop: 66409, Start Num: 27

Candidate Starts for Flapper\_95:

(20, 66113), (Start: 27 @66149 has 4 MA's),

Gene: Foxboro\_91 Start: 66505, Stop: 66780, Start Num: 23

Candidate Starts for Foxboro\_91:

(3, 66205), (8, 66289), (10, 66304), (13, 66385), (14, 66394), (Start: 23 @66505 has 11 MA's), (40, 66676), (44, 66751), (45, 66763),

Gene: GRU1\_81 Start: 57721, Stop: 57981, Start Num: 27

Candidate Starts for GRU1\_81:

(20, 57685), (Start: 27 @57721 has 4 MA's), (42, 57916),

Gene: GTE5\_79 Start: 58002, Stop: 58256, Start Num: 27

Candidate Starts for GTE5\_79:

(6, 57738), (Start: 27 @58002 has 4 MA's), (32, 58059),

Gene: GTE6\_10 Start: 4626, Stop: 4880, Start Num: 26

Candidate Starts for GTE6\_10:

(Start: 26 @4626 has 7 MA's), (28, 4638), (29, 4662),

Gene: GTE8\_79 Start: 58496, Stop: 58765, Start Num: 23

Candidate Starts for GTE8\_79:

(Start: 23 @58496 has 11 MA's), (44, 58736), (45, 58748),

Gene: GrootJr\_93 Start: 65899, Stop: 66174, Start Num: 23

Candidate Starts for GrootJr\_93:

(21, 65887), (Start: 23 @65899 has 11 MA's), (44, 66145), (45, 66157),

Gene: Gustav\_50 Start: 37089, Stop: 36850, Start Num: 27

Candidate Starts for Gustav\_50:

(22, 37125), (Start: 27 @37089 has 4 MA's), (33, 37020), (34, 37014), (37, 36993), (43, 36888),

Gene: Jifall16\_91 Start: 66148, Stop: 66423, Start Num: 23

Candidate Starts for Jifall16\_91:

(21, 66136), (Start: 23 @66148 has 11 MA's), (40, 66319), (44, 66394), (45, 66406),

Gene: KidneyBean\_91 Start: 66479, Stop: 66754, Start Num: 23

Candidate Starts for KidneyBean\_91:

(21, 66467), (Start: 23 @66479 has 11 MA's), (44, 66725), (45, 66737),

Gene: Kurt\_93 Start: 66896, Stop: 67171, Start Num: 23

Candidate Starts for Kurt\_93:

(21, 66884), (Start: 23 @66896 has 11 MA's), (40, 67067), (44, 67142), (45, 67154),

Gene: Kwekel\_9 Start: 4121, Stop: 4378, Start Num: 26

Candidate Starts for Kwekel\_9:

(Start: 26 @4121 has 7 MA's), (28, 4136), (29, 4160), (30, 4169), (36, 4211), (42, 4334),

Gene: Lilbeanie\_8 Start: 3584, Stop: 3880, Start Num: 19

Candidate Starts for Lilbeanie\_8:

(Start: 19 @3584 has 2 MA's), (41, 3773),

Gene: Morrissey\_50 Start: 38409, Stop: 38170, Start Num: 27

Candidate Starts for Morrissey\_50:

(1, 38862), (2, 38856), (4, 38727), (5, 38691), (15, 38538), (16, 38514), (22, 38445), (Start: 27 @38409 has 4 MA's), (33, 38340), (34, 38334), (37, 38313), (43, 38208),

Gene: NatB6\_92 Start: 65769, Stop: 66044, Start Num: 23

Candidate Starts for NatB6\_92:

(7, 65538), (9, 65550), (11, 65610), (12, 65613), (Start: 23 @65769 has 11 MA's), (44, 66015), (45, 66027),

Gene: NovumRegina\_91 Start: 65898, Stop: 66173, Start Num: 23

Candidate Starts for NovumRegina\_91:

(21, 65886), (Start: 23 @65898 has 11 MA's), (44, 66144), (45, 66156),

Gene: Phomeo\_91 Start: 66149, Stop: 66424, Start Num: 23

Candidate Starts for Phomeo\_91:  
(21, 66137), (Start: 23 @66149 has 11 MA's), (44, 66395), (45, 66407),

Gene: Puppies\_45 Start: 35534, Stop: 35259, Start Num: 25  
Candidate Starts for Puppies\_45:  
(17, 35597), (18, 35594), (Start: 25 @35534 has 2 MA's), (31, 35474),

Gene: RoadKill\_8 Start: 3935, Stop: 4192, Start Num: 26  
Candidate Starts for RoadKill\_8:  
(Start: 26 @3935 has 7 MA's), (28, 3947), (29, 3971), (42, 4145),

Gene: Tiamoceli\_10 Start: 4971, Stop: 5225, Start Num: 26  
Candidate Starts for Tiamoceli\_10:  
(Start: 26 @4971 has 7 MA's), (28, 4983), (29, 5007),

Gene: Tracker\_91 Start: 65324, Stop: 65599, Start Num: 23  
Candidate Starts for Tracker\_91:  
(21, 65312), (Start: 23 @65324 has 11 MA's), (44, 65570), (45, 65582),

Gene: Trine\_45 Start: 35791, Stop: 35480, Start Num: 19  
Candidate Starts for Trine\_45:  
(Start: 19 @35791 has 2 MA's), (24, 35764), (Start: 27 @35743 has 4 MA's), (38, 35644),

Gene: Twonlo\_8 Start: 3935, Stop: 4192, Start Num: 26  
Candidate Starts for Twonlo\_8:  
(Start: 26 @3935 has 7 MA's), (28, 3947), (29, 3971), (42, 4145),

Gene: Wheezy\_90 Start: 65712, Stop: 65987, Start Num: 23  
Candidate Starts for Wheezy\_90:  
(21, 65700), (Start: 23 @65712 has 11 MA's), (44, 65958), (45, 65970),

Gene: Widow\_46 Start: 36178, Stop: 35903, Start Num: 25  
Candidate Starts for Widow\_46:  
(17, 36241), (18, 36238), (Start: 25 @36178 has 2 MA's), (31, 36118),