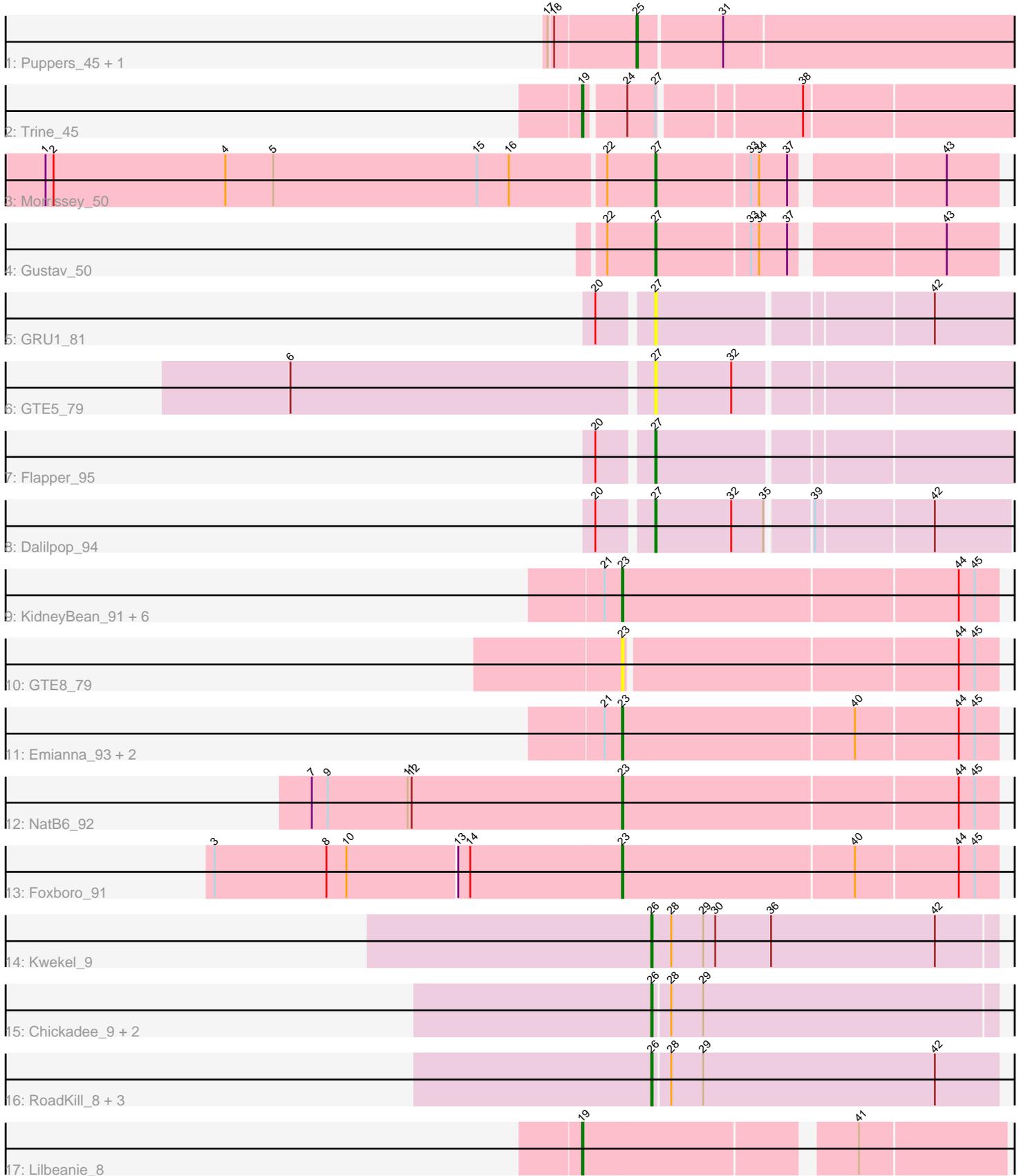


Pham 291397



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 291397 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291397 has 31 members, 4 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, GrootJr_93, Wheezy_90, Phomeo_90, 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 12 of the 27 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_90, 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 27
- 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: 12 of 27
- 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_90 (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 27
- 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 27
- 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 27
- 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 12 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 12 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 12 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 12 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 12 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 12 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 12 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 12 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 12 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 12 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 12 MA's), (44, 66144), (45, 66156),

Gene: Phomeo_90 Start: 66149, Stop: 66424, Start Num: 23

Candidate Starts for Phomeo_90:
(21, 66137), (Start: 23 @66149 has 12 MA's), (44, 66395), (45, 66407),

Gene: Puppets_45 Start: 35534, Stop: 35259, Start Num: 25
Candidate Starts for Puppets_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 12 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 12 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),