

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 156902 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156902 has 8 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Vash_23

• Track 2 : phiBT1 c

• Track 3 : Euratis 23

• Track 4: Lilbooboo 23

Track 5 : Samora_23

Track 6 : Heather_23

Track 7 : RemusLoopin_23

Track 8 : Sebastisaurus 23

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

The start number called the most often in the published annotations is 11, it was called in 3 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Euratis_23, Lilbooboo_23, Samora_23, Vash_23,

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

phiBT1_c,

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

Heather_23, RemusLoopin_23, Sebastisaurus_23,

Summary by start number:

Start 3:

- Found in 1 of 8 (12.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: phiBT1_c (BB1),

Start 10:

- Found in 1 of 8 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 6

- Called 100.0% of time when present
- Phage (with cluster) where this start called: RemusLoopin_23 (BB2),

Start 11:

- Found in 5 of 8 (62.5%) of genes in pham
- Manual Annotations of this start: 3 of 6
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Euratis_23 (BB1), Lilbooboo_23 (BB1), Samora_23 (BB1), Vash_23 (BB1),

Start 12:

- Found in 3 of 8 (37.5%) of genes in pham
- Manual Annotations of this start: 2 of 6
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Heather_23 (BB2), Sebastisaurus_23 (BB2),

Summary by clusters:

There are 2 clusters represented in this pham: BB2, BB1,

Info for manual annotations of cluster BB1:

•Start number 11 was manually annotated 3 times for cluster BB1.

Info for manual annotations of cluster BB2:

- •Start number 10 was manually annotated 1 time for cluster BB2.
- •Start number 12 was manually annotated 2 times for cluster BB2.

Gene Information:

Gene: Euratis_23 Start: 18316, Stop: 19668, Start Num: 11

Candidate Starts for Euratis 23:

(Start: 11 @18316 has 3 MA's), (15, 18331), (16, 18346), (21, 18403), (22, 18409), (28, 18487), (34, 18595), (37, 18724), (40, 18787), (44, 18808), (47, 18856), (48, 18868), (50, 18907), (54, 18940), (55, 18943), (58, 18982), (59, 19012), (61, 19027), (66, 19117), (67, 19159), (74, 19219), (79, 19297), (80, 19315), (83, 19381), (86, 19498), (88, 19519), (92, 19576), (96, 19633), (97, 19651),

Gene: Heather_23 Start: 17860, Stop: 19332, Start Num: 12

Candidate Starts for Heather 23:

(Start: 12 @17860 has 2 MA's), (19, 17920), (24, 17977), (27, 18037), (29, 18076), (33, 18139), (34, 18151), (36, 18190), (41, 18367), (42, 18370), (44, 18391), (45, 18406), (50, 18490), (51, 18502), (52, 18511), (54, 18523), (59, 18595), (63, 18661), (65, 18685), (78, 18877), (80, 18898), (89, 19138), (93, 19198),

Gene: Lilbooboo_23 Start: 18521, Stop: 19885, Start Num: 11

Candidate Starts for Lilbooboo_23:

(Start: 11 @18521 has 3 MA's), (16, 18551), (21, 18608), (23, 18617), (25, 18653), (28, 18686), (38, 18962), (42, 19019), (46, 19079), (50, 19139), (52, 19160), (63, 19313), (64, 19316), (68, 19403), (72, 19439), (80, 19550), (87, 19724), (88, 19736), (91, 19766), (92, 19793), (95, 19829),

Gene: RemusLoopin_23 Start: 18193, Stop: 19923, Start Num: 10

Candidate Starts for RemusLoopin 23:

(Start: 10 @18193 has 1 MA's), (Start: 12 @18211 has 2 MA's), (27, 18388), (29, 18430), (30, 18454), (31, 18547), (32, 18646), (34, 18703), (37, 18832), (39, 18856), (50, 19039), (51, 19051), (52, 19060), (54, 19072), (57, 19105), (59, 19144), (62, 19168), (63, 19210), (65, 19234), (70, 19330), (71, 19336), (77, 19420), (80, 19489), (82, 19555), (90, 19741), (94, 19795), (98, 19888),

Gene: Samora_23 Start: 18657, Stop: 20024, Start Num: 11

Candidate Starts for Samora 23:

(Start: 11 @18657 has 3 MA's), (16, 18690), (21, 18747), (22, 18753), (23, 18756), (25, 18792), (26, 18804), (28, 18825), (37, 19074), (38, 19095), (49, 19254), (50, 19281), (52, 19302), (63, 19455), (66, 19494), (69, 19557), (73, 19593), (75, 19599), (84, 19758), (87, 19863), (88, 19875), (91, 19905), (92, 19932),

Gene: Sebastisaurus_23 Start: 18238, Stop: 19758, Start Num: 12

Candidate Starts for Sebastisaurus_23:

(Start: 12 @18238 has 2 MA's), (14, 18247), (27, 18415), (29, 18457), (34, 18532), (36, 18571), (37, 18661), (39, 18685), (42, 18745), (44, 18766), (48, 18826), (50, 18865), (51, 18877), (52, 18886), (53, 18892), (59, 18970), (62, 18994), (65, 19060), (66, 19075), (77, 19255), (80, 19324), (86, 19534), (99, 19729),

Gene: Vash_23 Start: 18321, Stop: 19685, Start Num: 11

Candidate Starts for Vash_23:

(Start: 11 @18321 has 3 MA's), (16, 18351), (21, 18408), (22, 18414), (23, 18417), (25, 18453), (28, 18486), (42, 18822), (43, 18825), (50, 18942), (52, 18963), (63, 19116), (64, 19119), (68, 19206), (75, 19260), (80, 19350), (87, 19524), (88, 19536), (91, 19566), (92, 19593), (95, 19629),

Gene: phiBT1_c Start: 18711, Stop: 20387, Start Num: 3 Candidate Starts for phiBT1 c:

(1, 18654), (2, 18690), (3, 18711), (4, 18726), (5, 18798), (6, 18807), (7, 18852), (8, 18855), (9, 18903), (Start: 11 @18981 has 3 MA's), (13, 18987), (15, 18996), (17, 19020), (18, 19023), (20, 19071), (29, 19203), (35, 19320), (37, 19440), (42, 19512), (49, 19605), (50, 19632), (52, 19653), (56, 19698), (60, 19752), (63, 19806), (68, 19896), (69, 19908), (76, 19962), (80, 20040), (81, 20061), (85, 20169), (86, 20217), (91, 20268), (92, 20295), (96, 20352).