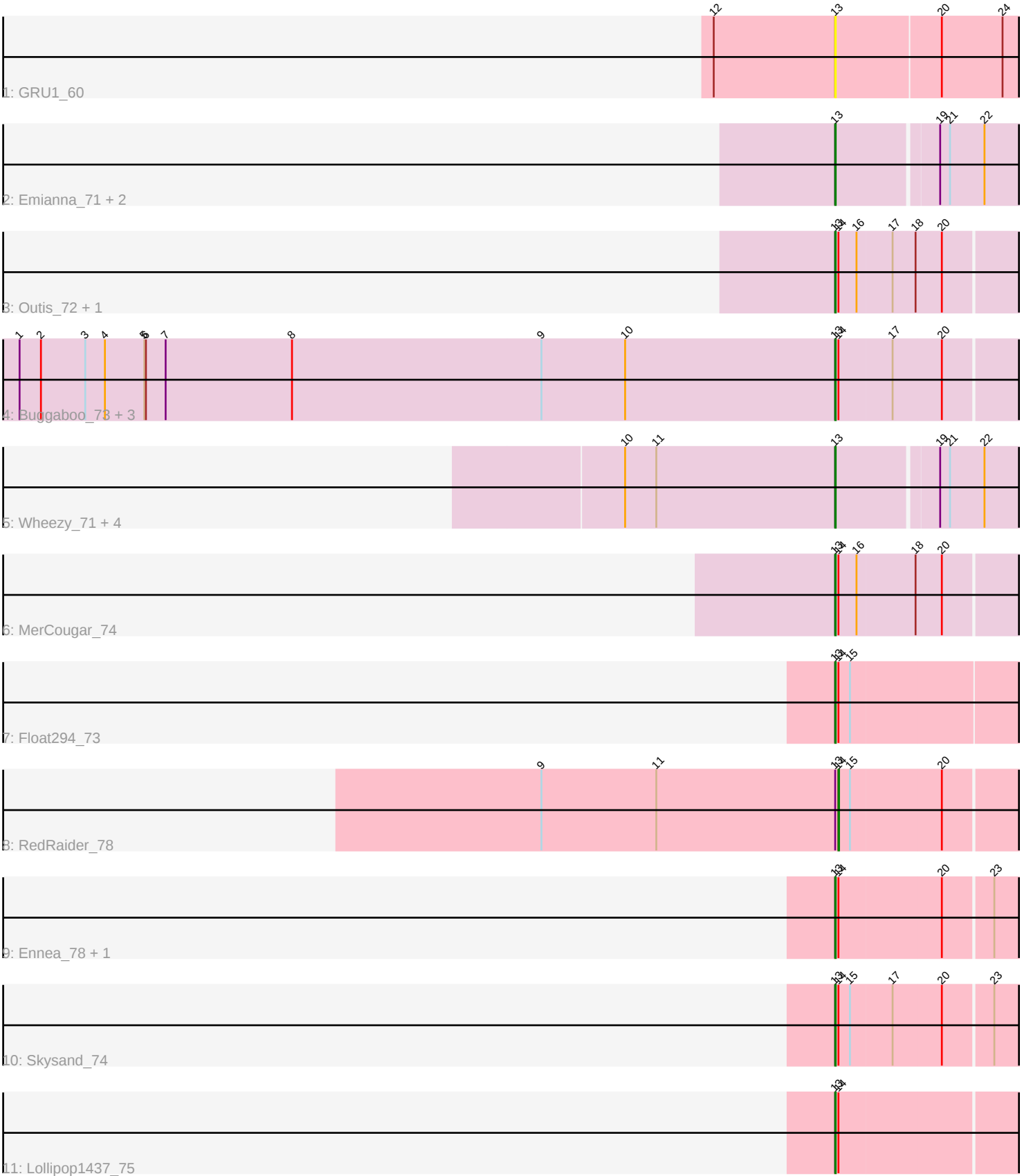


Pham 331225



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 331225 Report

This analysis was run 09/05/26 on database version 662.

Pham number 331225 has 22 members, 1 are drafts.

Phages represented in each track:

- Track 1 : GRU1_60
- Track 2 : Emianna_71, NatB6_71, Kurt_71
- Track 3 : Outis_72, StarStruck_72
- Track 4 : Buggaboo_73, Kabluna_74, SuperSulley_73, Bonum_75
- Track 5 : Wheezy_71, NovumRegina_71, GrootJr_73, Tracker_71, Arti_70
- Track 6 : MerCougar_74
- Track 7 : Float294_73
- Track 8 : RedRaider_78
- Track 9 : Ennea_78, Patio_73
- Track 10 : Skysand_74
- Track 11 : Lollipop1437_75

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

The start number called the most often in the published annotations is 13, it was called in 20 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arti_70, Bonum_75, Buggaboo_73, Emianna_71, Ennea_78, Float294_73, GRU1_60, GrootJr_73, Kabluna_74, Kurt_71, Lollipop1437_75, MerCougar_74, NatB6_71, NovumRegina_71, Outis_72, Patio_73, Skysand_74, StarStruck_72, SuperSulley_73, Tracker_71, Wheezy_71,

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

- RedRaider_78,

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

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Summary by start number:

Start 13:

- Found in 22 of 22 (100.0%) of genes in pham
- Manual Annotations of this start: 20 of 21

- Called 95.5% of time when present
- Phage (with cluster) where this start called: Arti_70 (CR2), Bonum_75 (CR2), Buggaboo_73 (CR2), Emianna_71 (CR2), Ennea_78 (CR3), Float294_73 (CR3), GRU1_60 (CR1), GrootJr_73 (CR2), Kabluna_74 (CR2), Kurt_71 (CR2), Lollipop1437_75 (CR3), MerCougar_74 (CR2), NatB6_71 (CR2), NovumRegina_71 (CR2), Outis_72 (CR2), Patio_73 (CR3), Skysand_74 (CR3), StarStruck_72 (CR2), SuperSulley_73 (CR2), Tracker_71 (CR2), Wheezy_71 (CR2),

Start 14:

- Found in 13 of 22 (59.1%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 7.7% of time when present
- Phage (with cluster) where this start called: RedRaider_78 (CR3),

Summary by clusters:

There are 3 clusters represented in this pham: CR2, CR3, CR1,

Info for manual annotations of cluster CR2:

- Start number 13 was manually annotated 15 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 13 was manually annotated 5 times for cluster CR3.
- Start number 14 was manually annotated 1 time for cluster CR3.

Gene Information:

Gene: Arti_70 Start: 53433, Stop: 53095, Start Num: 13

Candidate Starts for Arti_70:

(10, 53817), (11, 53760), (Start: 13 @53433 has 20 MA's), (19, 53259), (21, 53241), (22, 53178),

Gene: Bonum_75 Start: 54548, Stop: 54207, Start Num: 13

Candidate Starts for Bonum_75:

(1, 56036), (2, 55997), (3, 55916), (4, 55880), (5, 55808), (6, 55805), (7, 55769), (8, 55538), (9, 55085), (10, 54932), (Start: 13 @54548 has 20 MA's), (Start: 14 @54542 has 1 MA's), (17, 54446), (20, 54359),

Gene: Buggaboo_73 Start: 55114, Stop: 54773, Start Num: 13

Candidate Starts for Buggaboo_73:

(1, 56602), (2, 56563), (3, 56482), (4, 56446), (5, 56374), (6, 56371), (7, 56335), (8, 56104), (9, 55651), (10, 55498), (Start: 13 @55114 has 20 MA's), (Start: 14 @55108 has 1 MA's), (17, 55012), (20, 54925),

Gene: Emianna_71 Start: 54644, Stop: 54306, Start Num: 13

Candidate Starts for Emianna_71:

(Start: 13 @54644 has 20 MA's), (19, 54470), (21, 54452), (22, 54389),

Gene: Ennea_78 Start: 55864, Stop: 55523, Start Num: 13

Candidate Starts for Ennea_78:

(Start: 13 @55864 has 20 MA's), (Start: 14 @55858 has 1 MA's), (20, 55675), (23, 55588),

Gene: Float294_73 Start: 55770, Stop: 55426, Start Num: 13

Candidate Starts for Float294_73:

(Start: 13 @55770 has 20 MA's), (Start: 14 @55764 has 1 MA's), (15, 55743),

Gene: GRU1_60 Start: 46810, Stop: 46463, Start Num: 13

Candidate Starts for GRU1_60:

(12, 47032), (Start: 13 @46810 has 20 MA's), (20, 46624), (24, 46513),

Gene: GrootJr_73 Start: 54038, Stop: 53700, Start Num: 13

Candidate Starts for GrootJr_73:

(10, 54422), (11, 54365), (Start: 13 @54038 has 20 MA's), (19, 53864), (21, 53846), (22, 53783),

Gene: Kabluna_74 Start: 53877, Stop: 53536, Start Num: 13

Candidate Starts for Kabluna_74:

(1, 55365), (2, 55326), (3, 55245), (4, 55209), (5, 55137), (6, 55134), (7, 55098), (8, 54867), (9, 54414), (10, 54261), (Start: 13 @53877 has 20 MA's), (Start: 14 @53871 has 1 MA's), (17, 53775), (20, 53688),

Gene: Kurt_71 Start: 54659, Stop: 54321, Start Num: 13

Candidate Starts for Kurt_71:

(Start: 13 @54659 has 20 MA's), (19, 54485), (21, 54467), (22, 54404),

Gene: Lollipop1437_75 Start: 55544, Stop: 55203, Start Num: 13

Candidate Starts for Lollipop1437_75:

(Start: 13 @55544 has 20 MA's), (Start: 14 @55538 has 1 MA's),

Gene: MerCougar_74 Start: 55596, Stop: 55252, Start Num: 13

Candidate Starts for MerCougar_74:

(Start: 13 @55596 has 20 MA's), (Start: 14 @55590 has 1 MA's), (16, 55557), (18, 55452), (20, 55404),

Gene: NatB6_71 Start: 53749, Stop: 53411, Start Num: 13

Candidate Starts for NatB6_71:

(Start: 13 @53749 has 20 MA's), (19, 53575), (21, 53557), (22, 53494),

Gene: NovumRegina_71 Start: 54037, Stop: 53699, Start Num: 13

Candidate Starts for NovumRegina_71:

(10, 54421), (11, 54364), (Start: 13 @54037 has 20 MA's), (19, 53863), (21, 53845), (22, 53782),

Gene: Outis_72 Start: 54688, Stop: 54344, Start Num: 13

Candidate Starts for Outis_72:

(Start: 13 @54688 has 20 MA's), (Start: 14 @54682 has 1 MA's), (16, 54649), (17, 54586), (18, 54544), (20, 54496),

Gene: Patio_73 Start: 54601, Stop: 54260, Start Num: 13

Candidate Starts for Patio_73:

(Start: 13 @54601 has 20 MA's), (Start: 14 @54595 has 1 MA's), (20, 54412), (23, 54325),

Gene: RedRaider_78 Start: 56896, Stop: 56561, Start Num: 14

Candidate Starts for RedRaider_78:

(9, 57439), (11, 57229), (Start: 13 @56902 has 20 MA's), (Start: 14 @56896 has 1 MA's), (15, 56875), (20, 56713),

Gene: Skysand_74 Start: 55264, Stop: 54923, Start Num: 13

Candidate Starts for Skysand_74:

(Start: 13 @55264 has 20 MA's), (Start: 14 @55258 has 1 MA's), (15, 55237), (17, 55162), (20, 55075), (23, 54988),

Gene: StarStruck_72 Start: 54688, Stop: 54344, Start Num: 13

Candidate Starts for StarStruck_72:

(Start: 13 @54688 has 20 MA's), (Start: 14 @54682 has 1 MA's), (16, 54649), (17, 54586), (18, 54544), (20, 54496),

Gene: SuperSulley_73 Start: 55114, Stop: 54773, Start Num: 13

Candidate Starts for SuperSulley_73:

(1, 56602), (2, 56563), (3, 56482), (4, 56446), (5, 56374), (6, 56371), (7, 56335), (8, 56104), (9, 55651), (10, 55498), (Start: 13 @55114 has 20 MA's), (Start: 14 @55108 has 1 MA's), (17, 55012), (20, 54925),

Gene: Tracker_71 Start: 53493, Stop: 53155, Start Num: 13

Candidate Starts for Tracker_71:

(10, 53877), (11, 53820), (Start: 13 @53493 has 20 MA's), (19, 53319), (21, 53301), (22, 53238),

Gene: Wheezy_71 Start: 53707, Stop: 53369, Start Num: 13

Candidate Starts for Wheezy_71:

(10, 54091), (11, 54034), (Start: 13 @53707 has 20 MA's), (19, 53533), (21, 53515), (22, 53452),