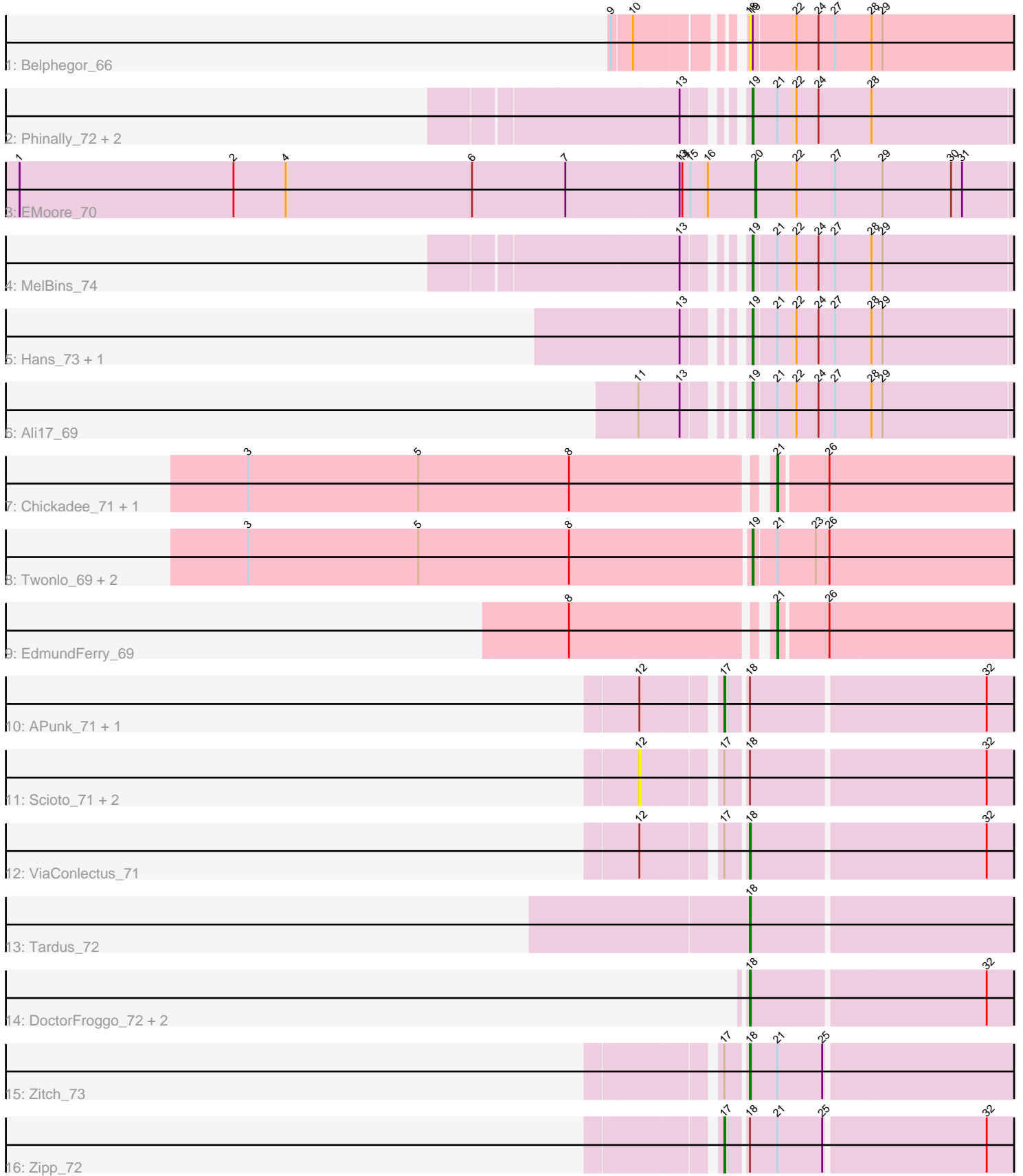# Pham 162107

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 162107 Report

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

Pham number 162107 has 27 members, 7 are drafts.

Phages represented in each track:
• Track 1 : Belphegor_66
• Track 2 : Phinally_72, Leonard_72, Inspectinfecti_73
• Track 3 : EMoore_70
• Track 4 : MelBins_74
• Track 5 : Hans_73, Phauci_64
• Track 6 : Ali17_69
• Track 7 : Chickadee_71, Kwekel_71
• Track 8 : Twonlo_69, GTE6_72, RoadKill_68
• Track 9 : EdmundFerry_69
• Track 10 : APunk_71, Sampson_73
• Track 11 : Scioto_71, Natkenzie_71, Abblin_71
• Track 12 : ViaConlectus_71
• Track 13 : Tardus_72
• Track 14 : DoctorFroggo_72, Delrey21_72, Verity_72
• Track 15 : Zitch_73
• Track 16 : Zipp_72

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

The start number called the most often in the published annotations is 19, it was called in 8 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ali17_69, GTE6_72, Hans_73, Inspectinfecti_73, Leonard_72, MelBins_74, Phauci_64, Phinally_72, RoadKill_68, Twonlo_69,

Genes that have the "Most Annotated" start but do not call it:
• Belphegor_66,

Genes that do not have the "Most Annotated" start:
• APunk_71, Abblin_71, Chickadee_71, Delrey21_72, DoctorFroggo_72, EMoore_70, EdmundFerry_69, Kwekel_71, Natkenzie_71, Sampson_73, Scioto_71, Tardus_72, Verity_72, ViaConlectus_71, Zipp_72, Zitch_73,

Summary by start number:

Start 12:
• Found in 6 of 27 (22.2%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Abblin_71 (DE4), Natkenzie_71 (DE4), Scioto_71 (DE4),

Start 17:
• Found in 8 of 27 (29.6%) of genes in pham
• Manual Annotations of this start: 3 of 20
• Called 37.5% of time when present
• Phage (with cluster) where this start called: APunk_71 (DE4), Sampson_73 (DE4), Zipp_72 (DE4),

Start 18:
• Found in 13 of 27 (48.1%) of genes in pham
• Manual Annotations of this start: 6 of 20
• Called 53.8% of time when present
• Phage (with cluster) where this start called: Belphegor_66 (DE), Delrey21_72 (DE4), DoctorFroggo_72 (DE4), Tardus_72 (DE4), Verity_72 (DE4), ViaConlectus_71 (DE4), Zitch_73 (DE4),

Start 19:
• Found in 11 of 27 (40.7%) of genes in pham
• Manual Annotations of this start: 8 of 20
• Called 90.9% of time when present
• Phage (with cluster) where this start called: Ali17_69 (DE2), GTE6_72 (DE3), Hans_73 (DE2), Inspectinfecti_73 (DE2), Leonard_72 (DE2), MelBins_74 (DE2), Phauci_64 (DE2), Phinally_72 (DE2), RoadKill_68 (DE3), Twonlo_69 (DE3),

Start 20:
• Found in 1 of 27 (3.7%) of genes in pham
• Manual Annotations of this start: 1 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EMoore_70 (DE2),

Start 21:
• Found in 15 of 27 (55.6%) of genes in pham
• Manual Annotations of this start: 2 of 20
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Chickadee_71 (DE3), EdmundFerry_69 (DE3), Kwekel_71 (DE3),

Summary by clusters:

There are 4 clusters represented in this pham: DE2, DE3, DE4, DE,

Info for manual annotations of cluster DE2:
•Start number 19 was manually annotated 6 times for cluster DE2.
•Start number 20 was manually annotated 1 time for cluster DE2.

Info for manual annotations of cluster DE3:
•Start number 19 was manually annotated 2 times for cluster DE3.
•Start number 21 was manually annotated 2 times for cluster DE3.

Info for manual annotations of cluster DE4:
•Start number 17 was manually annotated 3 times for cluster DE4.
•Start number 18 was manually annotated 6 times for cluster DE4.

Gene Information:

Gene: APunk_71 Start: 53143, Stop: 53451, Start Num: 17
Candidate Starts for APunk_71:
(12, 53068), (Start: 17 @53143 has 3 MA's), (Start: 18 @53164 has 6 MA's), (32, 53413),

Gene: Abblin_71 Start: 53226, Stop: 53609, Start Num: 12
Candidate Starts for Abblin_71:
(12, 53226), (Start: 17 @53301 has 3 MA's), (Start: 18 @53322 has 6 MA's), (32, 53571),

Gene: Ali17_69 Start: 52610, Stop: 52894, Start Num: 19
Candidate Starts for Ali17_69:
(11, 52523), (13, 52565), (Start: 19 @52610 has 8 MA's), (Start: 21 @52634 has 2 MA's), (22, 52655), (24, 52679), (27, 52697), (28, 52736), (29, 52748),

Gene: Belphegor_66 Start: 53613, Stop: 53903, Start Num: 18
Candidate Starts for Belphegor_66:
(9, 53499), (10, 53520), (Start: 18 @53613 has 6 MA's), (Start: 19 @53616 has 8 MA's), (22, 53661), (24, 53685), (27, 53703), (28, 53742), (29, 53754),

Gene: Chickadee_71 Start: 50496, Stop: 50762, Start Num: 21
Candidate Starts for Chickadee_71:
(3, 49947), (5, 50133), (8, 50298), (Start: 21 @50496 has 2 MA's), (26, 50547),

Gene: Delrey21_72 Start: 54939, Stop: 55223, Start Num: 18
Candidate Starts for Delrey21_72:
(Start: 18 @54939 has 6 MA's), (32, 55188),

Gene: DoctorFroggo_72 Start: 54939, Stop: 55223, Start Num: 18
Candidate Starts for DoctorFroggo_72:
(Start: 18 @54939 has 6 MA's), (32, 55188),

Gene: EMoore_70 Start: 54051, Stop: 54338, Start Num: 20
Candidate Starts for EMoore_70:
(1, 53250), (2, 53484), (4, 53541), (6, 53745), (7, 53847), (13, 53970), (14, 53973), (15, 53982), (16, 54000), (Start: 20 @54051 has 1 MA's), (22, 54096), (27, 54138), (29, 54189), (30, 54264), (31, 54276),

Gene: EdmundFerry_69 Start: 50048, Stop: 50314, Start Num: 21
Candidate Starts for EdmundFerry_69:
(8, 49850), (Start: 21 @50048 has 2 MA's), (26, 50099),

Gene: GTE6_72 Start: 51283, Stop: 51579, Start Num: 19
Candidate Starts for GTE6_72:
(3, 50740), (5, 50926), (8, 51091), (Start: 19 @51283 has 8 MA's), (Start: 21 @51307 has 2 MA's),
(23, 51349), (26, 51364),

Gene: Hans_73 Start: 53483, Stop: 53767, Start Num: 19
Candidate Starts for Hans_73:
(13, 53438), (Start: 19 @53483 has 8 MA's), (Start: 21 @53507 has 2 MA's), (22, 53528), (24, 53552),
(27, 53570), (28, 53609), (29, 53621),

Gene: Inspectinfecti_73 Start: 53454, Stop: 53741, Start Num: 19
Candidate Starts for Inspectinfecti_73:
(13, 53409), (Start: 19 @53454 has 8 MA's), (Start: 21 @53481 has 2 MA's), (22, 53502), (24, 53526),
(28, 53583),

Gene: Kwekel_71 Start: 50409, Stop: 50675, Start Num: 21
Candidate Starts for Kwekel_71:
(3, 49860), (5, 50046), (8, 50211), (Start: 21 @50409 has 2 MA's), (26, 50460),

Gene: Leonard_72 Start: 53517, Stop: 53804, Start Num: 19
Candidate Starts for Leonard_72:
(13, 53472), (Start: 19 @53517 has 8 MA's), (Start: 21 @53544 has 2 MA's), (22, 53565), (24, 53589),
(28, 53646),

Gene: MelBins_74 Start: 53725, Stop: 54009, Start Num: 19
Candidate Starts for MelBins_74:
(13, 53680), (Start: 19 @53725 has 8 MA's), (Start: 21 @53749 has 2 MA's), (22, 53770), (24, 53794),
(27, 53812), (28, 53851), (29, 53863),

Gene: Natkenzie_71 Start: 53226, Stop: 53609, Start Num: 12
Candidate Starts for Natkenzie_71:
(12, 53226), (Start: 17 @53301 has 3 MA's), (Start: 18 @53322 has 6 MA's), (32, 53571),

Gene: Phauci_64 Start: 50560, Stop: 50844, Start Num: 19
Candidate Starts for Phauci_64:
(13, 50515), (Start: 19 @50560 has 8 MA's), (Start: 21 @50584 has 2 MA's), (22, 50605), (24, 50629),
(27, 50647), (28, 50686), (29, 50698),

Gene: Phinally_72 Start: 53514, Stop: 53801, Start Num: 19
Candidate Starts for Phinally_72:
(13, 53469), (Start: 19 @53514 has 8 MA's), (Start: 21 @53541 has 2 MA's), (22, 53562), (24, 53586),
(28, 53643),

Gene: RoadKill_68 Start: 49908, Stop: 50204, Start Num: 19
Candidate Starts for RoadKill_68:
(3, 49365), (5, 49551), (8, 49716), (Start: 19 @49908 has 8 MA's), (Start: 21 @49932 has 2 MA's),
(23, 49974), (26, 49989),

Gene: Sampson_73 Start: 53452, Stop: 53760, Start Num: 17
Candidate Starts for Sampson_73:
(12, 53377), (Start: 17 @53452 has 3 MA's), (Start: 18 @53473 has 6 MA's), (32, 53722),

Gene: Scioto_71 Start: 53227, Stop: 53610, Start Num: 12

Candidate Starts for Scioto_71:
(12, 53227), (Start: 17 @53302 has 3 MA's), (Start: 18 @53323 has 6 MA's), (32, 53572),

Gene: Tardus_72 Start: 53609, Stop: 53890, Start Num: 18
Candidate Starts for Tardus_72:
(Start: 18 @53609 has 6 MA's),

Gene: Twonlo_69 Start: 50462, Stop: 50758, Start Num: 19
Candidate Starts for Twonlo_69:
(3, 49919), (5, 50105), (8, 50270), (Start: 19 @50462 has 8 MA's), (Start: 21 @50486 has 2 MA's),
(23, 50528), (26, 50543),

Gene: Verity_72 Start: 54939, Stop: 55223, Start Num: 18
Candidate Starts for Verity_72:
(Start: 18 @54939 has 6 MA's), (32, 55188),

Gene: ViaConlectus_71 Start: 52277, Stop: 52561, Start Num: 18
Candidate Starts for ViaConlectus_71:
(12, 52181), (Start: 17 @52256 has 3 MA's), (Start: 18 @52277 has 6 MA's), (32, 52526),

Gene: Zipp_72 Start: 54680, Stop: 54988, Start Num: 17
Candidate Starts for Zipp_72:
(Start: 17 @54680 has 3 MA's), (Start: 18 @54701 has 6 MA's), (Start: 21 @54731 has 2 MA's), (25,
54779), (32, 54950),

Gene: Zitch_73 Start: 52986, Stop: 53270, Start Num: 18
Candidate Starts for Zitch_73:
(Start: 17 @52965 has 3 MA's), (Start: 18 @52986 has 6 MA's), (Start: 21 @53016 has 2 MA's), (25,
53064),