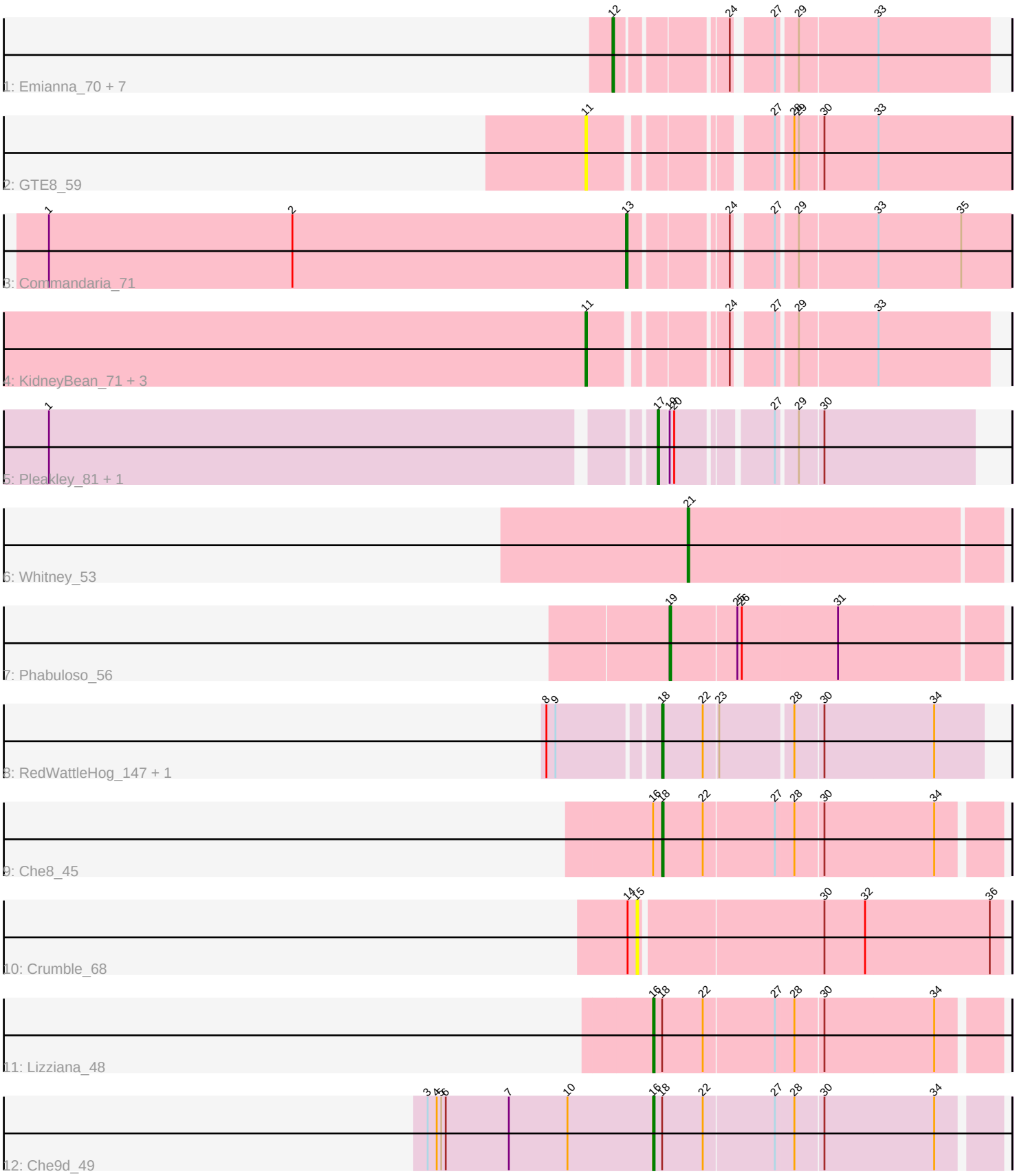
Pham 3209


1: Emianna_70 + 7
2: GTE8_59
3: Commandaria_71
4: KidneyBean_71 + 3
5: Pleakley_81 + 1
6: Whitney_53
7: Phabuloso_56
8: RedWattleHog_147 + 1
9: Che8_45
10: Crumble_68
11: Lizziana_48
12: Che9d_49

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 3209 Report

This analysis was run 04/05/24 on database version 557.

Pham number 3209 has 24 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Emianna_70, Arti_69, NatB6_70, Kurt_70, NovumRegina_70, GrootJr_72, Tracker_70, Wheezy_70
• Track 2 : GTE8_59
• Track 3 : Commandaria_71
• Track 4 : KidneyBean_71, Jifall16_70, Phomeo_71, Foxboro_71
• Track 5 : Pleakley_81, Fury_81
• Track 6 : Whitney_53
• Track 7 : Phabuloso_56
• Track 8 : RedWattleHog_147, Stormageddon_148
• Track 9 : Che8_45
• Track 10 : Crumble_68
• Track 11 : Lizziana_48
• Track 12 : Che9d_49

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

The start number called the most often in the published annotations is 12, it was called in 8 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arti_69, Emianna_70, GrootJr_72, Kurt_70, NatB6_70, NovumRegina_70, Tracker_70, Wheezy_70,

Genes that have the "Most Annotated" start but do not call it:
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Genes that do not have the "Most Annotated" start:
• Che8_45, Che9d_49, Commandaria_71, Crumble_68, Foxboro_71, Fury_81, GTE8_59, Jifall16_70, KidneyBean_71, Lizziana_48, Phabuloso_56, Phomeo_71, Pleakley_81, RedWattleHog_147, Stormageddon_148, Whitney_53,

Summary by start number:

Start 11:

• Found in 5 of 24 (20.8%) of genes in pham
• Manual Annotations of this start: 3 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Foxboro_71 (CR2), GTE8_59 (CR2), Jifall16_70 (CR2), KidneyBean_71 (CR2), Phomeo_71 (CR2),

Start 12:
• Found in 8 of 24 (33.3%) of genes in pham
• Manual Annotations of this start: 8 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arti_69 (CR2), Emianna_70 (CR2), GrootJr_72 (CR2), Kurt_70 (CR2), NatB6_70 (CR2), NovumRegina_70 (CR2), Tracker_70 (CR2), Wheezy_70 (CR2),

Start 13:
• Found in 1 of 24 (4.2%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Commandaria_71 (CR2),

Start 15:
• Found in 1 of 24 (4.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Crumble_68 (F1),

Start 16:
• Found in 3 of 24 (12.5%) of genes in pham
• Manual Annotations of this start: 2 of 21
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Che9d_49 (F2), Lizziana_48 (F1),

Start 17:
• Found in 2 of 24 (8.3%) of genes in pham
• Manual Annotations of this start: 2 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Fury_81 (CR5), Pleakley_81 (CR5),

Start 18:
• Found in 5 of 24 (20.8%) of genes in pham
• Manual Annotations of this start: 3 of 21
• Called 60.0% of time when present
• Phage (with cluster) where this start called: Che8_45 (F1), RedWattleHog_147 (DX), Stormageddon_148 (DX),

Start 19:
• Found in 3 of 24 (12.5%) of genes in pham
• Manual Annotations of this start: 1 of 21
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Phabuloso_56 (DN1),

Start 21:
• Found in 1 of 24 (4.2%) of genes in pham

• Manual Annotations of this start: 1 of 21
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Whitney_53 (DN1),

Summary by clusters:

There are 6 clusters represented in this pham: CR2, F1, F2, CR5, DN1, DX,

Info for manual annotations of cluster CR2:
•Start number 11 was manually annotated 3 times for cluster CR2.
•Start number 12 was manually annotated 8 times for cluster CR2.
•Start number 13 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR5:
•Start number 17 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster DN1:
•Start number 19 was manually annotated 1 time for cluster DN1.
•Start number 21 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DX:
•Start number 18 was manually annotated 2 times for cluster DX.

Info for manual annotations of cluster F1:
•Start number 16 was manually annotated 1 time for cluster F1.
•Start number 18 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:
•Start number 16 was manually annotated 1 time for cluster F2.

Gene Information:

Gene: Arti_69 Start: 53098, Stop: 52880, Start Num: 12
Candidate Starts for Arti_69:
(Start: 12 @53098 has 8 MA's), (24, 53035), (27, 53014), (29, 53002), (33, 52951),

Gene: Che8_45 Start: 32592, Stop: 32380, Start Num: 18
Candidate Starts for Che8_45:
(Start: 16 @32598 has 2 MA's), (Start: 18 @32592 has 3 MA's), (22, 32565), (27, 32520), (28, 32508), (30, 32490), (34, 32418),

Gene: Che9d_49 Start: 31400, Stop: 31182, Start Num: 16
Candidate Starts for Che9d_49:
(3, 31550), (4, 31544), (5, 31541), (6, 31538), (7, 31496), (10, 31457), (Start: 16 @31400 has 2 MA's), (Start: 18 @31394 has 3 MA's), (22, 31367), (27, 31322), (28, 31310), (30, 31292), (34, 31220),

Gene: Commandaria_71 Start: 54388, Stop: 54161, Start Num: 13
Candidate Starts for Commandaria_71:
(1, 54772), (2, 54610), (Start: 13 @54388 has 1 MA's), (24, 54331), (27, 54310), (29, 54298), (33, 54247), (35, 54193),

Gene: Crumble_68 Start: 42679, Stop: 42912, Start Num: 15
Candidate Starts for Crumble_68:
(14, 42673), (15, 42679), (30, 42796), (32, 42823), (36, 42904),

Gene: Emianna_70 Start: 54309, Stop: 54091, Start Num: 12
Candidate Starts for Emianna_70:
(Start: 12 @54309 has 8 MA's), (24, 54246), (27, 54225), (29, 54213), (33, 54162),

Gene: Foxboro_71 Start: 54852, Stop: 54619, Start Num: 11
Candidate Starts for Foxboro_71:
(Start: 11 @54852 has 3 MA's), (24, 54774), (27, 54753), (29, 54741), (33, 54690),

Gene: Fury_81 Start: 54093, Stop: 53905, Start Num: 17
Candidate Starts for Fury_81:
(1, 54480), (Start: 17 @54093 has 2 MA's), (Start: 19 @54087 has 1 MA's), (20, 54084), (27, 54030), (29, 54018), (30, 54003),

Gene: GTE8_59 Start: 47633, Stop: 47385, Start Num: 11
Candidate Starts for GTE8_59:
(Start: 11 @47633 has 3 MA's), (27, 47534), (28, 47525), (29, 47522), (30, 47507), (33, 47471),

Gene: GrootJr_72 Start: 53703, Stop: 53485, Start Num: 12
Candidate Starts for GrootJr_72:
(Start: 12 @53703 has 8 MA's), (24, 53640), (27, 53619), (29, 53607), (33, 53556),

Gene: Jifall16_70 Start: 54345, Stop: 54112, Start Num: 11
Candidate Starts for Jifall16_70:
(Start: 11 @54345 has 3 MA's), (24, 54267), (27, 54246), (29, 54234), (33, 54183),

Gene: KidneyBean_71 Start: 54469, Stop: 54236, Start Num: 11
Candidate Starts for KidneyBean_71:
(Start: 11 @54469 has 3 MA's), (24, 54391), (27, 54370), (29, 54358), (33, 54307),

Gene: Kurt_70 Start: 54324, Stop: 54106, Start Num: 12
Candidate Starts for Kurt_70:
(Start: 12 @54324 has 8 MA's), (24, 54261), (27, 54240), (29, 54228), (33, 54177),

Gene: Lizziana_48 Start: 33800, Stop: 33582, Start Num: 16
Candidate Starts for Lizziana_48:
(Start: 16 @33800 has 2 MA's), (Start: 18 @33794 has 3 MA's), (22, 33767), (27, 33722), (28, 33710), (30, 33692), (34, 33620),

Gene: NatB6_70 Start: 53414, Stop: 53196, Start Num: 12
Candidate Starts for NatB6_70:
(Start: 12 @53414 has 8 MA's), (24, 53351), (27, 53330), (29, 53318), (33, 53267),

Gene: NovumRegina_70 Start: 53702, Stop: 53484, Start Num: 12
Candidate Starts for NovumRegina_70:
(Start: 12 @53702 has 8 MA's), (24, 53639), (27, 53618), (29, 53606), (33, 53555),

Gene: Phabuloso_56 Start: 37035, Stop: 37247, Start Num: 19
Candidate Starts for Phabuloso_56:
(Start: 19 @37035 has 1 MA's), (25, 37077), (26, 37080), (31, 37143),

Gene: Phomeo_71 Start: 54341, Stop: 54108, Start Num: 11
Candidate Starts for Phomeo_71:
(Start: 11 @54341 has 3 MA's), (24, 54263), (27, 54242), (29, 54230), (33, 54179),

Gene: Pleakley_81 Start: 54094, Stop: 53906, Start Num: 17
Candidate Starts for Pleakley_81:
(1, 54481), (Start: 17 @54094 has 2 MA's), (Start: 19 @54088 has 1 MA's), (20, 54085), (27, 54031), (29, 54019), (30, 54004),

Gene: RedWattleHog_147 Start: 102029, Stop: 102232, Start Num: 18
Candidate Starts for RedWattleHog_147:
(8, 101960), (9, 101966), (Start: 18 @102029 has 3 MA's), (22, 102056), (23, 102065), (28, 102110), (30, 102128), (34, 102200),

Gene: Stormageddon_148 Start: 102993, Stop: 103196, Start Num: 18
Candidate Starts for Stormageddon_148:
(8, 102924), (9, 102930), (Start: 18 @102993 has 3 MA's), (22, 103020), (23, 103029), (28, 103074), (30, 103092), (34, 103164),

Gene: Tracker_70 Start: 53158, Stop: 52940, Start Num: 12
Candidate Starts for Tracker_70:
(Start: 12 @53158 has 8 MA's), (24, 53095), (27, 53074), (29, 53062), (33, 53011),

Gene: Wheezy_70 Start: 53372, Stop: 53154, Start Num: 12
Candidate Starts for Wheezy_70:
(Start: 12 @53372 has 8 MA's), (24, 53309), (27, 53288), (29, 53276), (33, 53225),

Gene: Whitney_53 Start: 37481, Stop: 37684, Start Num: 21
Candidate Starts for Whitney_53:
(Start: 21 @37481 has 1 MA's),