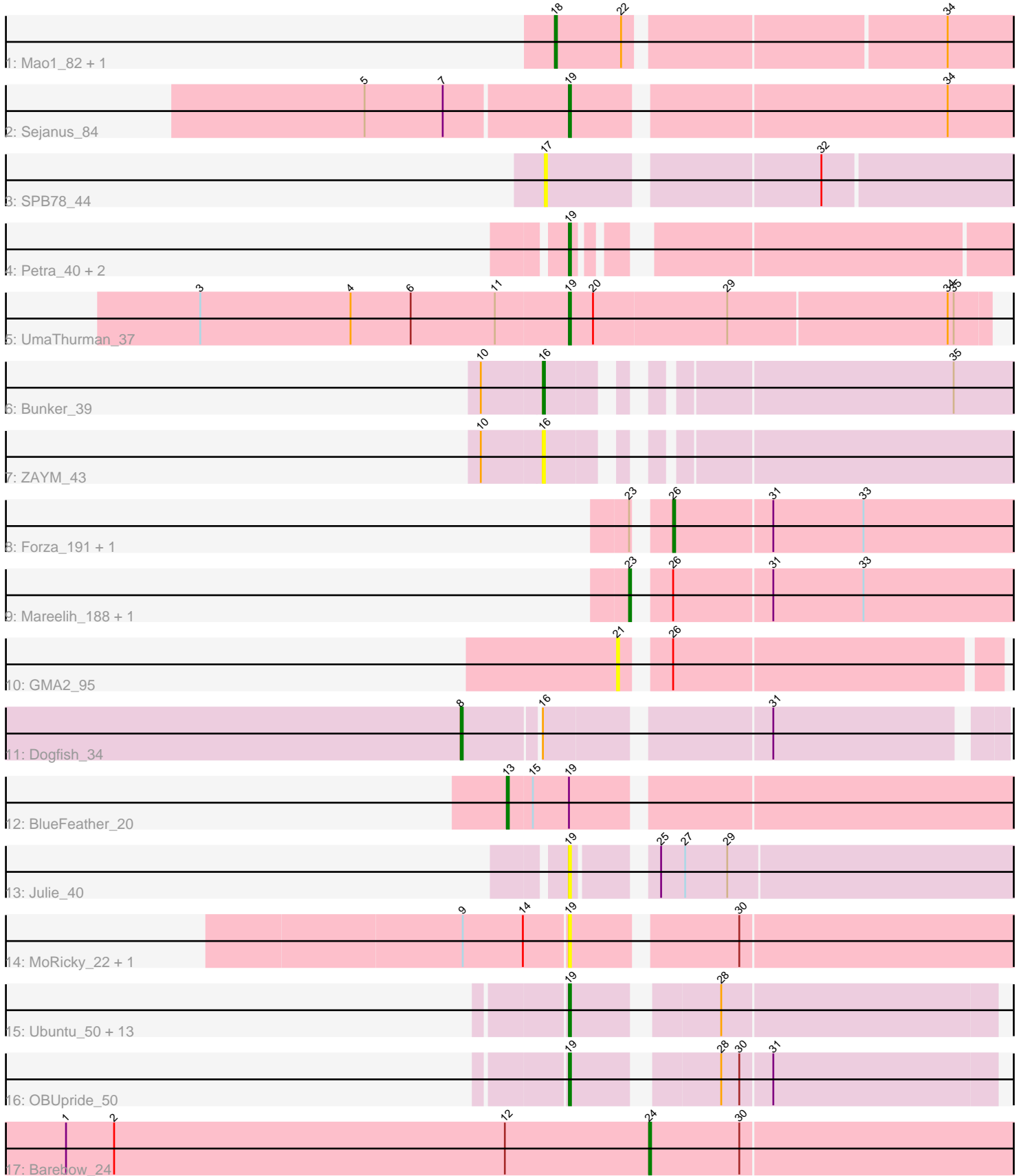# Pham 224739

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 224739 Report

This analysis was run 03/28/25 on database version 593.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 224739 has 36 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Mao1_82, Dori_80
• Track 2 : Sejanus_84
• Track 3 : SPB78_44
• Track 4 : Petra_40, Zarbodnamra_42, Obliviate_39
• Track 5 : UmaThurman_37
• Track 6 : Bunker_39
• Track 7 : ZAYM_43
• Track 8 : Forza_191, BlueNGold_187
• Track 9 : Mareelih_188, Boopy_191
• Track 10 : GMA2_95
• Track 11 : Dogfish_34
• Track 12 : BlueFeather_20
• Track 13 : Julie_40
• Track 14 : MoRicky_22, Smilerella_21
• Track 15 : Ubuntu_50, LilHazelnut_50, Evanesce_49, Hadrien_50, Forge_48, Webster2_50, Ein37_50, Amymech_50, DeepSoil15_50, Amochick_50, Gancho_49, Daegal_52, Luke_50, Kinbote_50
• Track 16 : OBUpride_50
• Track 17 : Barebow_24

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 20 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Amochick_50, Amymech_50, Daegal_52, DeepSoil15_50, Ein37_50, Evanesce_49, Forge_48, Gancho_49, Hadrien_50, Julie_40, Kinbote_50, LilHazelnut_50, Luke_50, MoRicky_22, OBUpride_50, Obliviate_39, Petra_40, Sejanus_84, Smilerella_21, Ubuntu_50, UmaThurman_37, Webster2_50, Zarbodnamra_42,

Genes that have the "Most Annotated" start but do not call it:
• BlueFeather_20,

Genes that do not have the "Most Annotated" start:
• Barebow_24, BlueNGold_187, Boopy_191, Bunker_39, Dogfish_34, Dori_80, Forza_191, GMA2_95, Mao1_82, Mareelih_188, SPB78_44, ZAYM_43,

Summary by start number:

Start 8:
• Found in 1 of 36 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dogfish_34 (DT),

Start 13:
• Found in 1 of 36 (2.8%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlueFeather_20 (FE),

Start 16:
• Found in 3 of 36 (8.3%) of genes in pham
• Manual Annotations of this start: 1 of 30
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Bunker_39 (DB), ZAYM_43 (DB),

Start 17:
• Found in 1 of 36 (2.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: SPB78_44 (BA),

Start 18:
• Found in 2 of 36 (5.6%) of genes in pham
• Manual Annotations of this start: 2 of 30
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dori_80 (AD), Mao1_82 (AD),

Start 19:
• Found in 24 of 36 (66.7%) of genes in pham
• Manual Annotations of this start: 20 of 30
• Called 95.8% of time when present
• Phage (with cluster) where this start called: Amochick_50 (Q), Amymech_50 (Q), Daegal_52 (Q), DeepSoil15_50 (Q), Ein37_50 (Q), Evanesce_49 (Q), Forge_48 (Q), Gancho_49 (Q), Hadrien_50 (Q), Julie_40 (FF), Kinbote_50 (Q), LilHazelnut_50 (Q), Luke_50 (Q), MoRicky_22 (GH), OBUpride_50 (Q), Obliviate_39 (CV), Petra_40 (CV), Sejanus_84 (AD), Smilerella_21 (GH), Ubuntu_50 (Q), UmaThurman_37 (CV), Webster2_50 (Q), Zarbodnamra_42 (CV),

Start 21:
• Found in 1 of 36 (2.8%) of genes in pham

- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA2_95 (DS),

Start 23:
- Found in 4 of 36 (11.1%) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Boopy_191 (DS), Mareelih_188 (DS),

Start 24:
- Found in 1 of 36 (2.8%) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barebow_24 (singleton),

Start 26:
- Found in 5 of 36 (13.9%) of genes in pham
- Manual Annotations of this start: 2 of 30
- Called 40.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_187 (DS), Forza_191 (DS),

Summary by clusters:

There are 11 clusters represented in this pham: singleton, AD, DB, CV, Q, FE, FF, BA, DT, DS, GH,

Info for manual annotations of cluster AD:
•Start number 18 was manually annotated 2 times for cluster AD.
•Start number 19 was manually annotated 1 time for cluster AD.

Info for manual annotations of cluster CV:
•Start number 19 was manually annotated 4 times for cluster CV.

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

Info for manual annotations of cluster DS:
•Start number 23 was manually annotated 2 times for cluster DS.
•Start number 26 was manually annotated 2 times for cluster DS.

Info for manual annotations of cluster DT:
•Start number 8 was manually annotated 1 time for cluster DT.

Info for manual annotations of cluster FE:
•Start number 13 was manually annotated 1 time for cluster FE.

Info for manual annotations of cluster Q:
•Start number 19 was manually annotated 15 times for cluster Q.

Gene Information:

Gene: Amochick_50 Start: 36955, Stop: 37152, Start Num: 19
Candidate Starts for Amochick_50:
(Start: 19 @36955 has 20 MA's), (28, 37018),

Gene: Amymech_50 Start: 36949, Stop: 37146, Start Num: 19
Candidate Starts for Amymech_50:
(Start: 19 @36949 has 20 MA's), (28, 37012),

Gene: Barebow_24 Start: 17257, Stop: 17445, Start Num: 24
Candidate Starts for Barebow_24:
(1, 16966), (2, 16990), (12, 17185), (Start: 24 @17257 has 1 MA's), (30, 17302),

Gene: BlueFeather_20 Start: 14165, Stop: 14407, Start Num: 13
Candidate Starts for BlueFeather_20:
(Start: 13 @14165 has 1 MA's), (15, 14177), (Start: 19 @14195 has 20 MA's),

Gene: BlueNGold_187 Start: 109354, Stop: 109548, Start Num: 26
Candidate Starts for BlueNGold_187:
(Start: 23 @109342 has 2 MA's), (Start: 26 @109354 has 2 MA's), (31, 109402), (33, 109447),

Gene: Boopy_191 Start: 109353, Stop: 109559, Start Num: 23
Candidate Starts for Boopy_191:
(Start: 23 @109353 has 2 MA's), (Start: 26 @109365 has 2 MA's), (31, 109413), (33, 109458),

Gene: Bunker_39 Start: 31881, Stop: 32090, Start Num: 16
Candidate Starts for Bunker_39:
(10, 31854), (Start: 16 @31881 has 1 MA's), (35, 32055),

Gene: Daegal_52 Start: 37533, Stop: 37730, Start Num: 19
Candidate Starts for Daegal_52:
(Start: 19 @37533 has 20 MA's), (28, 37596),

Gene: DeepSoil15_50 Start: 36949, Stop: 37146, Start Num: 19
Candidate Starts for DeepSoil15_50:
(Start: 19 @36949 has 20 MA's), (28, 37012),

Gene: Dogfish_34 Start: 29638, Stop: 29883, Start Num: 8
Candidate Starts for Dogfish_34:
(Start: 8 @29638 has 1 MA's), (Start: 16 @29674 has 1 MA's), (31, 29776),

Gene: Dori_80 Start: 57490, Stop: 57729, Start Num: 18
Candidate Starts for Dori_80:
(Start: 18 @57490 has 2 MA's), (22, 57523), (34, 57673),

Gene: Ein37_50 Start: 36949, Stop: 37146, Start Num: 19
Candidate Starts for Ein37_50:
(Start: 19 @36949 has 20 MA's), (28, 37012),

Gene: Evanesce_49 Start: 36949, Stop: 37146, Start Num: 19

Candidate Starts for Evanesce_49:
(Start: 19 @36949 has 20 MA's), (28, 37012),

Gene: Forge_48 Start: 36949, Stop: 37146, Start Num: 19
Candidate Starts for Forge_48:
(Start: 19 @36949 has 20 MA's), (28, 37012),

Gene: Forza_191 Start: 109282, Stop: 109476, Start Num: 26
Candidate Starts for Forza_191:
(Start: 23 @109270 has 2 MA's), (Start: 26 @109282 has 2 MA's), (31, 109330), (33, 109375),

Gene: GMA2_95 Start: 87367, Stop: 87170, Start Num: 21
Candidate Starts for GMA2_95:
(21, 87367), (Start: 26 @87349 has 2 MA's),

Gene: Gancho_49 Start: 36672, Stop: 36869, Start Num: 19
Candidate Starts for Gancho_49:
(Start: 19 @36672 has 20 MA's), (28, 36735),

Gene: Hadrien_50 Start: 36949, Stop: 37146, Start Num: 19
Candidate Starts for Hadrien_50:
(Start: 19 @36949 has 20 MA's), (28, 37012),

Gene: Julie_40 Start: 30591, Stop: 30806, Start Num: 19
Candidate Starts for Julie_40:
(Start: 19 @30591 has 20 MA's), (25, 30624), (27, 30636), (29, 30657),

Gene: Kinbote_50 Start: 36949, Stop: 37146, Start Num: 19
Candidate Starts for Kinbote_50:
(Start: 19 @36949 has 20 MA's), (28, 37012),

Gene: LilHazelnut_50 Start: 36949, Stop: 37146, Start Num: 19
Candidate Starts for LilHazelnut_50:
(Start: 19 @36949 has 20 MA's), (28, 37012),

Gene: Luke_50 Start: 36904, Stop: 37101, Start Num: 19
Candidate Starts for Luke_50:
(Start: 19 @36904 has 20 MA's), (28, 36967),

Gene: Mao1_82 Start: 56379, Stop: 56618, Start Num: 18
Candidate Starts for Mao1_82:
(Start: 18 @56379 has 2 MA's), (22, 56412), (34, 56562),

Gene: Mareelih_188 Start: 108788, Stop: 108994, Start Num: 23
Candidate Starts for Mareelih_188:
(Start: 23 @108788 has 2 MA's), (Start: 26 @108800 has 2 MA's), (31, 108848), (33, 108893),

Gene: MoRicky_22 Start: 14364, Stop: 14573, Start Num: 19
Candidate Starts for MoRicky_22:
(9, 14313), (14, 14343), (Start: 19 @14364 has 20 MA's), (30, 14439),

Gene: OBUpride_50 Start: 36945, Stop: 37142, Start Num: 19
Candidate Starts for OBUpride_50:

(Start: 19 @36945 has 20 MA's), (28, 37008), (30, 37017), (31, 37032),

Gene: Obliviate_39 Start: 31330, Stop: 31524, Start Num: 19
Candidate Starts for Obliviate_39:
(Start: 19 @31330 has 20 MA's),

Gene: Petra_40 Start: 31689, Stop: 31883, Start Num: 19
Candidate Starts for Petra_40:
(Start: 19 @31689 has 20 MA's),

Gene: SPB78_44 Start: 32113, Stop: 32337, Start Num: 17
Candidate Starts for SPB78_44:
(17, 32113), (32, 32239),

Gene: Sejanus_84 Start: 57638, Stop: 57847, Start Num: 19
Candidate Starts for Sejanus_84:
(5, 57539), (7, 57578), (Start: 19 @57638 has 20 MA's), (34, 57815),

Gene: Smilerella_21 Start: 14454, Stop: 14663, Start Num: 19
Candidate Starts for Smilerella_21:
(9, 14403), (14, 14433), (Start: 19 @14454 has 20 MA's), (30, 14529),

Gene: Ubuntu_50 Start: 36949, Stop: 37146, Start Num: 19
Candidate Starts for Ubuntu_50:
(Start: 19 @36949 has 20 MA's), (28, 37012),

Gene: UmaThurman_37 Start: 31748, Stop: 31954, Start Num: 19
Candidate Starts for UmaThurman_37:
(3, 31565), (4, 31640), (6, 31670), (11, 31712), (Start: 19 @31748 has 20 MA's), (20, 31760), (29, 31826), (34, 31934), (35, 31937),

Gene: Webster2_50 Start: 36949, Stop: 37146, Start Num: 19
Candidate Starts for Webster2_50:
(Start: 19 @36949 has 20 MA's), (28, 37012),

Gene: ZAYM_43 Start: 32247, Stop: 32456, Start Num: 16
Candidate Starts for ZAYM_43:
(10, 32220), (Start: 16 @32247 has 1 MA's),

Gene: Zarbodnamra_42 Start: 32451, Stop: 32645, Start Num: 19
Candidate Starts for Zarbodnamra_42:
(Start: 19 @32451 has 20 MA's),