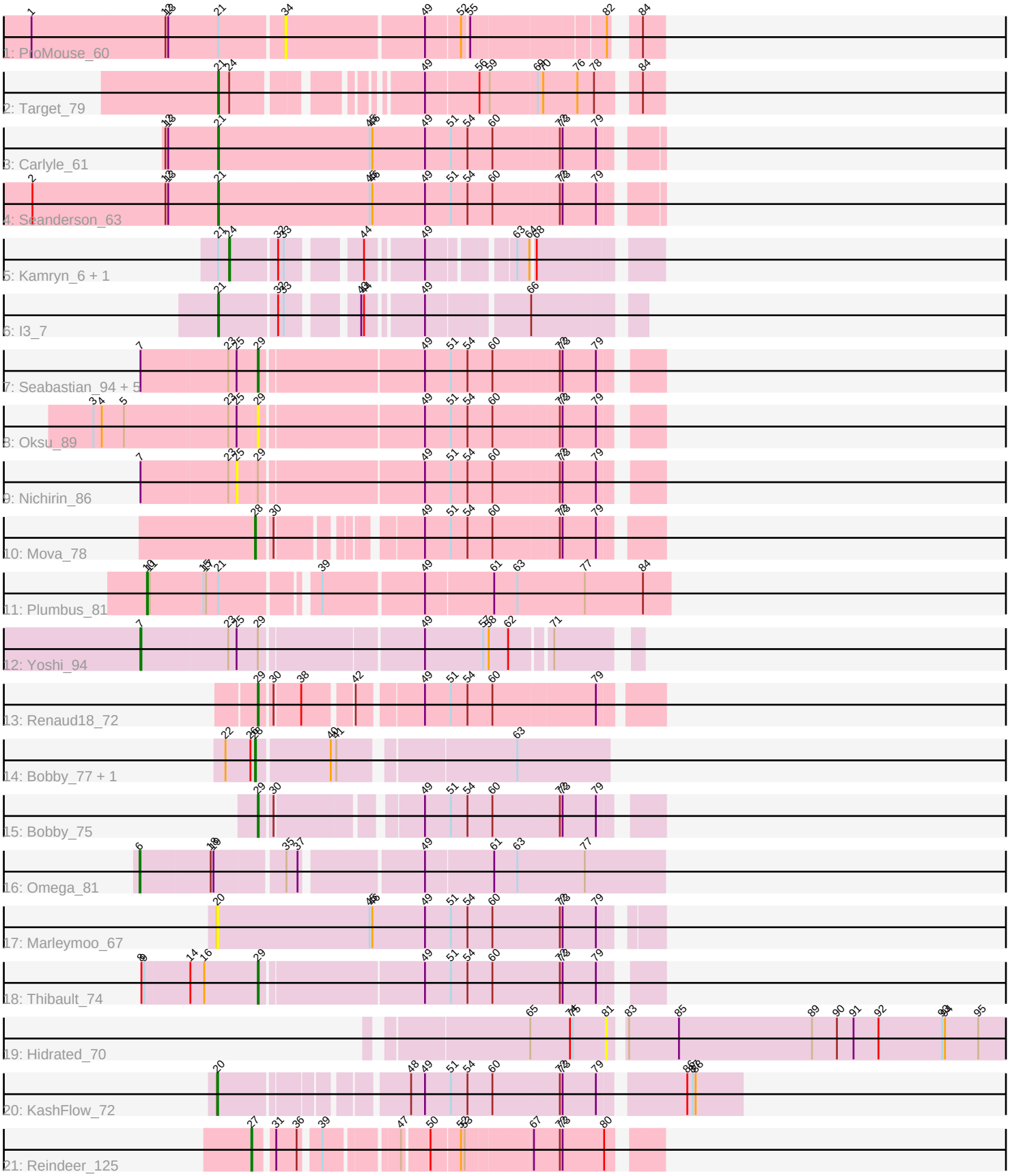
Pham 291425


1: ProMouse_60
2: Target_79
3: Carlyle_61
4: Seanderson_63
5: Kamryn_6 + 1
6: I3_7
7: Seabastian_94 + 5
8: Oksu_89
9: Nichirin_86
10: Mova_78
11: Plumbus_81
12: Yoshi_94
13: Renaud18_72
14: Bobby_77 + 1
15: Bobby_75
16: Omega_81
17: Marleymoo_67
18: Thibault_74
19: Hidrated_70
20: KashFlow_72
21: Reindeer_125

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 291425 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291425 has 28 members, 6 are drafts.

Phages represented in each track:
• Track 1 : ProMouse_60
• Track 2 : Target_79
• Track 3 : Carlyle_61
• Track 4 : Seanderson_63
• Track 5 : Kamryn_6, RoMag_5
• Track 6 : I3_7
• Track 7 : Seabastian_94, Jinglebell_93, Modragons_91, Llama_93, OfUltron_94, Ochi17_92
• Track 8 : Oksu_89
• Track 9 : Nichirin_86
• Track 10 : Mova_78
• Track 11 : Plumbus_81
• Track 12 : Yoshi_94
• Track 13 : Renaud18_72
• Track 14 : Bobby_77, Hidrated_71
• Track 15 : Bobby_75
• Track 16 : Omega_81
• Track 17 : Marleymoo_67
• Track 18 : Thibault_74
• Track 19 : Hidrated_70
• Track 20 : KashFlow_72
• Track 21 : Reindeer_125

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

The start number called the most often in the published annotations is 29, it was called in 9 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Bobby_75, Jinglebell_93, Llama_93, Modragons_91, Ochi17_92, OfUltron_94, Oksu_89, Renaud18_72, Seabastian_94, Thibault_74,

Genes that have the "Most Annotated" start but do not call it:
• Nichirin_86, Yoshi_94,

Genes that do not have the "Most Annotated" start:
• Bobby_77, Carlyle_61, Hidrated_70, Hidrated_71, I3_7, Kamryn_6, KashFlow_72, Marleymoo_67, Mova_78, Omega_81, Plumbus_81, ProMouse_60, Reindeer_125, RoMag_5, Seanderson_63, Target_79,

Summary by start number:

Start 6:
• Found in 1 of 28 (3.6%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Omega_81 (J),

Start 7:
• Found in 8 of 28 (28.6%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 12.5% of time when present
• Phage (with cluster) where this start called: Yoshi_94 (F2),

Start 10:
• Found in 1 of 28 (3.6%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Plumbus_81 (F1),

Start 20:
• Found in 2 of 28 (7.1%) of genes in pham
• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: KashFlow_72 (J), Marleymoo_67 (J),

Start 21:
• Found in 8 of 28 (28.6%) of genes in pham
• Manual Annotations of this start: 4 of 22
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Carlyle_61 (A1), I3_7 (C1), Seanderson_63 (A1), Target_79 (A1),

Start 24:
• Found in 3 of 28 (10.7%) of genes in pham
• Manual Annotations of this start: 2 of 22
• Called 66.7% of time when present
• Phage (with cluster) where this start called: Kamryn_6 (C1), RoMag_5 (C1),

Start 25:
• Found in 9 of 28 (32.1%) of genes in pham
• No Manual Annotations of this start.
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Nichirin_86 (F1),

Start 27:
• Found in 1 of 28 (3.6%) of genes in pham

• Manual Annotations of this start: 1 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Reindeer_125 (M1),

Start 28:
• Found in 3 of 28 (10.7%) of genes in pham
• Manual Annotations of this start: 2 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bobby_77 (J), Hidrated_71 (J), Mova_78 (F1),

Start 29:
• Found in 12 of 28 (42.9%) of genes in pham
• Manual Annotations of this start: 9 of 22
• Called 83.3% of time when present
• Phage (with cluster) where this start called: Bobby_75 (J), Jinglebell_93 (F1), Llama_93 (F1), Modragons_91 (F1), Ochi17_92 (F1), OfUltron_94 (F1), Oksu_89 (F1), Renaud18_72 (F4), Seabastian_94 (F1), Thibault_74 (J),

Start 34:
• Found in 1 of 28 (3.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ProMouse_60 (A1),

Start 81:
• Found in 1 of 28 (3.6%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hidrated_70 (J),

Summary by clusters:

There are 7 clusters represented in this pham: F1, F2, F4, J, A1, M1, C1,

Info for manual annotations of cluster A1:
•Start number 21 was manually annotated 3 times for cluster A1.

Info for manual annotations of cluster C1:
•Start number 21 was manually annotated 1 time for cluster C1.
•Start number 24 was manually annotated 2 times for cluster C1.

Info for manual annotations of cluster F1:
•Start number 10 was manually annotated 1 time for cluster F1.
•Start number 28 was manually annotated 1 time for cluster F1.
•Start number 29 was manually annotated 6 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 7 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F4:
•Start number 29 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster J:
•Start number 6 was manually annotated 1 time for cluster J.
•Start number 20 was manually annotated 1 time for cluster J.
•Start number 28 was manually annotated 1 time for cluster J.
•Start number 29 was manually annotated 2 times for cluster J.

Info for manual annotations of cluster M1:
•Start number 27 was manually annotated 1 time for cluster M1.

Gene Information:

Gene: Bobby_77 Start: 51896, Stop: 51546, Start Num: 28
Candidate Starts for Bobby_77:
(22, 51926), (26, 51899), (Start: 28 @51896 has 2 MA's), (40, 51821), (41, 51815), (63, 51644),

Gene: Bobby_75 Start: 51169, Stop: 50789, Start Num: 29
Candidate Starts for Bobby_75:
(Start: 29 @51169 has 9 MA's), (30, 51157), (49, 51022), (51, 50995), (54, 50977), (60, 50950), (72, 50881), (73, 50878), (79, 50842),

Gene: Carlyle_61 Start: 39697, Stop: 39242, Start Num: 21
Candidate Starts for Carlyle_61:
(12, 39754), (13, 39751), (Start: 21 @39697 has 4 MA's), (45, 39535), (46, 39532), (49, 39475), (51, 39448), (54, 39430), (60, 39403), (72, 39334), (73, 39331), (79, 39295),

Gene: Hidrated_71 Start: 51173, Stop: 50823, Start Num: 28
Candidate Starts for Hidrated_71:
(22, 51203), (26, 51176), (Start: 28 @51173 has 2 MA's), (40, 51098), (41, 51092), (63, 50921),

Gene: Hidrated_70 Start: 50826, Stop: 50383, Start Num: 81
Candidate Starts for Hidrated_70:
(65, 50907), (74, 50865), (75, 50862), (81, 50826), (83, 50814), (85, 50760), (89, 50616), (90, 50589), (91, 50571), (92, 50544), (93, 50475), (94, 50472), (95, 50436),

Gene: I3_7 Start: 2438, Stop: 2830, Start Num: 21
Candidate Starts for I3_7:
(Start: 21 @2438 has 4 MA's), (32, 2498), (33, 2504), (43, 2564), (44, 2567), (49, 2621), (66, 2723),

Gene: Jinglebell_93 Start: 50985, Stop: 51386, Start Num: 29
Candidate Starts for Jinglebell_93:
(Start: 7 @50862 has 1 MA's), (23, 50955), (25, 50964), (Start: 29 @50985 has 9 MA's), (49, 51153), (51, 51180), (54, 51198), (60, 51225), (72, 51294), (73, 51297), (79, 51333),

Gene: Kamryn_6 Start: 1771, Stop: 2151, Start Num: 24
Candidate Starts for Kamryn_6:
(Start: 21 @1759 has 4 MA's), (Start: 24 @1771 has 2 MA's), (32, 1819), (33, 1825), (44, 1888), (49, 1942), (63, 2020), (64, 2032), (68, 2035),

Gene: KashFlow_72 Start: 47258, Stop: 46752, Start Num: 20
Candidate Starts for KashFlow_72:

(Start: 20 @47258 has 1 MA's), (48, 47087), (49, 47072), (51, 47045), (54, 47027), (60, 47000), (72, 46931), (73, 46928), (79, 46892), (86, 46811), (87, 46805), (88, 46802),

Gene: Llama_93 Start: 50841, Stop: 51242, Start Num: 29
Candidate Starts for Llama_93:
(Start: 7 @50718 has 1 MA's), (23, 50811), (25, 50820), (Start: 29 @50841 has 9 MA's), (49, 51009), (51, 51036), (54, 51054), (60, 51081), (72, 51150), (73, 51153), (79, 51189),

Gene: Marleymoo_67 Start: 49139, Stop: 48684, Start Num: 20
Candidate Starts for Marleymoo_67:
(Start: 20 @49139 has 1 MA's), (45, 48977), (46, 48974), (49, 48917), (51, 48890), (54, 48872), (60, 48845), (72, 48776), (73, 48773), (79, 48737),

Gene: Modragons_91 Start: 50829, Stop: 51230, Start Num: 29
Candidate Starts for Modragons_91:
(Start: 7 @50706 has 1 MA's), (23, 50799), (25, 50808), (Start: 29 @50829 has 9 MA's), (49, 50997), (51, 51024), (54, 51042), (60, 51069), (72, 51138), (73, 51141), (79, 51177),

Gene: Mova_78 Start: 47116, Stop: 47487, Start Num: 28
Candidate Starts for Mova_78:
(Start: 28 @47116 has 2 MA's), (30, 47131), (49, 47251), (51, 47278), (54, 47296), (60, 47323), (72, 47392), (73, 47395), (79, 47431),

Gene: Nichirin_86 Start: 50184, Stop: 50606, Start Num: 25
Candidate Starts for Nichirin_86:
(Start: 7 @50082 has 1 MA's), (23, 50175), (25, 50184), (Start: 29 @50205 has 9 MA's), (49, 50373), (51, 50400), (54, 50418), (60, 50445), (72, 50514), (73, 50517), (79, 50553),

Gene: Ochi17_92 Start: 50436, Stop: 50837, Start Num: 29
Candidate Starts for Ochi17_92:
(Start: 7 @50313 has 1 MA's), (23, 50406), (25, 50415), (Start: 29 @50436 has 9 MA's), (49, 50604), (51, 50631), (54, 50649), (60, 50676), (72, 50745), (73, 50748), (79, 50784),

Gene: OfUltron_94 Start: 50985, Stop: 51386, Start Num: 29
Candidate Starts for OfUltron_94:
(Start: 7 @50862 has 1 MA's), (23, 50955), (25, 50964), (Start: 29 @50985 has 9 MA's), (49, 51153), (51, 51180), (54, 51198), (60, 51225), (72, 51294), (73, 51297), (79, 51333),

Gene: Oksu_89 Start: 51566, Stop: 51967, Start Num: 29
Candidate Starts for Oksu_89:
(3, 51392), (4, 51401), (5, 51425), (23, 51536), (25, 51545), (Start: 29 @51566 has 9 MA's), (49, 51734), (51, 51761), (54, 51779), (60, 51806), (72, 51875), (73, 51878), (79, 51914),

Gene: Omega_81 Start: 52384, Stop: 51857, Start Num: 6
Candidate Starts for Omega_81:
(Start: 6 @52384 has 1 MA's), (18, 52312), (19, 52309), (35, 52243), (37, 52231), (49, 52111), (61, 52039), (63, 52015), (77, 51943),

Gene: Plumbus_81 Start: 45998, Stop: 46525, Start Num: 10
Candidate Starts for Plumbus_81:
(Start: 10 @45998 has 1 MA's), (11, 46001), (15, 46058), (17, 46061), (Start: 21 @46073 has 4 MA's), (39, 46163), (49, 46265), (61, 46337), (63, 46361), (77, 46433), (84, 46496),

Gene: ProMouse_60 Start: 41014, Stop: 40655, Start Num: 34
Candidate Starts for ProMouse_60:
(1, 41281), (12, 41137), (13, 41134), (Start: 21 @41080 has 4 MA's), (34, 41014), (49, 40870), (52, 40834), (55, 40828), (82, 40696), (84, 40678),

Gene: Reindeer_125 Start: 66666, Stop: 67040, Start Num: 27
Candidate Starts for Reindeer_125:
(Start: 27 @66666 has 1 MA's), (31, 66684), (36, 66705), (39, 66723), (47, 66792), (50, 66819), (52, 66849), (53, 66852), (67, 66918), (72, 66945), (73, 66948), (80, 66993),

Gene: Renaud18_72 Start: 42500, Stop: 42886, Start Num: 29
Candidate Starts for Renaud18_72:
(Start: 29 @42500 has 9 MA's), (30, 42512), (38, 42539), (42, 42584), (49, 42647), (51, 42674), (54, 42692), (60, 42719), (79, 42827),

Gene: RoMag_5 Start: 2623, Stop: 3003, Start Num: 24
Candidate Starts for RoMag_5:
(Start: 21 @2611 has 4 MA's), (Start: 24 @2623 has 2 MA's), (32, 2671), (33, 2677), (44, 2740), (49, 2794), (63, 2872), (64, 2884), (68, 2887),

Gene: Seabastian_94 Start: 50986, Stop: 51387, Start Num: 29
Candidate Starts for Seabastian_94:
(Start: 7 @50863 has 1 MA's), (23, 50956), (25, 50965), (Start: 29 @50986 has 9 MA's), (49, 51154), (51, 51181), (54, 51199), (60, 51226), (72, 51295), (73, 51298), (79, 51334),

Gene: Seanderson_63 Start: 42839, Stop: 42384, Start Num: 21
Candidate Starts for Seanderson_63:
(2, 43040), (12, 42896), (13, 42893), (Start: 21 @42839 has 4 MA's), (45, 42677), (46, 42674), (49, 42617), (51, 42590), (54, 42572), (60, 42545), (72, 42476), (73, 42473), (79, 42437),

Gene: Target_79 Start: 46689, Stop: 46291, Start Num: 21
Candidate Starts for Target_79:
(Start: 21 @46689 has 4 MA's), (Start: 24 @46677 has 2 MA's), (49, 46521), (56, 46467), (59, 46458), (69, 46410), (70, 46404), (76, 46368), (78, 46350), (84, 46314),

Gene: Thibault_74 Start: 51276, Stop: 51677, Start Num: 29
Candidate Starts for Thibault_74:
(8, 51156), (9, 51159), (14, 51207), (16, 51222), (Start: 29 @51276 has 9 MA's), (49, 51444), (51, 51471), (54, 51489), (60, 51516), (72, 51585), (73, 51588), (79, 51624),

Gene: Yoshi_94 Start: 49980, Stop: 50474, Start Num: 7
Candidate Starts for Yoshi_94:
(Start: 7 @49980 has 1 MA's), (23, 50073), (25, 50082), (Start: 29 @50103 has 9 MA's), (49, 50268), (57, 50331), (58, 50337), (62, 50358), (71, 50397),