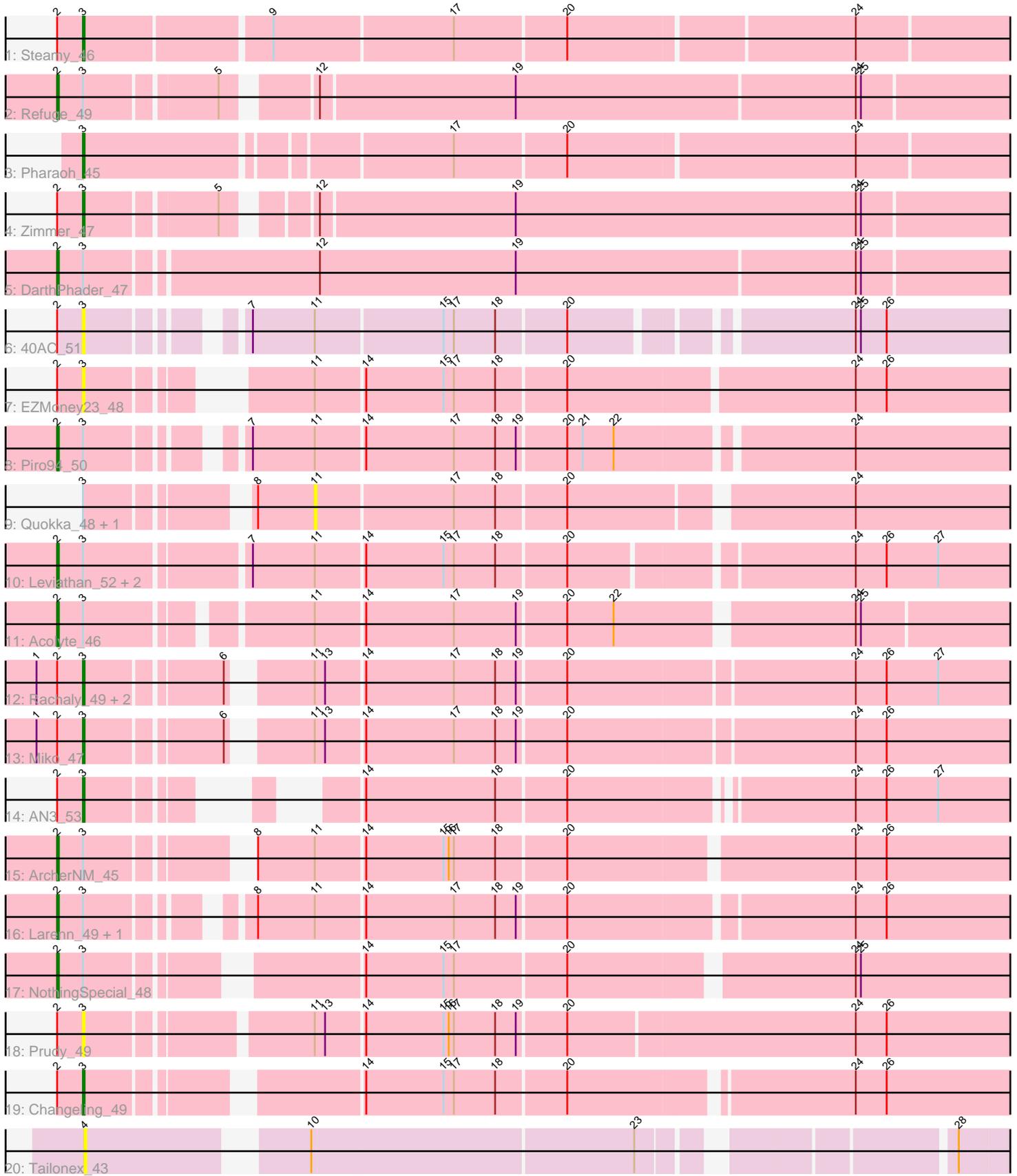# Pham 291470

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 291470 Report

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

Pham number 291470 has 26 members, 6 are drafts.

Phages represented in each track:
• Track 1 : Steamy_46
• Track 2 : Refuge_49
• Track 3 : Pharaoh_45
• Track 4 : Zimmer_47
• Track 5 : DarthPhader_47
• Track 6 : 40AC_51
• Track 7 : EZMoney23_48
• Track 8 : Piro94_50
• Track 9 : Quokka_48, Bradman_49
• Track 10 : Leviathan_52, Agape74_52, EvilGenius_52
• Track 11 : Acolyte_46
• Track 12 : Rachaly_49, Lokk_47, BobSwaget_46
• Track 13 : Miko_47
• Track 14 : AN3_53
• Track 15 : ArcherNM_45
• Track 16 : Larenn_49, Malec_50
• Track 17 : NothingSpecial_48
• Track 18 : Prudy_49
• Track 19 : Changeling_49
• Track 20 : Tailonex_43

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

The start number called the most often in the published annotations is 2, it was called in 11 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acolyte_46, Agape74_52, ArcherNM_45, DarthPhader_47, EvilGenius_52, Larenn_49, Leviathan_52, Malec_50, NothingSpecial_48, Piro94_50, Refuge_49,

Genes that have the "Most Annotated" start but do not call it:
• 40AC_51, AN3_53, BobSwaget_46, Changeling_49, EZMoney23_48, Lokk_47, Miko_47, Prudy_49, Rachaly_49, Steamy_46, Zimmer_47,

Genes that do not have the "Most Annotated" start:
• Bradman_49, Pharaoh_45, Quokka_48, Tailonex_43,

Summary by start number:

Start 2:
• Found in 22 of 26 (84.6%) of genes in pham
• Manual Annotations of this start: 11 of 20
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Acolyte_46 (A2), Agape74_52 (A2), ArcherNM_45 (A2), DarthPhader_47 (A12), EvilGenius_52 (A2), Larenn_49 (A2), Leviathan_52 (A2), Malec_50 (A2), NothingSpecial_48 (A2), Piro94_50 (A2), Refuge_49 (A12),

Start 3:
• Found in 25 of 26 (96.2%) of genes in pham
• Manual Annotations of this start: 9 of 20
• Called 48.0% of time when present
• Phage (with cluster) where this start called: 40AC_51 (A17), AN3_53 (A2), BobSwaget_46 (A2), Changeling_49 (A2), EZMoney23_48 (A2), Lokk_47 (A2), Miko_47 (A2), Pharaoh_45 (A12), Prudy_49 (A2), Rachaly_49 (A2), Steamy_46 (A12), Zimmer_47 (A12),

Start 4:
• Found in 1 of 26 (3.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Tailonex_43 (singleton),

Start 11:
• Found in 17 of 26 (65.4%) of genes in pham
• No Manual Annotations of this start.
• Called 11.8% of time when present
• Phage (with cluster) where this start called: Bradman_49 (A2), Quokka_48 (A2),

Summary by clusters:

There are 4 clusters represented in this pham: singleton, A2, A17, A12,

Info for manual annotations of cluster A12:
•Start number 2 was manually annotated 2 times for cluster A12.
•Start number 3 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A2:
•Start number 2 was manually annotated 9 times for cluster A2.
•Start number 3 was manually annotated 6 times for cluster A2.

Gene Information:
Gene: 40AC_51 Start: 34942, Stop: 34445, Start Num: 3

Candidate Starts for 40AC_51:
(Start: 2 @34957 has 11 MA's), (Start: 3 @34942 has 9 MA's), (7, 34873), (11, 34837), (15, 34765), (17, 34759), (18, 34735), (20, 34696), (24, 34552), (25, 34549), (26, 34534),

Gene: AN3_53 Start: 34524, Stop: 34060, Start Num: 3
Candidate Starts for AN3_53:
(Start: 2 @34539 has 11 MA's), (Start: 3 @34524 has 9 MA's), (14, 34434), (18, 34359), (20, 34320), (24, 34170), (26, 34152), (27, 34122),

Gene: Acolyte_46 Start: 33097, Stop: 32558, Start Num: 2
Candidate Starts for Acolyte_46:
(Start: 2 @33097 has 11 MA's), (Start: 3 @33082 has 9 MA's), (11, 32968), (14, 32941), (17, 32890), (19, 32854), (20, 32827), (22, 32800), (24, 32671), (25, 32668),

Gene: Agape74_52 Start: 34153, Stop: 33611, Start Num: 2
Candidate Starts for Agape74_52:
(Start: 2 @34153 has 11 MA's), (Start: 3 @34138 has 9 MA's), (7, 34051), (11, 34015), (14, 33988), (15, 33943), (17, 33937), (18, 33913), (20, 33874), (24, 33721), (26, 33703), (27, 33673),

Gene: ArcherNM_45 Start: 33685, Stop: 33152, Start Num: 2
Candidate Starts for ArcherNM_45:
(Start: 2 @33685 has 11 MA's), (Start: 3 @33670 has 9 MA's), (8, 33595), (11, 33562), (14, 33535), (15, 33490), (16, 33487), (17, 33484), (18, 33460), (20, 33421), (24, 33265), (26, 33247),

Gene: BobSwaget_46 Start: 32491, Stop: 31973, Start Num: 3
Candidate Starts for BobSwaget_46:
(1, 32518), (Start: 2 @32506 has 11 MA's), (Start: 3 @32491 has 9 MA's), (6, 32419), (11, 32383), (13, 32377), (14, 32356), (17, 32305), (18, 32281), (19, 32269), (20, 32242), (24, 32083), (26, 32065), (27, 32035),

Gene: Bradman_49 Start: 32541, Stop: 32137, Start Num: 11
Candidate Starts for Bradman_49:
(Start: 3 @32652 has 9 MA's), (8, 32574), (11, 32541), (17, 32463), (18, 32439), (20, 32400), (24, 32247),

Gene: Changeling_49 Start: 34250, Stop: 33735, Start Num: 3
Candidate Starts for Changeling_49:
(Start: 2 @34265 has 11 MA's), (Start: 3 @34250 has 9 MA's), (14, 34115), (15, 34070), (17, 34064), (18, 34040), (20, 34001), (24, 33848), (26, 33830),

Gene: DarthPhader_47 Start: 34512, Stop: 33961, Start Num: 2
Candidate Starts for DarthPhader_47:
(Start: 2 @34512 has 11 MA's), (Start: 3 @34497 has 9 MA's), (12, 34371), (19, 34257), (24, 34062), (25, 34059),

Gene: EZMoney23_48 Start: 33569, Stop: 33063, Start Num: 3
Candidate Starts for EZMoney23_48:
(Start: 2 @33584 has 11 MA's), (Start: 3 @33569 has 9 MA's), (11, 33476), (14, 33449), (15, 33404), (17, 33398), (18, 33374), (20, 33335), (24, 33176), (26, 33158),

Gene: EvilGenius_52 Start: 35429, Stop: 34887, Start Num: 2
Candidate Starts for EvilGenius_52:

(Start: 2 @35429 has 11 MA's), (Start: 3 @35414 has 9 MA's), (7, 35327), (11, 35291), (14, 35264), (15, 35219), (17, 35213), (18, 35189), (20, 35150), (24, 34997), (26, 34979), (27, 34949),

Gene: Larenn_49 Start: 33825, Stop: 33295, Start Num: 2
Candidate Starts for Larenn_49:
(Start: 2 @33825 has 11 MA's), (Start: 3 @33810 has 9 MA's), (8, 33738), (11, 33705), (14, 33678), (17, 33627), (18, 33603), (19, 33591), (20, 33564), (24, 33408), (26, 33390),

Gene: Leviathan_52 Start: 34282, Stop: 33740, Start Num: 2
Candidate Starts for Leviathan_52:
(Start: 2 @34282 has 11 MA's), (Start: 3 @34267 has 9 MA's), (7, 34180), (11, 34144), (14, 34117), (15, 34072), (17, 34066), (18, 34042), (20, 34003), (24, 33850), (26, 33832), (27, 33802),

Gene: Lokk_47 Start: 33016, Stop: 32498, Start Num: 3
Candidate Starts for Lokk_47:
(1, 33043), (Start: 2 @33031 has 11 MA's), (Start: 3 @33016 has 9 MA's), (6, 32944), (11, 32908), (13, 32902), (14, 32881), (17, 32830), (18, 32806), (19, 32794), (20, 32767), (24, 32608), (26, 32590), (27, 32560),

Gene: Malec_50 Start: 34392, Stop: 33859, Start Num: 2
Candidate Starts for Malec_50:
(Start: 2 @34392 has 11 MA's), (Start: 3 @34377 has 9 MA's), (8, 34305), (11, 34272), (14, 34245), (17, 34194), (18, 34170), (19, 34158), (20, 34131), (24, 33972), (26, 33954),

Gene: Miko_47 Start: 33800, Stop: 33279, Start Num: 3
Candidate Starts for Miko_47:
(1, 33827), (Start: 2 @33815 has 11 MA's), (Start: 3 @33800 has 9 MA's), (6, 33728), (11, 33692), (13, 33686), (14, 33665), (17, 33614), (18, 33590), (19, 33578), (20, 33551), (24, 33392), (26, 33374),

Gene: NothingSpecial_48 Start: 34231, Stop: 33707, Start Num: 2
Candidate Starts for NothingSpecial_48:
(Start: 2 @34231 has 11 MA's), (Start: 3 @34216 has 9 MA's), (14, 34084), (15, 34039), (17, 34033), (20, 33970), (24, 33817), (25, 33814),

Gene: Pharaoh_45 Start: 33439, Stop: 32915, Start Num: 3
Candidate Starts for Pharaoh_45:
(Start: 3 @33439 has 9 MA's), (17, 33241), (20, 33178), (24, 33016),

Gene: Piro94_50 Start: 34062, Stop: 33535, Start Num: 2
Candidate Starts for Piro94_50:
(Start: 2 @34062 has 11 MA's), (Start: 3 @34047 has 9 MA's), (7, 33978), (11, 33942), (14, 33915), (17, 33864), (18, 33840), (19, 33828), (20, 33801), (21, 33792), (22, 33774), (24, 33648),

Gene: Prudy_49 Start: 34410, Stop: 33877, Start Num: 3
Candidate Starts for Prudy_49:
(Start: 2 @34425 has 11 MA's), (Start: 3 @34410 has 9 MA's), (11, 34293), (13, 34287), (14, 34266), (15, 34221), (16, 34218), (17, 34215), (18, 34191), (19, 34179), (20, 34152), (24, 33990), (26, 33972),

Gene: Quokka_48 Start: 32541, Stop: 32137, Start Num: 11
Candidate Starts for Quokka_48:
(Start: 3 @32652 has 9 MA's), (8, 32574), (11, 32541), (17, 32463), (18, 32439), (20, 32400), (24, 32247),

Gene: Rachaly_49 Start: 33948, Stop: 33430, Start Num: 3
Candidate Starts for Rachaly_49:
(1, 33975), (Start: 2 @33963 has 11 MA's), (Start: 3 @33948 has 9 MA's), (6, 33876), (11, 33840), (13, 33834), (14, 33813), (17, 33762), (18, 33738), (19, 33726), (20, 33699), (24, 33540), (26, 33522), (27, 33492),

Gene: Refuge_49 Start: 34874, Stop: 34341, Start Num: 2
Candidate Starts for Refuge_49:
(Start: 2 @34874 has 11 MA's), (Start: 3 @34859 has 9 MA's), (5, 34790), (12, 34748), (19, 34637), (24, 34442), (25, 34439),

Gene: Steamy_46 Start: 33175, Stop: 32648, Start Num: 3
Candidate Starts for Steamy_46:
(Start: 2 @33190 has 11 MA's), (Start: 3 @33175 has 9 MA's), (9, 33073), (17, 32971), (20, 32908), (24, 32749),

Gene: Tailonex_43 Start: 34493, Stop: 34008, Start Num: 4
Candidate Starts for Tailonex_43:
(4, 34493), (10, 34385), (23, 34202), (28, 34049),

Gene: Zimmer_47 Start: 34365, Stop: 33847, Start Num: 3
Candidate Starts for Zimmer_47:
(Start: 2 @34380 has 11 MA's), (Start: 3 @34365 has 9 MA's), (5, 34296), (12, 34257), (19, 34146), (24, 33948), (25, 33945),