# Pham 289693


1: PFR1_48 + 1
2: WilliamBoone_105
3: Gsput1_45
4: Taotie_126
5: PSonyx_124
6: MicyPS_105
7: Ruby_68 + 4
8: ByChance_67 + 4
9: ArcusAngelus_78 + 1
10: Topiatin_78
11: Renaud18_83
12: Pitbull_55
13: Hum25_57
14: Altostratus_58
15: Phayonce_66
16: MooMoo_67

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 289693 Report

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

Pham number 289693 has 26 members, 5 are drafts.

Phages represented in each track:
- Track 1 : PFR1_48, PFR2_50
- Track 2 : WilliamBoone_105
- Track 3 : Gsput1_45
- Track 4 : Taotie_126
- Track 5 : PSonyx_124
- Track 6 : MicyPS_105
- Track 7 : Ruby_68, MisterCuddles_70, Girr_70, Stap_68, Krakatau_68
- Track 8 : ByChance_67, Mova_73, ShowerHandel_77, Alexphander_75, Madiba_77
- Track 9 : ArcusAngelus_78, Chevrolet_80
- Track 10 : Topiatin_78
- Track 11 : Renaud18_83
- Track 12 : Pitbull_55
- Track 13 : Hum25_57
- Track 14 : Altostratus_58
- Track 15 : Phayonce_66
- Track 16 : MooMoo_67

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

The start number called the most often in the published annotations is 8, it was called in 16 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Alexphander_75, ArcusAngelus_78, ByChance_67, Chevrolet_80, Girr_70, Krakatau_68, Madiba_77, MisterCuddles_70, MooMoo_67, Mova_73, PFR1_48, PFR2_50, Phayonce_66, Renaud18_83, Ruby_68, ShowerHandel_77, Stap_68, Topiatin_78, WilliamBoone_105,

Genes that have the "Most Annotated" start but do not call it:
- Gsput1_45,

Genes that do not have the "Most Annotated" start:
- Altostratus_58, Hum25_57, MicyPS_105, PSonyx_124, Pitbull_55, Taotie_126,

**Summary by start number:**

Start 7:
• Found in 3 of 26 ( 11.5% ) 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: MicyPS_105 (EQ), PSonyx_124 (EQ), Taotie_126 (EQ),

Start 8:
• Found in 20 of 26 ( 76.9% ) of genes in pham
• Manual Annotations of this start: 16 of 21
• Called 95.0% of time when present
• Phage (with cluster) where this start called: Alexphander_75 (F1), ArcusAngelus_78 (F1), ByChance_67 (F1), Chevrolet_80 (F1), Girr_70 (F1), Krakatau_68 (F1), Madiba_77 (F1), MisterCuddles_70 (F1), MooMoo_67 (singleton), Mova_73 (F1), PFR1_48 (BX), PFR2_50 (BX), Phayonce_66 (P5), Renaud18_83 (F4), Ruby_68 (F1), ShowerHandel_77 (F1), Stap_68 (F1), Topiatin_78 (F1), WilliamBoone_105 (CQ1),

Start 10:
• 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: Gsput1_45 (CU2),

Start 19:
• Found in 2 of 26 ( 7.7% ) 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: Hum25_57 (FQ), Pitbull_55 (FQ),

Start 20:
• Found in 1 of 26 ( 3.8% ) 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: Altostratus_58 (FS),

**Summary by clusters:**

There are 10 clusters represented in this pham: F1, singleton, FS, F4, CU2, FQ, BX, P5, CQ1, EQ,

Info for manual annotations of cluster CQ1:
•Start number 8 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster EQ:
•Start number 7 was manually annotated 2 times for cluster EQ.

Info for manual annotations of cluster F1:
•Start number 8 was manually annotated 12 times for cluster F1.

Info for manual annotations of cluster F4:
•Start number 8 was manually annotated 1 time for cluster F4.

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

Info for manual annotations of cluster FS:
•Start number 20 was manually annotated 1 time for cluster FS.

Info for manual annotations of cluster P5:
•Start number 8 was manually annotated 1 time for cluster P5.

### *Gene Information:*

Gene: Alexphander_75 Start: 46658, Stop: 47605, Start Num: 8
Candidate Starts for Alexphander_75:
(2, 46559), (4, 46610), (6, 46616), (Start: 8 @46658 has 16 MA's), (15, 46733), (16, 46736), (18, 46757), (21, 46772), (33, 46895), (41, 46925), (42, 46931), (53, 47195), (74, 47522), (75, 47546),

Gene: Altostratus_58 Start: 33551, Stop: 34300, Start Num: 20
Candidate Starts for Altostratus_58:
(9, 33461), (Start: 20 @33551 has 1 MA's), (28, 33653), (29, 33671), (37, 33698), (55, 33977), (57, 33995), (63, 34139), (66, 34169), (69, 34244),

Gene: ArcusAngelus_78 Start: 47565, Stop: 48512, Start Num: 8
Candidate Starts for ArcusAngelus_78:
(2, 47466), (6, 47523), (Start: 8 @47565 has 16 MA's), (15, 47640), (16, 47643), (18, 47664), (21, 47679), (33, 47802), (39, 47829), (41, 47832), (42, 47838), (53, 48102), (61, 48291), (62, 48294), (74, 48429), (75, 48453),

Gene: ByChance_67 Start: 42797, Stop: 43744, Start Num: 8
Candidate Starts for ByChance_67:
(2, 42698), (4, 42749), (6, 42755), (Start: 8 @42797 has 16 MA's), (15, 42872), (16, 42875), (18, 42896), (21, 42911), (33, 43034), (41, 43064), (42, 43070), (53, 43334), (74, 43661), (75, 43685),

Gene: Chevrolet_80 Start: 47566, Stop: 48513, Start Num: 8
Candidate Starts for Chevrolet_80:
(2, 47467), (6, 47524), (Start: 8 @47566 has 16 MA's), (15, 47641), (16, 47644), (18, 47665), (21, 47680), (33, 47803), (39, 47830), (41, 47833), (42, 47839), (53, 48103), (61, 48292), (62, 48295), (74, 48430), (75, 48454),

Gene: Girr_70 Start: 46136, Stop: 47083, Start Num: 8
Candidate Starts for Girr_70:
(4, 46088), (6, 46094), (Start: 8 @46136 has 16 MA's), (15, 46211), (16, 46214), (18, 46235), (21, 46250), (33, 46373), (41, 46403), (42, 46409), (53, 46673), (74, 47000), (75, 47024),

Gene: Gsput1_45 Start: 32516, Stop: 33187, Start Num: 10
Candidate Starts for Gsput1_45:
(Start: 8 @32471 has 16 MA's), (10, 32516), (17, 32558), (21, 32585), (42, 32741), (59, 32957),

Gene: Hum25_57 Start: 32602, Stop: 33336, Start Num: 19
Candidate Starts for Hum25_57:
(Start: 19 @32602 has 2 MA's), (30, 32725), (36, 32746), (37, 32752), (38, 32758), (44, 32791), (45, 32806), (51, 32968), (56, 33028), (63, 33178), (65, 33202), (68, 33253),

Gene: Krakatau_68 Start: 42516, Stop: 43463, Start Num: 8
Candidate Starts for Krakatau_68:
(4, 42468), (6, 42474), (Start: 8 @42516 has 16 MA's), (15, 42591), (16, 42594), (18, 42615), (21, 42630), (33, 42753), (41, 42783), (42, 42789), (53, 43053), (74, 43380), (75, 43404),

Gene: Madiba_77 Start: 47713, Stop: 48660, Start Num: 8
Candidate Starts for Madiba_77:
(2, 47614), (4, 47665), (6, 47671), (Start: 8 @47713 has 16 MA's), (15, 47788), (16, 47791), (18, 47812), (21, 47827), (33, 47950), (41, 47980), (42, 47986), (53, 48250), (74, 48577), (75, 48601),

Gene: MicyPS_105 Start: 61596, Stop: 62462, Start Num: 7
Candidate Starts for MicyPS_105:
(Start: 7 @61596 has 2 MA's), (11, 61647), (25, 61749), (31, 61833), (50, 61971), (52, 62049), (67, 62316),

Gene: MisterCuddles_70 Start: 46136, Stop: 47083, Start Num: 8
Candidate Starts for MisterCuddles_70:
(4, 46088), (6, 46094), (Start: 8 @46136 has 16 MA's), (15, 46211), (16, 46214), (18, 46235), (21, 46250), (33, 46373), (41, 46403), (42, 46409), (53, 46673), (74, 47000), (75, 47024),

Gene: MooMoo_67 Start: 43945, Stop: 44826, Start Num: 8
Candidate Starts for MooMoo_67:
(1, 43822), (3, 43879), (Start: 8 @43945 has 16 MA's), (12, 43999), (15, 44020), (23, 44080), (25, 44095), (26, 44110), (27, 44143), (31, 44179), (32, 44182), (48, 44293), (53, 44401), (68, 44683), (78, 44812),

Gene: Mova_73 Start: 45137, Stop: 46084, Start Num: 8
Candidate Starts for Mova_73:
(2, 45038), (4, 45089), (6, 45095), (Start: 8 @45137 has 16 MA's), (15, 45212), (16, 45215), (18, 45236), (21, 45251), (33, 45374), (41, 45404), (42, 45410), (53, 45674), (74, 46001), (75, 46025),

Gene: PFR1_48 Start: 33401, Stop: 34246, Start Num: 8
Candidate Starts for PFR1_48:
(Start: 8 @33401 has 16 MA's), (14, 33473), (15, 33476), (18, 33500), (21, 33515), (24, 33542), (26, 33566), (41, 33671), (46, 33734), (54, 33878), (72, 34160), (76, 34211),

Gene: PFR2_50 Start: 34970, Stop: 35815, Start Num: 8
Candidate Starts for PFR2_50:
(Start: 8 @34970 has 16 MA's), (14, 35042), (15, 35045), (18, 35069), (21, 35084), (24, 35111), (26, 35135), (41, 35240), (46, 35303), (54, 35447), (72, 35729), (76, 35780),

Gene: PSonyx_124 Start: 65104, Stop: 65970, Start Num: 7
Candidate Starts for PSonyx_124:
(Start: 7 @65104 has 2 MA's), (11, 65155), (25, 65257), (31, 65341), (50, 65479), (52, 65557),

Gene: Phayonce_66 Start: 43928, Stop: 44809, Start Num: 8
Candidate Starts for Phayonce_66:

(Start: 8 @43928 has 16 MA's), (15, 44003), (23, 44063), (25, 44078), (26, 44093), (27, 44126), (53, 44384), (70, 44702),

Gene: Pitbull_55 Start: 31198, Stop: 31932, Start Num: 19
Candidate Starts for Pitbull_55:
(5, 31060), (Start: 19 @31198 has 2 MA's), (30, 31321), (36, 31342), (37, 31348), (38, 31354), (40, 31357), (44, 31387), (45, 31402), (51, 31564), (56, 31624), (63, 31774), (64, 31786), (65, 31798), (68, 31849), (71, 31882),

Gene: Renaud18_83 Start: 47137, Stop: 48084, Start Num: 8
Candidate Starts for Renaud18_83:
(2, 47038), (6, 47095), (Start: 8 @47137 has 16 MA's), (15, 47212), (16, 47215), (18, 47236), (21, 47251), (33, 47374), (41, 47404), (42, 47410), (53, 47674), (61, 47863), (62, 47866), (74, 48001), (75, 48025),

Gene: Ruby_68 Start: 46137, Stop: 47084, Start Num: 8
Candidate Starts for Ruby_68:
(4, 46089), (6, 46095), (Start: 8 @46137 has 16 MA's), (15, 46212), (16, 46215), (18, 46236), (21, 46251), (33, 46374), (41, 46404), (42, 46410), (53, 46674), (74, 47001), (75, 47025),

Gene: ShowerHandel_77 Start: 46737, Stop: 47684, Start Num: 8
Candidate Starts for ShowerHandel_77:
(2, 46638), (4, 46689), (6, 46695), (Start: 8 @46737 has 16 MA's), (15, 46812), (16, 46815), (18, 46836), (21, 46851), (33, 46974), (41, 47004), (42, 47010), (53, 47274), (74, 47601), (75, 47625),

Gene: Stap_68 Start: 43382, Stop: 44329, Start Num: 8
Candidate Starts for Stap_68:
(4, 43334), (6, 43340), (Start: 8 @43382 has 16 MA's), (15, 43457), (16, 43460), (18, 43481), (21, 43496), (33, 43619), (41, 43649), (42, 43655), (53, 43919), (74, 44246), (75, 44270),

Gene: Taotie_126 Start: 64036, Stop: 64902, Start Num: 7
Candidate Starts for Taotie_126:
(Start: 7 @64036 has 2 MA's), (14, 64111), (25, 64189), (31, 64273), (32, 64276), (34, 64282), (35, 64291), (43, 64318), (47, 64375), (52, 64486),

Gene: Topiatin_78 Start: 46863, Stop: 47810, Start Num: 8
Candidate Starts for Topiatin_78:
(4, 46815), (6, 46821), (Start: 8 @46863 has 16 MA's), (15, 46938), (16, 46941), (18, 46962), (21, 46977), (33, 47100), (41, 47130), (42, 47136), (53, 47400), (62, 47592), (74, 47727), (75, 47751),

Gene: WilliamBoone_105 Start: 60775, Stop: 61641, Start Num: 8
Candidate Starts for WilliamBoone_105:
(Start: 8 @60775 has 16 MA's), (13, 60844), (18, 60877), (21, 60892), (22, 60898), (31, 61012), (49, 61135), (58, 61300), (60, 61387), (61, 61417), (73, 61549), (77, 61612),