# Pham 192641


1: JasonD_59
2: Piperis_80 + 5
3: Nicole72_78
4: Sunny_77 + 1
5: Fireman_80
6: Teamocil_82 + 1
7: Ramiel05_78 + 4
8: Paschalis_79
9: Smarties_88 + 1
10: Honeyfin_79 + 8
11: Ganandorf_77
12: Phrancesco_79 + 1
13: Jayden_79
14: Megan_79
15: FireCastle_43
16: Goodman_44 + 1
17: Zanella_43
18: Htur_44 + 1
19: Cicada_45 + 1
20: PermaG_44 + 1
21: Lesiram_38
22: DelaGarza_37
23: Teng_39
24: Gingerbug_36

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 192641 Report

This analysis was run 11/02/24 on database version 579.

Pham number 192641 has 49 members, 5 are drafts.

Phages represented in each track:
• Track 1 : JasonD_59
• Track 2 : Piperis_80, Onika_78, Jollipop_80, Antares_79, Busephilis_78, Selwyn23_80
• Track 3 : Nicole72_78
• Track 4 : Sunny_77, Merry_77
• Track 5 : Fireman_80
• Track 6 : Teamocil_82, Gina_82
• Track 7 : Ramiel05_78, Kowalski_78, NoodlelyBoi_79, Scumberland_81, BrazzalePHS_78
• Track 8 : Paschalis_79
• Track 9 : Smarties_88, Ariadne_88
• Track 10 : Honeyfin_79, Hermeonysus_79, Yeti_80, Shotgun_78, Cranjis_80, Jefe_79, PiperSansNom_80, Quhwah_83, PierreOrion_78
• Track 11 : Ganandorf_77
• Track 12 : Phrancesco_79, Phorgeous_79
• Track 13 : Jayden_79
• Track 14 : Megan_79
• Track 15 : FireCastle_43
• Track 16 : Goodman_44, Johann_44
• Track 17 : Zanella_43
• Track 18 : Htur_44, Rasovi_44
• Track 19 : Cicada_45, SBlackberry_43
• Track 20 : PermaG_44, TurboVicky_44
• Track 21 : Lesiram_38
• Track 22 : DelaGarza_37
• Track 23 : Teng_39
• Track 24 : Gingerbug_36

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

The start number called the most often in the published annotations is 11, it was called in 44 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Antares_79, Ariadne_88, BrazzalePHS_78, Busephilis_78, Cicada_45, Cranjis_80, DelaGarza_37, FireCastle_43, Fireman_80, Ganandorf_77, Gina_82, Gingerbug_36, Goodman_44, Hermeonysus_79, Honeyfin_79, Htur_44, Jayden_79, Jefe_79, Johann_44, Jollipop_80, Kowalski_78, Lesiram_38, Megan_79, Merry_77, Nicole72_78, NoodlelyBoi_79, Onika_78, Paschalis_79, PermaG_44, Phorgeous_79, Phrancesco_79, PierreOrion_78, PiperSansNom_80, Piperis_80, Quhwah_83, Ramiel05_78, Rasovi_44, SBlackberry_43, Scumberland_81, Selwyn23_80, Shotgun_78, Smarties_88, Sunny_77, Teamocil_82, Teng_39, TurboVicky_44, Yeti_80, Zanella_43,

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

Genes that do not have the "Most Annotated" start:
• JasonD_59,

**Summary by start number:**

Start 10:
• Found in 1 of 49 ( 2.0% ) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: JasonD_59 (EA1),

Start 11:
• Found in 48 of 49 ( 98.0% ) of genes in pham
• Manual Annotations of this start: 44 of 44
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Antares_79 (EC), Ariadne_88 (EC), BrazzalePHS_78 (EC), Busephilis_78 (EC), Cicada_45 (EJ), Cranjis_80 (EC), DelaGarza_37 (GF), FireCastle_43 (EJ), Fireman_80 (EC), Ganandorf_77 (EC), Gina_82 (EC), Gingerbug_36 (GF), Goodman_44 (EJ), Hermeonysus_79 (EC), Honeyfin_79 (EC), Htur_44 (EJ), Jayden_79 (EC), Jefe_79 (EC), Johann_44 (EJ), Jollipop_80 (EC), Kowalski_78 (EC), Lesiram_38 (GF), Megan_79 (EC), Merry_77 (EC), Nicole72_78 (EC), NoodlelyBoi_79 (EC), Onika_78 (EC), Paschalis_79 (EC), PermaG_44 (EJ), Phorgeous_79 (EC), Phrancesco_79 (EC), PierreOrion_78 (EC), PiperSansNom_80 (EC), Piperis_80 (EC), Quhwah_83 (EC), Ramiel05_78 (EC), Rasovi_44 (EJ), SBlackberry_43 (EJ), Scumberland_81 (EC), Selwyn23_80 (EC), Shotgun_78 (EC), Smarties_88 (EC), Sunny_77 (EC), Teamocil_82 (EC), Teng_39 (GF), TurboVicky_44 (EJ), Yeti_80 (EC), Zanella_43 (EJ),

**Summary by clusters:**

There are 4 clusters represented in this pham: EA1, GF, EC, EJ,

Info for manual annotations of cluster EC:
•Start number 11 was manually annotated 31 times for cluster EC.

Info for manual annotations of cluster EJ:
•Start number 11 was manually annotated 10 times for cluster EJ.

Info for manual annotations of cluster GF:

•Start number 11 was manually annotated 3 times for cluster GF.

### *Gene Information:*

Gene: Antares_79 Start: 46331, Stop: 46864, Start Num: 11
Candidate Starts for Antares_79:
(2, 46088), (3, 46097), (6, 46235), (Start: 11 @46331 has 44 MA's), (20, 46517), (27, 46628), (33, 46715), (44, 46841),

Gene: Ariadne_88 Start: 47215, Stop: 47748, Start Num: 11
Candidate Starts for Ariadne_88:
(Start: 11 @47215 has 44 MA's), (20, 47401), (23, 47461), (27, 47512), (32, 47590),

Gene: BrazzalePHS_78 Start: 46099, Stop: 46662, Start Num: 11
Candidate Starts for BrazzalePHS_78:
(2, 45856), (3, 45865), (6, 46003), (Start: 11 @46099 has 44 MA's), (20, 46285), (27, 46396), (44, 46639),

Gene: Busephilis_78 Start: 46038, Stop: 46571, Start Num: 11
Candidate Starts for Busephilis_78:
(2, 45795), (3, 45804), (6, 45942), (Start: 11 @46038 has 44 MA's), (20, 46224), (27, 46335), (33, 46422), (44, 46548),

Gene: Cicada_45 Start: 28818, Stop: 29375, Start Num: 11
Candidate Starts for Cicada_45:
(Start: 11 @28818 has 44 MA's), (25, 29076), (27, 29115), (33, 29202), (35, 29247), (41, 29331), (46, 29364), (47, 29370),

Gene: Cranjis_80 Start: 46292, Stop: 46855, Start Num: 11
Candidate Starts for Cranjis_80:
(2, 46049), (3, 46058), (Start: 11 @46292 has 44 MA's), (20, 46478), (27, 46589), (44, 46832),

Gene: DelaGarza_37 Start: 24280, Stop: 23711, Start Num: 11
Candidate Starts for DelaGarza_37:
(1, 24751), (Start: 11 @24280 has 44 MA's), (18, 24106), (25, 24016), (26, 23983), (27, 23977), (34, 23878),

Gene: FireCastle_43 Start: 28548, Stop: 29102, Start Num: 11
Candidate Starts for FireCastle_43:
(9, 28533), (Start: 11 @28548 has 44 MA's), (14, 28608), (25, 28803), (32, 28920), (41, 29058), (46, 29091), (47, 29097),

Gene: Fireman_80 Start: 47379, Stop: 47912, Start Num: 11
Candidate Starts for Fireman_80:
(Start: 11 @47379 has 44 MA's), (20, 47565), (23, 47625), (27, 47676), (32, 47754), (43, 47883),

Gene: Ganandorf_77 Start: 45680, Stop: 46213, Start Num: 11
Candidate Starts for Ganandorf_77:
(2, 45437), (3, 45446), (Start: 11 @45680 has 44 MA's), (20, 45866), (27, 45977), (33, 46064),

Gene: Gina_82 Start: 45620, Stop: 46153, Start Num: 11

Candidate Starts for Gina_82:
(2, 45377), (3, 45386), (6, 45524), (Start: 11 @45620 has 44 MA's), (17, 45779), (20, 45806), (23, 45866), (27, 45917), (38, 46091),

Gene: Gingerbug_36 Start: 24786, Stop: 24157, Start Num: 11
Candidate Starts for Gingerbug_36:
(5, 24909), (Start: 11 @24786 has 44 MA's), (15, 24669), (16, 24651), (20, 24597), (25, 24522), (48, 24168),

Gene: Goodman_44 Start: 28588, Stop: 29145, Start Num: 11
Candidate Starts for Goodman_44:
(Start: 11 @28588 has 44 MA's), (25, 28846), (27, 28885), (28, 28900), (35, 29017), (41, 29101), (46, 29134), (47, 29140),

Gene: Hermeonysus_79 Start: 46007, Stop: 46570, Start Num: 11
Candidate Starts for Hermeonysus_79:
(2, 45764), (3, 45773), (Start: 11 @46007 has 44 MA's), (20, 46193), (27, 46304), (44, 46547),

Gene: Honeyfin_79 Start: 45840, Stop: 46403, Start Num: 11
Candidate Starts for Honeyfin_79:
(2, 45597), (3, 45606), (Start: 11 @45840 has 44 MA's), (20, 46026), (27, 46137), (44, 46380),

Gene: Htur_44 Start: 28989, Stop: 29546, Start Num: 11
Candidate Starts for Htur_44:
(Start: 11 @28989 has 44 MA's), (22, 29199), (25, 29247), (41, 29502), (46, 29535), (47, 29541),

Gene: JasonD_59 Start: 38474, Stop: 37911, Start Num: 10
Candidate Starts for JasonD_59:
(7, 38552), (10, 38474), (19, 38300), (21, 38270), (31, 38120),

Gene: Jayden_79 Start: 46047, Stop: 46610, Start Num: 11
Candidate Starts for Jayden_79:
(Start: 11 @46047 has 44 MA's), (20, 46233), (27, 46344), (30, 46389), (32, 46422),

Gene: Jefe_79 Start: 46068, Stop: 46631, Start Num: 11
Candidate Starts for Jefe_79:
(2, 45825), (3, 45834), (Start: 11 @46068 has 44 MA's), (20, 46254), (27, 46365), (44, 46608),

Gene: Johann_44 Start: 28588, Stop: 29145, Start Num: 11
Candidate Starts for Johann_44:
(Start: 11 @28588 has 44 MA's), (25, 28846), (27, 28885), (28, 28900), (35, 29017), (41, 29101), (46, 29134), (47, 29140),

Gene: Jollipop_80 Start: 46457, Stop: 46990, Start Num: 11
Candidate Starts for Jollipop_80:
(2, 46214), (3, 46223), (6, 46361), (Start: 11 @46457 has 44 MA's), (20, 46643), (27, 46754), (33, 46841), (44, 46967),

Gene: Kowalski_78 Start: 46094, Stop: 46657, Start Num: 11
Candidate Starts for Kowalski_78:
(2, 45851), (3, 45860), (6, 45998), (Start: 11 @46094 has 44 MA's), (20, 46280), (27, 46391), (44, 46634),

Gene: Lesiram_38 Start: 24252, Stop: 23683, Start Num: 11
Candidate Starts for Lesiram_38:
(1, 24723), (Start: 11 @24252 has 44 MA's), (18, 24078), (25, 23988), (26, 23955), (34, 23850), (40, 23745),

Gene: Megan_79 Start: 50910, Stop: 51479, Start Num: 11
Candidate Starts for Megan_79:
(Start: 11 @50910 has 44 MA's), (12, 50925), (20, 51099), (24, 51162), (29, 51252), (31, 51264), (45, 51468),

Gene: Merry_77 Start: 46502, Stop: 47071, Start Num: 11
Candidate Starts for Merry_77:
(2, 46262), (8, 46457), (Start: 11 @46502 has 44 MA's), (13, 46520), (20, 46691), (31, 46856),

Gene: Nicole72_78 Start: 50493, Stop: 51062, Start Num: 11
Candidate Starts for Nicole72_78:
(4, 50373), (Start: 11 @50493 has 44 MA's), (20, 50682), (27, 50793), (31, 50847), (36, 50976), (37, 50997), (39, 51009), (42, 51021), (45, 51051),

Gene: NoodlelyBoi_79 Start: 46440, Stop: 47003, Start Num: 11
Candidate Starts for NoodlelyBoi_79:
(2, 46197), (3, 46206), (6, 46344), (Start: 11 @46440 has 44 MA's), (20, 46626), (27, 46737), (44, 46980),

Gene: Onika_78 Start: 46097, Stop: 46630, Start Num: 11
Candidate Starts for Onika_78:
(2, 45854), (3, 45863), (6, 46001), (Start: 11 @46097 has 44 MA's), (20, 46283), (27, 46394), (33, 46481), (44, 46607),

Gene: Paschalis_79 Start: 46122, Stop: 46655, Start Num: 11
Candidate Starts for Paschalis_79:
(2, 45879), (3, 45888), (Start: 11 @46122 has 44 MA's), (20, 46308), (27, 46419), (33, 46506), (44, 46632),

Gene: PermaG_44 Start: 28655, Stop: 29212, Start Num: 11
Candidate Starts for PermaG_44:
(Start: 11 @28655 has 44 MA's), (25, 28913), (35, 29084), (41, 29168), (46, 29201), (47, 29207),

Gene: Phorgeous_79 Start: 45917, Stop: 46450, Start Num: 11
Candidate Starts for Phorgeous_79:
(2, 45674), (3, 45683), (6, 45821), (Start: 11 @45917 has 44 MA's), (20, 46103), (27, 46214), (33, 46301),

Gene: Phrancesco_79 Start: 46228, Stop: 46761, Start Num: 11
Candidate Starts for Phrancesco_79:
(2, 45985), (3, 45994), (6, 46132), (Start: 11 @46228 has 44 MA's), (20, 46414), (27, 46525), (33, 46612),

Gene: PierreOrion_78 Start: 45907, Stop: 46470, Start Num: 11
Candidate Starts for PierreOrion_78:
(2, 45664), (3, 45673), (Start: 11 @45907 has 44 MA's), (20, 46093), (27, 46204), (44, 46447),

Gene: PiperSansNom_80 Start: 46407, Stop: 46970, Start Num: 11

Candidate Starts for PiperSansNom_80:
(2, 46164), (3, 46173), (Start: 11 @46407 has 44 MA's), (20, 46593), (27, 46704), (44, 46947),

Gene: Piperis_80 Start: 46030, Stop: 46563, Start Num: 11
Candidate Starts for Piperis_80:
(2, 45787), (3, 45796), (6, 45934), (Start: 11 @46030 has 44 MA's), (20, 46216), (27, 46327), (33, 46414), (44, 46540),

Gene: Quhwah_83 Start: 46721, Stop: 47284, Start Num: 11
Candidate Starts for Quhwah_83:
(2, 46478), (3, 46487), (Start: 11 @46721 has 44 MA's), (20, 46907), (27, 47018), (44, 47261),

Gene: Ramiel05_78 Start: 46094, Stop: 46657, Start Num: 11
Candidate Starts for Ramiel05_78:
(2, 45851), (3, 45860), (6, 45998), (Start: 11 @46094 has 44 MA's), (20, 46280), (27, 46391), (44, 46634),

Gene: Rasovi_44 Start: 28989, Stop: 29546, Start Num: 11
Candidate Starts for Rasovi_44:
(Start: 11 @28989 has 44 MA's), (22, 29199), (25, 29247), (41, 29502), (46, 29535), (47, 29541),

Gene: SBlackberry_43 Start: 28461, Stop: 29018, Start Num: 11
Candidate Starts for SBlackberry_43:
(Start: 11 @28461 has 44 MA's), (25, 28719), (27, 28758), (33, 28845), (35, 28890), (41, 28974), (46, 29007), (47, 29013),

Gene: Scumberland_81 Start: 46346, Stop: 46909, Start Num: 11
Candidate Starts for Scumberland_81:
(2, 46103), (3, 46112), (6, 46250), (Start: 11 @46346 has 44 MA's), (20, 46532), (27, 46643), (44, 46886),

Gene: Selwyn23_80 Start: 46257, Stop: 46790, Start Num: 11
Candidate Starts for Selwyn23_80:
(2, 46014), (3, 46023), (6, 46161), (Start: 11 @46257 has 44 MA's), (20, 46443), (27, 46554), (33, 46641), (44, 46767),

Gene: Shotgun_78 Start: 45596, Stop: 46159, Start Num: 11
Candidate Starts for Shotgun_78:
(2, 45353), (3, 45362), (Start: 11 @45596 has 44 MA's), (20, 45782), (27, 45893), (44, 46136),

Gene: Smarties_88 Start: 47212, Stop: 47745, Start Num: 11
Candidate Starts for Smarties_88:
(Start: 11 @47212 has 44 MA's), (20, 47398), (23, 47458), (27, 47509), (32, 47587),

Gene: Sunny_77 Start: 46504, Stop: 47073, Start Num: 11
Candidate Starts for Sunny_77:
(2, 46264), (8, 46459), (Start: 11 @46504 has 44 MA's), (13, 46522), (20, 46693), (31, 46858),

Gene: Teamocil_82 Start: 45713, Stop: 46246, Start Num: 11
Candidate Starts for Teamocil_82:
(2, 45470), (3, 45479), (6, 45617), (Start: 11 @45713 has 44 MA's), (17, 45872), (20, 45899), (23, 45959), (27, 46010), (38, 46184),

Gene: Teng_39 Start: 24288, Stop: 23719, Start Num: 11
Candidate Starts for Teng_39:
(1, 24759), (Start: 11 @24288 has 44 MA's), (18, 24114), (25, 24024), (26, 23991), (34, 23886),

Gene: TurboVicky_44 Start: 28701, Stop: 29258, Start Num: 11
Candidate Starts for TurboVicky_44:
(Start: 11 @28701 has 44 MA's), (25, 28959), (35, 29130), (41, 29214), (46, 29247), (47, 29253),

Gene: Yeti_80 Start: 45628, Stop: 46191, Start Num: 11
Candidate Starts for Yeti_80:
(2, 45385), (3, 45394), (Start: 11 @45628 has 44 MA's), (20, 45814), (27, 45925), (44, 46168),

Gene: Zanella_43 Start: 28527, Stop: 29084, Start Num: 11
Candidate Starts for Zanella_43:
(Start: 11 @28527 has 44 MA's), (25, 28785), (41, 29040), (46, 29073), (47, 29079),