Pham 347687


1: DaWorst_71
2: OwlsT2W_73
3: TDanisky_75
4: FreddyB_79 + 2
5: Emma_73
6: Slim_75 + 2
7: VRedHorse_70 + 2
8: Spartacus_75 + 1
9: DosHalletts_73 + 1
10: Mutaforma13_76 + 3
11: Beanstalk_70 + 2
12: Royals2015_77
13: NewHope4_71
14: ShiLan_73
15: Cheesepuff_79 + 1
16: Mahavrat_67 + 2
17: Starcevich_71 + 1
18: Eish_74
19: Aubs_72
20: Mantra_68
21: Kersh_72 + 1
22: Crumble_67
23: MilleniumForce_71 + 2
24: Job42_71
25: Eradicator_61
26: Oksu_76 + 1
27: Che8_75
28: Pacc40_64 + 1
29: CaptainTrips_69
30: Plumbus_72
31: PMC_65
32: Che9d_82

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 347687 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347687 has 54 members, 0 are drafts.

Phages represented in each track:
- Track 1 : DaWorst_71
- Track 2 : OwlsT2W_73
- Track 3 : TDanisky_75
- Track 4 : FreddyB_79, Peridot_75, Ramsey_74
- Track 5 : Emma_73
- Track 6 : Slim_75, Emmaloid_75, Rialto_78
- Track 7 : VRedHorse_70, Cornucopia_72, Fancypants_75
- Track 8 : Spartacus_75, BodEinwohner17_76
- Track 9 : DosHalletts_73, Hades_71
- Track 10 : Mutaforma13_76, LunaBlu_73, Galactic_70, Sarma624_69
- Track 11 : Beanstalk_70, Estave1_77, Moonbeam_71
- Track 12 : Royals2015_77
- Track 13 : NewHope4_71
- Track 14 : ShiLan_73
- Track 15 : Cheesepuff_79, BuzzLyseyear_77
- Track 16 : Mahavrat_67, RockyHorror_71, Grimmer_77
- Track 17 : Starcevich_71, Nitzel_67
- Track 18 : Eish_74
- Track 19 : Aubs_72
- Track 20 : Mantra_68
- Track 21 : Kersh_72, LilMoolah_69
- Track 22 : Crumble_67
- Track 23 : MilleniumForce_71, Rockne_69, Boomer_73
- Track 24 : Job42_71
- Track 25 : Eradicator_61
- Track 26 : Oksu_76, BlueCrab_73
- Track 27 : Che8_75
- Track 28 : Pacc40_64, Nivrat_67
- Track 29 : CaptainTrips_69
- Track 30 : Plumbus_72
- Track 31 : PMC_65
- Track 32 : Che9d_82

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

The start number called the most often in the published annotations is 15, it was called in 36 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BlueCrab_73, BodEinwohner17_76, Boomer_73, CaptainTrips_69, Cornucopia_72, Crumble_67, DaWorst_71, Eish_74, Emma_73, Emmaloid_75, Fancypants_75, FreddyB_79, Galactic_70, Grimmer_77, Job42_71, Kersh_72, LilMoolah_69, LunaBlu_73, Mahavrat_67, MilleniumForce_71, Mutaforma13_76, NewHope4_71, Nitzel_67, Oksu_76, OwlsT2W_73, Peridot_75, Ramsey_74, Rialto_78, Rockne_69, RockyHorror_71, Sarma624_69, ShiLan_73, Slim_75, Spartacus_75, Starcevich_71, VRedHorse_70,

Genes that have the "Most Annotated" start but do not call it:
• Aubs_72, Beanstalk_70, BuzzLyseyear_77, Che8_75, Che9d_82, Cheesepuff_79, DosHalletts_73, Eradicator_61, Estave1_77, Hades_71, Mantra_68, Moonbeam_71, Nivrat_67, PMC_65, Pacc40_64, Royals2015_77, TDanisky_75,

Genes that do not have the "Most Annotated" start:
• Plumbus_72,

Summary by start number:

Start 15:
• Found in 53 of 54 (98.1%) of genes in pham
• Manual Annotations of this start: 36 of 54
• Called 67.9% of time when present
• Phage (with cluster) where this start called: BlueCrab_73 (F1), BodEinwohner17_76 (F1), Boomer_73 (F1), CaptainTrips_69 (F1), Cornucopia_72 (F1), Crumble_67 (F1), DaWorst_71 (F1), Eish_74 (F1), Emma_73 (F1), Emmaloid_75 (F1), Fancypants_75 (F1), FreddyB_79 (F1), Galactic_70 (F1), Grimmer_77 (F1), Job42_71 (F1), Kersh_72 (F1), LilMoolah_69 (F1), LunaBlu_73 (F1), Mahavrat_67 (F1), MilleniumForce_71 (F1), Mutaforma13_76 (F1), NewHope4_71 (F1), Nitzel_67 (F1), Oksu_76 (F1), OwlsT2W_73 (F1), Peridot_75 (F1), Ramsey_74 (F1), Rialto_78 (F1), Rockne_69 (F1), RockyHorror_71 (F1), Sarma624_69 (F1), ShiLan_73 (F1), Slim_75 (F1), Spartacus_75 (F1), Starcevich_71 (F1), VRedHorse_70 (F1),

Start 17:
• Found in 54 of 54 (100.0%) of genes in pham
• Manual Annotations of this start: 18 of 54
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Aubs_72 (F1), Beanstalk_70 (F1), BuzzLyseyear_77 (F1), Che8_75 (F1), Che9d_82 (F2), Cheesepuff_79 (F1), DosHalletts_73 (F1), Eradicator_61 (F1), Estave1_77 (F1), Hades_71 (F1), Mantra_68 (F1), Moonbeam_71 (F1), Nivrat_67 (F1), PMC_65 (F1), Pacc40_64 (F1), Plumbus_72 (F1), Royals2015_77 (F1), TDanisky_75 (F1),

Summary by clusters:

There are 2 clusters represented in this pham: F1, F2,

Info for manual annotations of cluster F1:
•Start number 15 was manually annotated 36 times for cluster F1.

•Start number 17 was manually annotated 17 times for cluster F1.

Info for manual annotations of cluster F2:
•Start number 17 was manually annotated 1 time for cluster F2.

Gene Information:

Gene: Aubs_72 Start: 46574, Stop: 46738, Start Num: 17
Candidate Starts for Aubs_72:
(Start: 15 @46559 has 36 MA's), (Start: 17 @46574 has 18 MA's), (18, 46622), (20, 46643), (21, 46664), (22, 46682), (23, 46697),

Gene: Beanstalk_70 Start: 45264, Stop: 45428, Start Num: 17
Candidate Starts for Beanstalk_70:
(5, 45120), (Start: 15 @45252 has 36 MA's), (Start: 17 @45264 has 18 MA's), (19, 45318), (20, 45333), (23, 45387),

Gene: BlueCrab_73 Start: 46976, Stop: 47152, Start Num: 15
Candidate Starts for BlueCrab_73:
(Start: 15 @46976 has 36 MA's), (Start: 17 @46988 has 18 MA's), (19, 47042), (20, 47057), (23, 47111),

Gene: BodEinwohner17_76 Start: 48065, Stop: 48241, Start Num: 15
Candidate Starts for BodEinwohner17_76:
(Start: 15 @48065 has 36 MA's), (Start: 17 @48077 has 18 MA's), (19, 48131), (20, 48146), (23, 48200),

Gene: Boomer_73 Start: 46160, Stop: 46336, Start Num: 15
Candidate Starts for Boomer_73:
(Start: 15 @46160 has 36 MA's), (Start: 17 @46172 has 18 MA's), (18, 46220), (20, 46241), (21, 46262), (22, 46280), (23, 46295),

Gene: BuzzLyseyear_77 Start: 48122, Stop: 48286, Start Num: 17
Candidate Starts for BuzzLyseyear_77:
(13, 48098), (Start: 15 @48110 has 36 MA's), (Start: 17 @48122 has 18 MA's), (19, 48176), (20, 48191), (23, 48245),

Gene: CaptainTrips_69 Start: 45366, Stop: 45542, Start Num: 15
Candidate Starts for CaptainTrips_69:
(1, 45123), (7, 45237), (13, 45354), (Start: 15 @45366 has 36 MA's), (Start: 17 @45378 has 18 MA's), (19, 45432), (20, 45447), (23, 45501),

Gene: Che8_75 Start: 46187, Stop: 46351, Start Num: 17
Candidate Starts for Che8_75:
(5, 46043), (13, 46163), (Start: 15 @46175 has 36 MA's), (Start: 17 @46187 has 18 MA's), (20, 46256), (23, 46310),

Gene: Che9d_82 Start: 45911, Stop: 46075, Start Num: 17
Candidate Starts for Che9d_82:
(5, 45767), (12, 45866), (Start: 15 @45899 has 36 MA's), (Start: 17 @45911 has 18 MA's), (18, 45959), (19, 45965), (20, 45980), (23, 46034),

Gene: Cheesepuff_79 Start: 45572, Stop: 45736, Start Num: 17
Candidate Starts for Cheesepuff_79:
(13, 45548), (Start: 15 @45560 has 36 MA's), (Start: 17 @45572 has 18 MA's), (19, 45626), (20, 45641), (23, 45695),

Gene: Cornucopia_72 Start: 44790, Stop: 44966, Start Num: 15
Candidate Starts for Cornucopia_72:
(5, 44658), (Start: 15 @44790 has 36 MA's), (Start: 17 @44802 has 18 MA's), (18, 44850), (19, 44856), (20, 44871), (23, 44925),

Gene: Crumble_67 Start: 42381, Stop: 42560, Start Num: 15
Candidate Starts for Crumble_67:
(4, 42249), (6, 42255), (Start: 15 @42381 has 36 MA's), (16, 42393), (Start: 17 @42396 has 18 MA's), (19, 42450), (20, 42465), (23, 42519),

Gene: DaWorst_71 Start: 45136, Stop: 45315, Start Num: 15
Candidate Starts for DaWorst_71:
(Start: 15 @45136 has 36 MA's), (16, 45148), (Start: 17 @45151 has 18 MA's), (18, 45199), (19, 45205), (20, 45220), (23, 45274),

Gene: DosHalletts_73 Start: 47406, Stop: 47570, Start Num: 17
Candidate Starts for DosHalletts_73:
(13, 47382), (Start: 15 @47394 has 36 MA's), (Start: 17 @47406 has 18 MA's), (19, 47460), (20, 47475), (23, 47529),

Gene: Eish_74 Start: 46769, Stop: 46948, Start Num: 15
Candidate Starts for Eish_74:
(Start: 15 @46769 has 36 MA's), (Start: 17 @46784 has 18 MA's), (18, 46832), (20, 46853), (21, 46874), (22, 46892), (23, 46907),

Gene: Emma_73 Start: 45152, Stop: 45328, Start Num: 15
Candidate Starts for Emma_73:
(Start: 15 @45152 has 36 MA's), (Start: 17 @45164 has 18 MA's), (19, 45218), (20, 45233), (23, 45287),

Gene: Emmaloid_75 Start: 45890, Stop: 46066, Start Num: 15
Candidate Starts for Emmaloid_75:
(7, 45761), (Start: 15 @45890 has 36 MA's), (16, 45899), (Start: 17 @45902 has 18 MA's), (19, 45956), (20, 45971), (23, 46025),

Gene: Eradicator_61 Start: 43588, Stop: 43752, Start Num: 17
Candidate Starts for Eradicator_61:
(9, 43456), (Start: 15 @43573 has 36 MA's), (Start: 17 @43588 has 18 MA's), (18, 43636), (20, 43657), (21, 43678), (22, 43696), (23, 43711),

Gene: Estave1_77 Start: 49101, Stop: 49265, Start Num: 17
Candidate Starts for Estave1_77:
(5, 48957), (Start: 15 @49089 has 36 MA's), (Start: 17 @49101 has 18 MA's), (19, 49155), (20, 49170), (23, 49224),

Gene: Fancypants_75 Start: 47387, Stop: 47563, Start Num: 15
Candidate Starts for Fancypants_75:

(5, 47255), (Start: 15 @47387 has 36 MA's), (Start: 17 @47399 has 18 MA's), (18, 47447), (19, 47453), (20, 47468), (23, 47522),

Gene: FreddyB_79 Start: 47135, Stop: 47311, Start Num: 15
Candidate Starts for FreddyB_79:
(Start: 15 @47135 has 36 MA's), (16, 47144), (Start: 17 @47147 has 18 MA's), (19, 47201), (20, 47216), (23, 47270),

Gene: Galactic_70 Start: 45411, Stop: 45587, Start Num: 15
Candidate Starts for Galactic_70:
(13, 45399), (Start: 15 @45411 has 36 MA's), (Start: 17 @45423 has 18 MA's), (19, 45477), (20, 45492), (23, 45546),

Gene: Grimmer_77 Start: 45962, Stop: 46141, Start Num: 15
Candidate Starts for Grimmer_77:
(Start: 15 @45962 has 36 MA's), (16, 45974), (Start: 17 @45977 has 18 MA's), (19, 46031), (20, 46046), (23, 46100),

Gene: Hades_71 Start: 44162, Stop: 44326, Start Num: 17
Candidate Starts for Hades_71:
(13, 44138), (Start: 15 @44150 has 36 MA's), (Start: 17 @44162 has 18 MA's), (19, 44216), (20, 44231), (23, 44285),

Gene: Job42_71 Start: 48732, Stop: 48908, Start Num: 15
Candidate Starts for Job42_71:
(2, 48513), (8, 48609), (11, 48651), (Start: 15 @48732 has 36 MA's), (Start: 17 @48744 has 18 MA's), (19, 48798), (20, 48813), (23, 48867),

Gene: Kersh_72 Start: 47575, Stop: 47751, Start Num: 15
Candidate Starts for Kersh_72:
(5, 47443), (13, 47563), (Start: 15 @47575 has 36 MA's), (Start: 17 @47587 has 18 MA's), (19, 47641), (20, 47656), (23, 47710),

Gene: LilMoolah_69 Start: 45729, Stop: 45905, Start Num: 15
Candidate Starts for LilMoolah_69:
(5, 45597), (13, 45717), (Start: 15 @45729 has 36 MA's), (Start: 17 @45741 has 18 MA's), (19, 45795), (20, 45810), (23, 45864),

Gene: LunaBlu_73 Start: 46069, Stop: 46245, Start Num: 15
Candidate Starts for LunaBlu_73:
(13, 46057), (Start: 15 @46069 has 36 MA's), (Start: 17 @46081 has 18 MA's), (19, 46135), (20, 46150), (23, 46204),

Gene: Mahavrat_67 Start: 43531, Stop: 43710, Start Num: 15
Candidate Starts for Mahavrat_67:
(Start: 15 @43531 has 36 MA's), (16, 43543), (Start: 17 @43546 has 18 MA's), (19, 43600), (20, 43615), (23, 43669),

Gene: Mantra_68 Start: 45375, Stop: 45539, Start Num: 17
Candidate Starts for Mantra_68:
(Start: 15 @45363 has 36 MA's), (Start: 17 @45375 has 18 MA's), (19, 45429), (20, 45444), (23, 45498),

Gene: MilleniumForce_71 Start: 46034, Stop: 46210, Start Num: 15
Candidate Starts for MilleniumForce_71:
(Start: 15 @46034 has 36 MA's), (Start: 17 @46046 has 18 MA's), (18, 46094), (20, 46115), (21, 46136), (22, 46154), (23, 46169),

Gene: Moonbeam_71 Start: 46193, Stop: 46357, Start Num: 17
Candidate Starts for Moonbeam_71:
(5, 46049), (Start: 15 @46181 has 36 MA's), (Start: 17 @46193 has 18 MA's), (19, 46247), (20, 46262), (23, 46316),

Gene: Mutaforma13_76 Start: 46783, Stop: 46959, Start Num: 15
Candidate Starts for Mutaforma13_76:
(13, 46771), (Start: 15 @46783 has 36 MA's), (Start: 17 @46795 has 18 MA's), (19, 46849), (20, 46864), (23, 46918),

Gene: NewHope4_71 Start: 43976, Stop: 44155, Start Num: 15
Candidate Starts for NewHope4_71:
(Start: 15 @43976 has 36 MA's), (Start: 17 @43991 has 18 MA's), (18, 44039), (20, 44060), (21, 44081), (22, 44099), (23, 44114),

Gene: Nitzel_67 Start: 43134, Stop: 43310, Start Num: 15
Candidate Starts for Nitzel_67:
(5, 43002), (Start: 15 @43134 has 36 MA's), (Start: 17 @43146 has 18 MA's), (19, 43200), (20, 43215), (23, 43269),

Gene: Nivrat_67 Start: 45614, Stop: 45778, Start Num: 17
Candidate Starts for Nivrat_67:
(5, 45470), (13, 45590), (Start: 15 @45602 has 36 MA's), (Start: 17 @45614 has 18 MA's), (19, 45668), (20, 45683), (23, 45737),

Gene: Oksu_76 Start: 47529, Stop: 47705, Start Num: 15
Candidate Starts for Oksu_76:
(Start: 15 @47529 has 36 MA's), (Start: 17 @47541 has 18 MA's), (19, 47595), (20, 47610), (23, 47664),

Gene: OwlsT2W_73 Start: 45895, Stop: 46071, Start Num: 15
Candidate Starts for OwlsT2W_73:
(13, 45883), (Start: 15 @45895 has 36 MA's), (Start: 17 @45907 has 18 MA's), (19, 45961), (20, 45976), (23, 46030),

Gene: PMC_65 Start: 44396, Stop: 44560, Start Num: 17
Candidate Starts for PMC_65:
(Start: 15 @44384 has 36 MA's), (Start: 17 @44396 has 18 MA's), (18, 44444), (20, 44465), (21, 44486), (22, 44504), (23, 44519),

Gene: Pacc40_64 Start: 45641, Stop: 45805, Start Num: 17
Candidate Starts for Pacc40_64:
(5, 45497), (13, 45617), (Start: 15 @45629 has 36 MA's), (Start: 17 @45641 has 18 MA's), (19, 45695), (20, 45710), (23, 45764),

Gene: Peridot_75 Start: 46380, Stop: 46556, Start Num: 15
Candidate Starts for Peridot_75:

(Start: 15 @46380 has 36 MA's), (16, 46389), (Start: 17 @46392 has 18 MA's), (19, 46446), (20, 46461), (23, 46515),

Gene: Plumbus_72 Start: 43333, Stop: 43497, Start Num: 17
Candidate Starts for Plumbus_72:
(3, 43189), (14, 43321), (Start: 17 @43333 has 18 MA's), (18, 43381), (20, 43402), (21, 43423), (22, 43441), (23, 43456),

Gene: Ramsey_74 Start: 47871, Stop: 48047, Start Num: 15
Candidate Starts for Ramsey_74:
(Start: 15 @47871 has 36 MA's), (16, 47880), (Start: 17 @47883 has 18 MA's), (19, 47937), (20, 47952), (23, 48006),

Gene: Rialto_78 Start: 47263, Stop: 47439, Start Num: 15
Candidate Starts for Rialto_78:
(7, 47134), (Start: 15 @47263 has 36 MA's), (16, 47272), (Start: 17 @47275 has 18 MA's), (19, 47329), (20, 47344), (23, 47398),

Gene: Rockne_69 Start: 44396, Stop: 44572, Start Num: 15
Candidate Starts for Rockne_69:
(Start: 15 @44396 has 36 MA's), (Start: 17 @44408 has 18 MA's), (18, 44456), (20, 44477), (21, 44498), (22, 44516), (23, 44531),

Gene: RockyHorror_71 Start: 44952, Stop: 45131, Start Num: 15
Candidate Starts for RockyHorror_71:
(Start: 15 @44952 has 36 MA's), (16, 44964), (Start: 17 @44967 has 18 MA's), (19, 45021), (20, 45036), (23, 45090),

Gene: Royals2015_77 Start: 45927, Stop: 46091, Start Num: 17
Candidate Starts for Royals2015_77:
(10, 45798), (Start: 15 @45915 has 36 MA's), (Start: 17 @45927 has 18 MA's), (19, 45981), (20, 45996), (23, 46050),

Gene: Sarma624_69 Start: 42529, Stop: 42705, Start Num: 15
Candidate Starts for Sarma624_69:
(13, 42517), (Start: 15 @42529 has 36 MA's), (Start: 17 @42541 has 18 MA's), (19, 42595), (20, 42610), (23, 42664),

Gene: ShiLan_73 Start: 48503, Stop: 48679, Start Num: 15
Candidate Starts for ShiLan_73:
(Start: 15 @48503 has 36 MA's), (16, 48512), (Start: 17 @48515 has 18 MA's), (19, 48569), (20, 48584), (23, 48638),

Gene: Slim_75 Start: 45881, Stop: 46057, Start Num: 15
Candidate Starts for Slim_75:
(7, 45752), (Start: 15 @45881 has 36 MA's), (16, 45890), (Start: 17 @45893 has 18 MA's), (19, 45947), (20, 45962), (23, 46016),

Gene: Spartacus_75 Start: 48082, Stop: 48258, Start Num: 15
Candidate Starts for Spartacus_75:
(Start: 15 @48082 has 36 MA's), (Start: 17 @48094 has 18 MA's), (19, 48148), (20, 48163), (23, 48217),

Gene: Starcevich_71 Start: 46946, Stop: 47122, Start Num: 15
Candidate Starts for Starcevich_71:
(5, 46814), (Start: 15 @46946 has 36 MA's), (Start: 17 @46958 has 18 MA's), (19, 47012), (20, 47027), (23, 47081),

Gene: TDanisky_75 Start: 44459, Stop: 44623, Start Num: 17
Candidate Starts for TDanisky_75:
(3, 44306), (Start: 15 @44444 has 36 MA's), (Start: 17 @44459 has 18 MA's), (18, 44507), (20, 44528), (21, 44549), (22, 44567), (23, 44582),

Gene: VRedHorse_70 Start: 43608, Stop: 43784, Start Num: 15
Candidate Starts for VRedHorse_70:
(5, 43476), (Start: 15 @43608 has 36 MA's), (Start: 17 @43620 has 18 MA's), (18, 43668), (19, 43674), (20, 43689), (23, 43743),