Pham 347732


1: Wolfstar_110
2: Lupine_104
3: Alleb_101 + 4
4: Platte_103
5: DejaVu_106 + 1
6: Solimine_107
7: Pavlo_106 + 2
8: Uterion_108
9: PhillyPhilly_103
10: RunningBrook_12 + 1
11: Necrophoxinus_112 + 2
12: Musetta_13 + 1
13: Fork_107
14: Yuma_109 + 4
15: Lyell_110 + 1
16: Shroomer_12
17: Deschain_110
18: ASegato_13
19: Erenyeager_110
20: Welcome_113
21: Necrophoxinus_13
22: Erenyeager_10
23: Issa7_110
24: StevieWelch_13
25: Shroomer_115 + 1
26: Deschain_12
27: Casablancas_12
28: Fork_10
29: Lyell_13
30: Issa7_11
31: Welcome_13
32: Chilliams_235

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 347732 Report

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

Pham number 347732 has 49 members, 7 are drafts.

Phages represented in each track:
- Track 1 : Wolfstar_110
- Track 2 : Lupine_104
- Track 3 : Alleb_101, OlinDD_104, Tandem_104, Pioneer3_104, Hortus1_104
- Track 4 : Platte_103
- Track 5 : DejaVu_106, Saradis_107
- Track 6 : Solimine_107
- Track 7 : Pavlo_106, Roman_107, Hubbs_105
- Track 8 : Uterion_108
- Track 9 : PhillyPhilly_103
- Track 10 : RunningBrook_12, DustyDino_13
- Track 11 : Necrophoxinus_112, HollowPurple_111, SteakFry_113
- Track 12 : Musetta_13, Yuma_13
- Track 13 : Fork_107
- Track 14 : Yuma_109, ASegato_109, Casablancas_111, DustyDino_114, RunningBrook_112
- Track 15 : Lyell_110, Musetta_108
- Track 16 : Shroomer_12
- Track 17 : Deschain_110
- Track 18 : ASegato_13
- Track 19 : Erenyeager_110
- Track 20 : Welcome_113
- Track 21 : Necrophoxinus_13
- Track 22 : Erenyeager_10
- Track 23 : Issa7_110
- Track 24 : StevieWelch_13
- Track 25 : Shroomer_115, StevieWelch_111
- Track 26 : Deschain_12
- Track 27 : Casablancas_12
- Track 28 : Fork_10
- Track 29 : Lyell_13
- Track 30 : Issa7_11
- Track 31 : Welcome_13
- Track 32 : Chilliams_235

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

The start number called the most often in the published annotations is 4, it was called in 16 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Alleb_101, DejaVu_106, Hortus1_104, Hubbs_105, Lupine_104, OlinDD_104, Pavlo_106, PhillyPhilly_103, Pioneer3_104, Platte_103, Roman_107, Saradis_107, Shroomer_12, Solimine_107, StevieWelch_13, Tandem_104, Uterion_108, Wolfstar_110,

Genes that have the "Most Annotated" start but do not call it:
• Casablancas_12, Deschain_12, Fork_10, Musetta_13, Yuma_13,

Genes that do not have the "Most Annotated" start:
• ASegato_109, ASegato_13, Casablancas_111, Chilliams_235, Deschain_110, DustyDino_114, DustyDino_13, Erenyeager_10, Erenyeager_110, Fork_107, HollowPurple_111, Issa7_11, Issa7_110, Lyell_110, Lyell_13, Musetta_108, Necrophoxinus_112, Necrophoxinus_13, RunningBrook_112, RunningBrook_12, Shroomer_115, SteakFry_113, StevieWelch_111, Welcome_113, Welcome_13, Yuma_109,

Summary by start number:

Start 3:
• Found in 10 of 49 (20.4%) of genes in pham
• Manual Annotations of this start: 8 of 42
• Called 90.0% of time when present
• Phage (with cluster) where this start called: ASegato_109 (ED2), Casablancas_111 (ED2), Deschain_110 (ED2), DustyDino_114 (ED2), HollowPurple_111 (ED2), Necrophoxinus_112 (ED2), RunningBrook_112 (ED2), SteakFry_113 (ED2), Yuma_109 (ED2),

Start 4:
• Found in 23 of 49 (46.9%) of genes in pham
• Manual Annotations of this start: 16 of 42
• Called 78.3% of time when present
• Phage (with cluster) where this start called: Alleb_101 (ED1), DejaVu_106 (ED1), Hortus1_104 (ED1), Hubbs_105 (ED1), Lupine_104 (ED1), OlinDD_104 (ED1), Pavlo_106 (ED1), PhillyPhilly_103 (ED1), Pioneer3_104 (ED1), Platte_103 (ED1), Roman_107 (ED1), Saradis_107 (ED1), Shroomer_12 (ED2), Solimine_107 (ED1), StevieWelch_13 (ED2), Tandem_104 (ED1), Uterion_108 (ED1), Wolfstar_110 (ED),

Start 5:
• Found in 15 of 49 (30.6%) of genes in pham
• Manual Annotations of this start: 11 of 42
• Called 86.7% of time when present
• Phage (with cluster) where this start called: ASegato_13 (ED2), Casablancas_12 (ED2), Deschain_12 (ED2), DustyDino_13 (ED2), Erenyeager_10 (ED2), Fork_10 (ED2), Issa7_11 (ED2), Lyell_13 (ED2), Musetta_13 (ED2), Necrophoxinus_13 (ED2), RunningBrook_12 (ED2), Welcome_13 (ED2), Yuma_13 (ED2),

Start 6:
• 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: Chilliams_235 (FC),

Start 7:
• Found in 17 of 49 (34.7%) of genes in pham
• Manual Annotations of this start: 7 of 42
• Called 47.1% of time when present
• Phage (with cluster) where this start called: Erenyeager_110 (ED2), Fork_107 (ED2), Issa7_110 (ED2), Lyell_110 (ED2), Musetta_108 (ED2), Shroomer_115 (ED2), StevieWelch_111 (ED2), Welcome_113 (ED2),

Summary by clusters:

There are 4 clusters represented in this pham: ED2, ED, ED1, FC,

Info for manual annotations of cluster ED:
•Start number 4 was manually annotated 1 time for cluster ED.

Info for manual annotations of cluster ED1:
•Start number 4 was manually annotated 13 times for cluster ED1.

Info for manual annotations of cluster ED2:
•Start number 3 was manually annotated 8 times for cluster ED2.
•Start number 4 was manually annotated 2 times for cluster ED2.
•Start number 5 was manually annotated 11 times for cluster ED2.
•Start number 7 was manually annotated 7 times for cluster ED2.

Gene Information:

Gene: ASegato_109 Start: 57290, Stop: 56880, Start Num: 3
Candidate Starts for ASegato_109:
(Start: 3 @57290 has 8 MA's), (Start: 7 @57254 has 7 MA's), (8, 57239), (9, 57233), (19, 57137), (22, 57080), (28, 57002), (37, 56927), (40, 56891),

Gene: ASegato_13 Start: 4659, Stop: 5057, Start Num: 5
Candidate Starts for ASegato_13:
(Start: 5 @4659 has 11 MA's), (13, 4734), (15, 4764), (23, 4851), (26, 4878), (27, 4890), (34, 4971), (36, 5001), (37, 5010), (40, 5046), (41, 5049),

Gene: Alleb_101 Start: 56509, Stop: 56129, Start Num: 4
Candidate Starts for Alleb_101:
(Start: 4 @56509 has 16 MA's), (10, 56449), (12, 56440), (26, 56287), (33, 56221), (36, 56185), (37, 56176), (40, 56140),

Gene: Casablancas_111 Start: 56920, Stop: 56510, Start Num: 3
Candidate Starts for Casablancas_111:
(Start: 3 @56920 has 8 MA's), (Start: 7 @56884 has 7 MA's), (8, 56869), (9, 56863), (19, 56767), (22, 56710), (28, 56632), (37, 56557), (40, 56521),

Gene: Casablancas_12 Start: 4232, Stop: 4618, Start Num: 5
Candidate Starts for Casablancas_12:
(1, 4151), (Start: 4 @4226 has 16 MA's), (Start: 5 @4232 has 11 MA's), (13, 4307), (15, 4337), (23, 4424), (26, 4451), (29, 4493), (34, 4532), (36, 4562), (37, 4571), (40, 4607),

Gene: Chilliams_235 Start: 150972, Stop: 151376, Start Num: 6
Candidate Starts for Chilliams_235:
(6, 150972), (14, 151044), (20, 151155), (21, 151158), (33, 151278), (35, 151311),

Gene: DejaVu_106 Start: 56615, Stop: 56235, Start Num: 4
Candidate Starts for DejaVu_106:
(Start: 4 @56615 has 16 MA's), (11, 56552), (18, 56486), (21, 56435), (34, 56321), (36, 56291), (37, 56282), (40, 56246),

Gene: Deschain_110 Start: 57472, Stop: 57062, Start Num: 3
Candidate Starts for Deschain_110:
(Start: 3 @57472 has 8 MA's), (Start: 7 @57436 has 7 MA's), (8, 57421), (9, 57415), (19, 57319), (28, 57184), (32, 57169), (37, 57109), (40, 57073),

Gene: Deschain_12 Start: 4576, Stop: 4974, Start Num: 5
Candidate Starts for Deschain_12:
(1, 4495), (Start: 4 @4570 has 16 MA's), (Start: 5 @4576 has 11 MA's), (10, 4630), (13, 4651), (15, 4681), (17, 4702), (23, 4768), (26, 4795), (27, 4807), (34, 4888), (36, 4918), (37, 4927), (40, 4963),

Gene: DustyDino_13 Start: 4681, Stop: 5079, Start Num: 5
Candidate Starts for DustyDino_13:
(1, 4603), (Start: 5 @4681 has 11 MA's), (10, 4735), (13, 4756), (15, 4786), (23, 4873), (26, 4900), (27, 4912), (29, 4954), (34, 4993), (36, 5023), (37, 5032), (40, 5068),

Gene: DustyDino_114 Start: 58143, Stop: 57733, Start Num: 3
Candidate Starts for DustyDino_114:
(Start: 3 @58143 has 8 MA's), (Start: 7 @58107 has 7 MA's), (8, 58092), (9, 58086), (19, 57990), (22, 57933), (28, 57855), (37, 57780), (40, 57744),

Gene: Erenyeager_110 Start: 57108, Stop: 56731, Start Num: 7
Candidate Starts for Erenyeager_110:
(Start: 7 @57108 has 7 MA's), (8, 57093), (9, 57087), (19, 56991), (25, 56913), (30, 56850), (36, 56787), (37, 56778), (39, 56763), (40, 56742),

Gene: Erenyeager_10 Start: 4052, Stop: 4450, Start Num: 5
Candidate Starts for Erenyeager_10:
(1, 3974), (Start: 5 @4052 has 11 MA's), (13, 4127), (15, 4157), (23, 4244), (26, 4271), (27, 4283), (34, 4364), (36, 4394), (37, 4403), (40, 4439),

Gene: Fork_107 Start: 57132, Stop: 56758, Start Num: 7
Candidate Starts for Fork_107:
(Start: 7 @57132 has 7 MA's), (8, 57117), (19, 57015), (22, 56958), (28, 56880), (37, 56805), (40, 56769),

Gene: Fork_10 Start: 3946, Stop: 4332, Start Num: 5
Candidate Starts for Fork_10:
(1, 3865), (2, 3922), (Start: 4 @3940 has 16 MA's), (Start: 5 @3946 has 11 MA's), (13, 4021), (15, 4051), (23, 4138), (26, 4165), (29, 4207), (34, 4246), (36, 4276), (37, 4285), (40, 4321),

Gene: HollowPurple_111 Start: 57719, Stop: 57309, Start Num: 3
Candidate Starts for HollowPurple_111:
(Start: 3 @57719 has 8 MA's), (Start: 7 @57683 has 7 MA's), (8, 57668), (9, 57662), (19, 57566), (28, 57431), (37, 57356), (40, 57320),

Gene: Hortus1_104 Start: 57265, Stop: 56885, Start Num: 4
Candidate Starts for Hortus1_104:
(Start: 4 @57265 has 16 MA's), (10, 57205), (12, 57196), (26, 57043), (33, 56977), (36, 56941), (37, 56932), (40, 56896),

Gene: Hubbs_105 Start: 56879, Stop: 56505, Start Num: 4
Candidate Starts for Hubbs_105:
(Start: 4 @56879 has 16 MA's), (10, 56819), (14, 56801), (16, 56768), (30, 56624), (31, 56615), (40, 56516),

Gene: Issa7_110 Start: 57175, Stop: 56804, Start Num: 7
Candidate Starts for Issa7_110:
(Start: 3 @57211 has 8 MA's), (Start: 7 @57175 has 7 MA's), (8, 57160), (9, 57154), (14, 57118), (18, 57064), (19, 57058), (28, 56926), (37, 56851), (40, 56815),

Gene: Issa7_11 Start: 3876, Stop: 4262, Start Num: 5
Candidate Starts for Issa7_11:
(Start: 5 @3876 has 11 MA's), (13, 3951), (15, 3981), (23, 4068), (26, 4095), (29, 4137), (34, 4176), (36, 4206), (37, 4215), (41, 4254),

Gene: Lupine_104 Start: 56423, Stop: 56046, Start Num: 4
Candidate Starts for Lupine_104:
(Start: 4 @56423 has 16 MA's), (12, 56354), (14, 56345), (23, 56225), (31, 56156), (40, 56057),

Gene: Lyell_110 Start: 57057, Stop: 56680, Start Num: 7
Candidate Starts for Lyell_110:
(Start: 7 @57057 has 7 MA's), (8, 57042), (19, 56940), (30, 56799), (36, 56736), (37, 56727), (39, 56712), (40, 56691),

Gene: Lyell_13 Start: 4396, Stop: 4794, Start Num: 5
Candidate Starts for Lyell_13:
(1, 4318), (Start: 5 @4396 has 11 MA's), (10, 4450), (13, 4471), (15, 4501), (17, 4522), (23, 4588), (26, 4615), (27, 4627), (29, 4669), (34, 4708), (36, 4738), (37, 4747), (40, 4783),

Gene: Musetta_13 Start: 4656, Stop: 5042, Start Num: 5
Candidate Starts for Musetta_13:
(1, 4575), (2, 4632), (Start: 4 @4650 has 16 MA's), (Start: 5 @4656 has 11 MA's), (13, 4731), (15, 4761), (23, 4848), (26, 4875), (29, 4917), (34, 4956), (36, 4986), (37, 4995), (40, 5031),

Gene: Musetta_108 Start: 57298, Stop: 56921, Start Num: 7
Candidate Starts for Musetta_108:
(Start: 7 @57298 has 7 MA's), (8, 57283), (19, 57181), (30, 57040), (36, 56977), (37, 56968), (39, 56953), (40, 56932),

Gene: Necrophoxinus_112 Start: 57987, Stop: 57577, Start Num: 3
Candidate Starts for Necrophoxinus_112:

(Start: 3 @57987 has 8 MA's), (Start: 7 @57951 has 7 MA's), (8, 57936), (9, 57930), (19, 57834), (28, 57699), (37, 57624), (40, 57588),

Gene: Necrophoxinus_13 Start: 4772, Stop: 5158, Start Num: 5
Candidate Starts for Necrophoxinus_13:
(1, 4694), (Start: 5 @4772 has 11 MA's), (10, 4826), (13, 4847), (15, 4877), (23, 4964), (26, 4991), (34, 5072), (36, 5102), (37, 5111), (40, 5147),

Gene: OlinDD_104 Start: 57270, Stop: 56890, Start Num: 4
Candidate Starts for OlinDD_104:
(Start: 4 @57270 has 16 MA's), (10, 57210), (12, 57201), (26, 57048), (33, 56982), (36, 56946), (37, 56937), (40, 56901),

Gene: Pavlo_106 Start: 57274, Stop: 56900, Start Num: 4
Candidate Starts for Pavlo_106:
(Start: 4 @57274 has 16 MA's), (10, 57214), (14, 57196), (16, 57163), (30, 57019), (31, 57010), (40, 56911),

Gene: PhillyPhilly_103 Start: 56263, Stop: 55889, Start Num: 4
Candidate Starts for PhillyPhilly_103:
(Start: 4 @56263 has 16 MA's), (10, 56203), (14, 56185), (16, 56152), (31, 55999), (40, 55900),

Gene: Pioneer3_104 Start: 57068, Stop: 56688, Start Num: 4
Candidate Starts for Pioneer3_104:
(Start: 4 @57068 has 16 MA's), (10, 57008), (12, 56999), (26, 56846), (33, 56780), (36, 56744), (37, 56735), (40, 56699),

Gene: Platte_103 Start: 56852, Stop: 56472, Start Num: 4
Candidate Starts for Platte_103:
(Start: 4 @56852 has 16 MA's), (10, 56792), (12, 56783), (24, 56645), (26, 56630), (33, 56564), (36, 56528), (37, 56519), (40, 56483),

Gene: Roman_107 Start: 57323, Stop: 56949, Start Num: 4
Candidate Starts for Roman_107:
(Start: 4 @57323 has 16 MA's), (10, 57263), (14, 57245), (16, 57212), (30, 57068), (31, 57059), (40, 56960),

Gene: RunningBrook_12 Start: 4681, Stop: 5079, Start Num: 5
Candidate Starts for RunningBrook_12:
(1, 4603), (Start: 5 @4681 has 11 MA's), (10, 4735), (13, 4756), (15, 4786), (23, 4873), (26, 4900), (27, 4912), (29, 4954), (34, 4993), (36, 5023), (37, 5032), (40, 5068),

Gene: RunningBrook_112 Start: 58143, Stop: 57733, Start Num: 3
Candidate Starts for RunningBrook_112:
(Start: 3 @58143 has 8 MA's), (Start: 7 @58107 has 7 MA's), (8, 58092), (9, 58086), (19, 57990), (22, 57933), (28, 57855), (37, 57780), (40, 57744),

Gene: Saradis_107 Start: 56290, Stop: 55910, Start Num: 4
Candidate Starts for Saradis_107:
(Start: 4 @56290 has 16 MA's), (11, 56227), (18, 56161), (21, 56110), (34, 55996), (36, 55966), (37, 55957), (40, 55921),

Gene: Shroomer_12 Start: 3999, Stop: 4391, Start Num: 4

Candidate Starts for Shroomer_12:
(Start: 4 @3999 has 16 MA's), (Start: 5 @4005 has 11 MA's), (13, 4080), (15, 4110), (23, 4197), (26, 4224), (29, 4266), (34, 4305), (36, 4335), (37, 4344), (40, 4380),

Gene: Shroomer_115 Start: 57555, Stop: 57178, Start Num: 7
Candidate Starts for Shroomer_115:
(Start: 7 @57555 has 7 MA's), (8, 57540), (9, 57534), (19, 57438), (30, 57297), (36, 57234), (37, 57225), (39, 57210), (40, 57189),

Gene: Solimine_107 Start: 57198, Stop: 56821, Start Num: 4
Candidate Starts for Solimine_107:
(Start: 4 @57198 has 16 MA's), (12, 57129), (14, 57120), (30, 56940), (31, 56931), (40, 56832),

Gene: SteakFry_113 Start: 57719, Stop: 57309, Start Num: 3
Candidate Starts for SteakFry_113:
(Start: 3 @57719 has 8 MA's), (Start: 7 @57683 has 7 MA's), (8, 57668), (9, 57662), (19, 57566), (28, 57431), (37, 57356), (40, 57320),

Gene: StevieWelch_13 Start: 4567, Stop: 4959, Start Num: 4
Candidate Starts for StevieWelch_13:
(1, 4492), (2, 4549), (Start: 4 @4567 has 16 MA's), (Start: 5 @4573 has 11 MA's), (13, 4648), (15, 4678), (23, 4765), (26, 4792), (29, 4834), (34, 4873), (36, 4903), (37, 4912), (40, 4948),

Gene: StevieWelch_111 Start: 57350, Stop: 56973, Start Num: 7
Candidate Starts for StevieWelch_111:
(Start: 7 @57350 has 7 MA's), (8, 57335), (9, 57329), (19, 57233), (30, 57092), (36, 57029), (37, 57020), (39, 57005), (40, 56984),

Gene: Tandem_104 Start: 57148, Stop: 56768, Start Num: 4
Candidate Starts for Tandem_104:
(Start: 4 @57148 has 16 MA's), (10, 57088), (12, 57079), (26, 56926), (33, 56860), (36, 56824), (37, 56815), (40, 56779),

Gene: Uterion_108 Start: 56720, Stop: 56343, Start Num: 4
Candidate Starts for Uterion_108:
(Start: 4 @56720 has 16 MA's), (11, 56657), (14, 56642), (30, 56462), (31, 56453), (40, 56354),

Gene: Welcome_113 Start: 57947, Stop: 57573, Start Num: 7
Candidate Starts for Welcome_113:
(Start: 7 @57947 has 7 MA's), (8, 57932), (14, 57890), (19, 57830), (22, 57773), (28, 57695), (37, 57620), (40, 57584),

Gene: Welcome_13 Start: 4652, Stop: 5038, Start Num: 5
Candidate Starts for Welcome_13:
(1, 4574), (Start: 5 @4652 has 11 MA's), (13, 4727), (15, 4757), (23, 4844), (26, 4871), (29, 4913), (34, 4952), (36, 4982), (37, 4991), (40, 5027),

Gene: Wolfstar_110 Start: 58799, Stop: 58431, Start Num: 4
Candidate Starts for Wolfstar_110:
(Start: 4 @58799 has 16 MA's), (10, 58748), (17, 58679), (19, 58670), (21, 58625), (26, 58583), (28, 58556), (32, 58538), (33, 58523), (34, 58517), (38, 58469), (40, 58442),

Gene: Yuma_109 Start: 57104, Stop: 56694, Start Num: 3

Candidate Starts for Yuma_109:
(Start: 3 @57104 has 8 MA's), (Start: 7 @57068 has 7 MA's), (8, 57053), (9, 57047), (19, 56951), (22, 56894), (28, 56816), (37, 56741), (40, 56705),

Gene: Yuma_13 Start: 4555, Stop: 4941, Start Num: 5
Candidate Starts for Yuma_13:
(1, 4474), (2, 4531), (Start: 4 @4549 has 16 MA's), (Start: 5 @4555 has 11 MA's), (13, 4630), (15, 4660), (23, 4747), (26, 4774), (29, 4816), (34, 4855), (36, 4885), (37, 4894), (40, 4930),