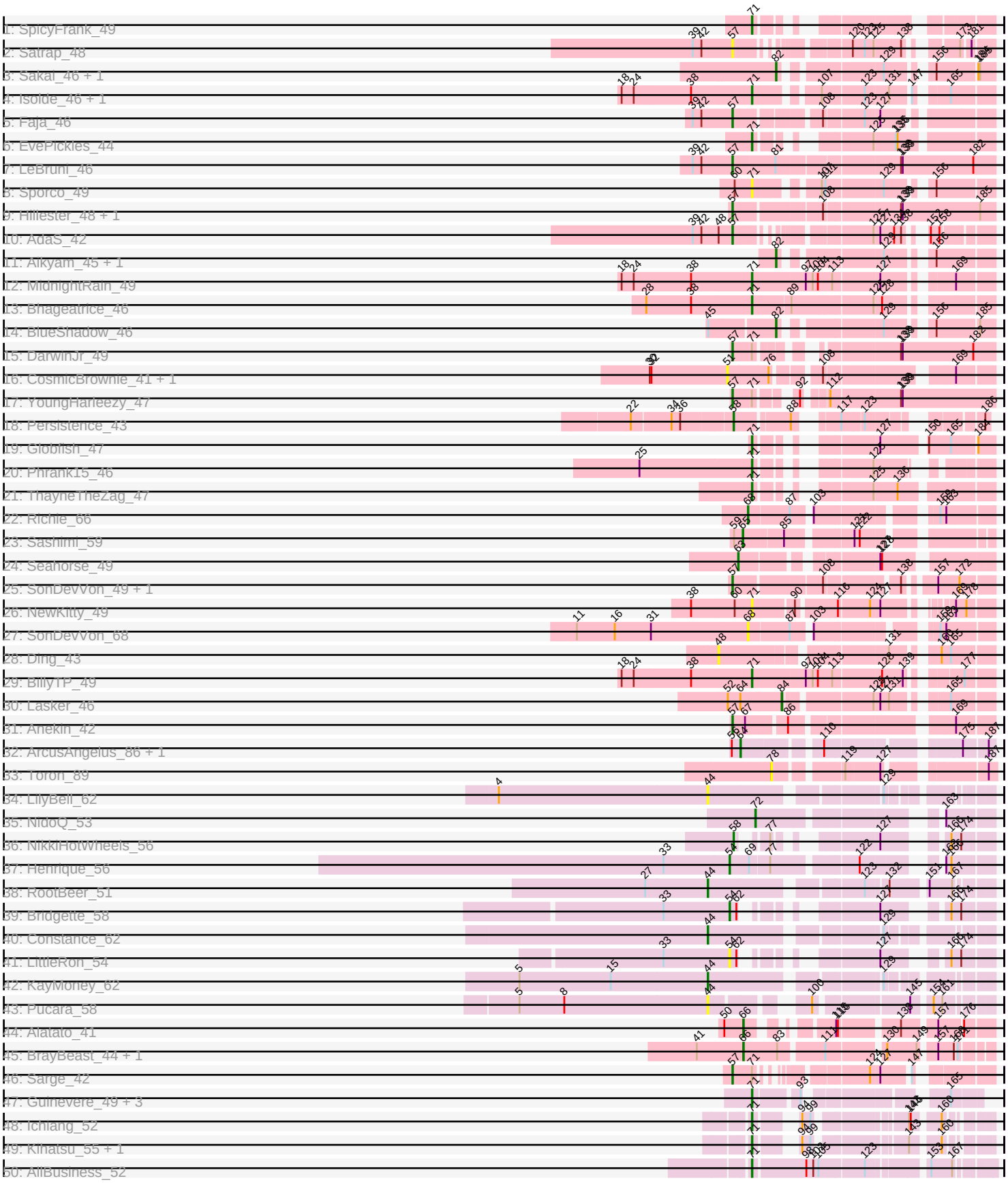
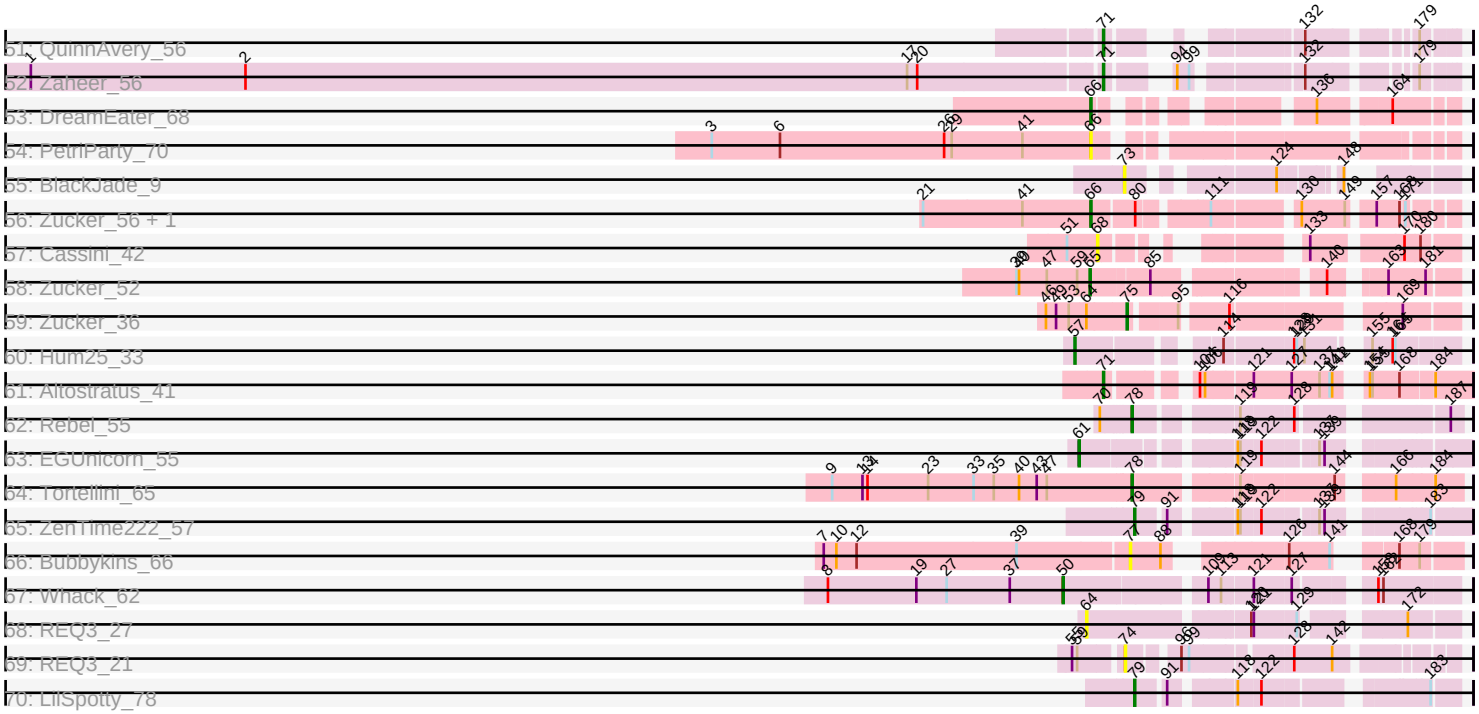
Pham 311497


1: SpicyFrank_49
2: Satrap_48
3: Sakai_46 + 1
4: Isolde_46 + 1
5: Faja_46
6: EvePickles_44
7: LeBruni_46
8: Sporco_49
9: Hillester_48 + 1
10: AdaS_42
11: Alkyam_45 + 1
12: MidnightRain_49
13: Bhageatrice_46
14: BlueShadow_46
15: DarwinJr_49
16: CosmicBrownie_41 + 1
17: YoungHaneezy_47
18: Persistence_43
19: Globlish_47
20: Phrank15_46
21: ThayneTheZag_47
22: Richie_66
23: Sashimi_59
24: Seahorse_49
25: SonDevVon_49 + 1
26: NewKitty_49
27: SonDevVon_68
28: Ding_43
29: BillyTP_49
30: Lasker_46
31: Anekin_42
32: ArcusAngelus_86 + 1
33: Toron_89
34: LilyBell_62
35: NidoQ_53
36: NikkiHotWheels_56
37: Henrique_56
38: RootBeer_51
39: Bridgette_58
40: Constance_62
41: LittleRon_54
42: KayMoney_62
43: Pucara_58
44: Alatato_41
45: BrayBeast_44 + 1
46: Sarge_42
47: Guinevere_49 + 3
48: Ichiang_52
49: Kinatsu_55 + 1
50: AllBusiness_52

Pham 311497


51: QuinnAvery_56
52: Zaheer_56
53: DreamEater_68
54: PetriParty_70
55: BlackJade_9
56: Zucker_56 + 1
57: Cassini_42
58: Zucker_52
59: Zucker_36
60: Hum25_33
61: Altostratus_41
62: Rebel_55
63: EGUnicorn_55
64: Tortellini_65
65: ZenTime222_57
66: Bubbykins_66
67: Whack_62
68: REQ3_27
69: REQ3_21
70: LilSpotty_78

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 311497 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311497 has 83 members, 20 are drafts.

Phages represented in each track:
- Track 1 : SpicyFrank_49
- Track 2 : Satrap_48
- Track 3 : Sakai_46, Gorpy_47
- Track 4 : Isolde_46, Mapleville_43
- Track 5 : Faja_46
- Track 6 : EvePickles_44
- Track 7 : LeBruni_46
- Track 8 : Sporco_49
- Track 9 : Hillester_48, RadFad_48
- Track 10 : AdaS_42
- Track 11 : Aikyam_45, MaterMagnus_47
- Track 12 : MidnightRain_49
- Track 13 : Bhageatrice_46
- Track 14 : BlueShadow_46
- Track 15 : DarwinJr_49
- Track 16 : CosmicBrownie_41, GumGum_44
- Track 17 : YoungHarleezy_47
- Track 18 : Persistence_43
- Track 19 : Globfish_47
- Track 20 : Phrank15_46
- Track 21 : ThayneTheZag_47
- Track 22 : Richie_66
- Track 23 : Sashimi_59
- Track 24 : Seahorse_49
- Track 25 : SonDevVon_49, Lawnathon_48
- Track 26 : NewKitty_49
- Track 27 : SonDevVon_68
- Track 28 : Ding_43
- Track 29 : BillyTP_49
- Track 30 : Lasker_46
- Track 31 : Anekin_42
- Track 32 : ArcusAngelus_86, Chevrolet_89
- Track 33 : Toron_89
- Track 34 : LilyBell_62
- Track 35 : NidoQ_53
- Track 36 : NikkiHotWheels_56
- Track 37 : Henrique_56

• Track 38 : RootBeer_51
• Track 39 : Bridgette_58
• Track 40 : Constance_62
• Track 41 : LittleRon_54
• Track 42 : KayMoney_62
• Track 43 : Pucara_58
• Track 44 : Alatato_41
• Track 45 : BrayBeast_44, Raqqa_54
• Track 46 : Sarge_42
• Track 47 : Guinevere_49, Kihatsu_48, Ichiang_46, Nandita_49
• Track 48 : Ichiang_52
• Track 49 : Kihatsu_55, Nandita_55
• Track 50 : AllBusiness_52
• Track 51 : QuinnAvery_56
• Track 52 : Zaheer_56
• Track 53 : DreamEater_68
• Track 54 : PetriParty_70
• Track 55 : BlackJade_9
• Track 56 : Zucker_56, DillyDally_57
• Track 57 : Cassini_42
• Track 58 : Zucker_52
• Track 59 : Zucker_36
• Track 60 : Hum25_33
• Track 61 : Altostratus_41
• Track 62 : Rebel_55
• Track 63 : EGUnicorn_55
• Track 64 : Tortellini_65
• Track 65 : ZenTime222_57
• Track 66 : Bubbykins_66
• Track 67 : Whack_62
• Track 68 : REQ3_27
• Track 69 : REQ3_21
• Track 70 : LilSpotty_78

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

The start number called the most often in the published annotations is 71, it was called in 21 of the 63 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AllBusiness_52, Altostratus_41, Bhageatrice_46, BillyTP_49, EvePickles_44, Globfish_47, Guinevere_49, Ichiang_46, Ichiang_52, Isolde_46, Kihatsu_48, Kihatsu_55, Mapleville_43, MidnightRain_49, Nandita_49, Nandita_55, NewKitty_49, Phrank15_46, QuinnAvery_56, SpicyFrank_49, Sporco_49, ThayneTheZag_47, Zaheer_56,

Genes that have the "Most Annotated" start but do not call it:
• DarwinJr_49, Sarge_42, YoungHarleezy_47,

Genes that do not have the "Most Annotated" start:

• AdaS_42, Aikyam_45, Alatato_41, Anekin_42, ArcusAngelus_86, BlackJade_9, BlueShadow_46, BrayBeast_44, Bridgette_58, Bubbykins_66, Cassini_42, Chevrolet_89, Constance_62, CosmicBrownie_41, DillyDally_57, Ding_43, DreamEater_68, EGUnicorn_55, Faja_46, Gorpy_47, GumGum_44, Henrique_56, Hillester_48, Hum25_33, KayMoney_62, Lasker_46, Lawnathon_48, LeBruni_46, LilSpotty_78, LilyBell_62, LittleRon_54, MaterMagnus_47, NidoQ_53, NikkiHotWheels_56, Persistence_43, PetriParty_70, Pucara_58, REQ3_21, REQ3_27, RadFad_48, Raqqa_54, Rebel_55, Richie_66, RootBeer_51, Sakai_46, Sashimi_59, Satrap_48, Seahorse_49, SonDevVon_49, SonDevVon_68, Toron_89, Tortellini_65, Whack_62, ZenTime222_57, Zucker_36, Zucker_52, Zucker_56,

Summary by start number:

Start 44:
• Found in 5 of 83 (6.0%) of genes in pham
• Manual Annotations of this start: 3 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Constance_62 (FA), KayMoney_62 (FA), LilyBell_62 (FA), Pucara_58 (FA), RootBeer_51 (FA),

Start 48:
• Found in 2 of 83 (2.4%) of genes in pham
• No Manual Annotations of this start.
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Ding_43 (AY),

Start 50:
• Found in 2 of 83 (2.4%) of genes in pham
• Manual Annotations of this start: 1 of 63
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Whack_62 (singleton),

Start 51:
• Found in 3 of 83 (3.6%) of genes in pham
• No Manual Annotations of this start.
• Called 66.7% of time when present
• Phage (with cluster) where this start called: CosmicBrownie_41 (AY), GumGum_44 (AY),

Start 54:
• Found in 3 of 83 (3.6%) of genes in pham
• Manual Annotations of this start: 2 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bridgette_58 (FA), Henrique_56 (FA), LittleRon_54 (FA),

Start 57:
• Found in 13 of 83 (15.7%) of genes in pham
• Manual Annotations of this start: 11 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AdaS_42 (AY), Anekin_42 (AY), DarwinJr_49 (AY), Faja_46 (AY), Hillester_48 (AY), Hum25_33 (FQ1), Lawnathon_48 (AY), LeBruni_46 (AY), RadFad_48 (AY), Sarge_42 (FB), Satrap_48 (AY),

SonDevVon_49 (AY), YoungHarleezy_47 (AY),

Start 58:
• Found in 2 of 83 (2.4%) of genes in pham
• Manual Annotations of this start: 2 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NikkiHotWheels_56 (FA), Persistence_43 (AY),

Start 61:
• Found in 1 of 83 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: EGUnicorn_55 (N),

Start 63:
• Found in 1 of 83 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Seahorse_49 (AY),

Start 64:
• Found in 5 of 83 (6.0%) of genes in pham
• Manual Annotations of this start: 2 of 63
• Called 60.0% of time when present
• Phage (with cluster) where this start called: ArcusAngelus_86 (F1), Chevrolet_89 (F1), REQ3_27 (singleton),

Start 65:
• Found in 2 of 83 (2.4%) of genes in pham
• Manual Annotations of this start: 2 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Sashimi_59 (AY), Zucker_52 (FN),

Start 66:
• Found in 7 of 83 (8.4%) of genes in pham
• Manual Annotations of this start: 5 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Alatato_41 (FB), BrayBeast_44 (FB), DillyDally_57 (singleton), DreamEater_68 (FJ), PetriParty_70 (FJ), Raqqa_54 (AY), Zucker_56 (FN),

Start 68:
• Found in 3 of 83 (3.6%) of genes in pham
• Manual Annotations of this start: 1 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cassini_42 (FN), Richie_66 (AY), SonDevVon_68 (AY),

Start 71:
• Found in 26 of 83 (31.3%) of genes in pham
• Manual Annotations of this start: 21 of 63
• Called 88.5% of time when present

• Phage (with cluster) where this start called: AllBusiness_52 (FF), Altostratus_41 (FS), Bhageatrice_46 (AY), BillyTP_49 (AY), EvePickles_44 (AY), Globfish_47 (AY), Guinevere_49 (FF), Ichiang_46 (FF), Ichiang_52 (FF), Isolde_46 (AY), Kihatsu_48 (FF), Kihatsu_55 (FF), Mapleville_43 (AY), MidnightRain_49 (AY), Nandita_49 (FF), Nandita_55 (FF), NewKitty_49 (AY), Phrank15_46 (AY), QuinnAvery_56 (FF), SpicyFrank_49 (AY), Sporco_49 (AY), ThayneTheZag_47 (AY), Zaheer_56 (FF),

Start 72:
• Found in 1 of 83 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: NidoQ_53 (FA),

Start 73:
• Found in 1 of 83 (1.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BlackJade_9 (FL),

Start 74:
• Found in 1 of 83 (1.2%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: REQ3_21 (singleton),

Start 75:
• Found in 1 of 83 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Zucker_36 (FN),

Start 77:
• Found in 3 of 83 (3.6%) of genes in pham
• No Manual Annotations of this start.
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Bubbykins_66 (UNK),

Start 78:
• Found in 3 of 83 (3.6%) of genes in pham
• Manual Annotations of this start: 2 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Rebel_55 (N), Toron_89 (F6), Tortellini_65 (P2),

Start 79:
• Found in 2 of 83 (2.4%) of genes in pham
• Manual Annotations of this start: 2 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: LilSpotty_78 (singleton), ZenTime222_57 (T),

Start 82:
• Found in 5 of 83 (6.0%) of genes in pham

• Manual Annotations of this start: 4 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Aikyam_45 (AY), BlueShadow_46 (AY), Gorpy_47 (AY), MaterMagnus_47 (AY), Sakai_46 (AY),

Start 84:
• Found in 1 of 83 (1.2%) of genes in pham
• Manual Annotations of this start: 1 of 63
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Lasker_46 (AY),

Summary by clusters:

There are 16 clusters represented in this pham: P2, F1, singleton, FS, F6, UNK, N, FA, FB, T, FF, AY, FJ, FQ1, FL, FN,

Info for manual annotations of cluster AY:
•Start number 57 was manually annotated 9 times for cluster AY.
•Start number 58 was manually annotated 1 time for cluster AY.
•Start number 63 was manually annotated 1 time for cluster AY.
•Start number 65 was manually annotated 1 time for cluster AY.
•Start number 68 was manually annotated 1 time for cluster AY.
•Start number 71 was manually annotated 10 times for cluster AY.
•Start number 82 was manually annotated 4 times for cluster AY.
•Start number 84 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster F1:
•Start number 64 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster FA:
•Start number 44 was manually annotated 3 times for cluster FA.
•Start number 54 was manually annotated 2 times for cluster FA.
•Start number 58 was manually annotated 1 time for cluster FA.
•Start number 72 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FB:
•Start number 57 was manually annotated 1 time for cluster FB.
•Start number 66 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FF:
•Start number 71 was manually annotated 10 times for cluster FF.

Info for manual annotations of cluster FJ:
•Start number 66 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FN:
•Start number 65 was manually annotated 1 time for cluster FN.
•Start number 66 was manually annotated 1 time for cluster FN.
•Start number 75 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FQ1:

•Start number 57 was manually annotated 1 time for cluster FQ1.

Info for manual annotations of cluster FS:
•Start number 71 was manually annotated 1 time for cluster FS.

Info for manual annotations of cluster N:
•Start number 61 was manually annotated 1 time for cluster N.
•Start number 78 was manually annotated 1 time for cluster N.

Info for manual annotations of cluster P2:
•Start number 78 was manually annotated 1 time for cluster P2.

Info for manual annotations of cluster T:
•Start number 79 was manually annotated 1 time for cluster T.

Gene Information:

Gene: AdaS_42 Start: 27993, Stop: 28319, Start Num: 57
Candidate Starts for AdaS_42:
(39, 27924), (42, 27939), (48, 27969), (Start: 57 @27993 has 11 MA's), (125, 28167), (127, 28176), (134, 28200), (138, 28212), (152, 28227), (158, 28242),

Gene: Aikyam_45 Start: 27569, Stop: 27871, Start Num: 82
Candidate Starts for Aikyam_45:
(Start: 82 @27569 has 4 MA's), (129, 27716), (156, 27776),

Gene: Alatato_41 Start: 27251, Stop: 27568, Start Num: 66
Candidate Starts for Alatato_41:
(Start: 50 @27221 has 1 MA's), (Start: 66 @27251 has 5 MA's), (115, 27344), (116, 27347), (138, 27434), (157, 27485), (176, 27521),

Gene: AllBusiness_52 Start: 37847, Stop: 38209, Start Num: 71
Candidate Starts for AllBusiness_52:
(Start: 71 @37847 has 21 MA's), (98, 37934), (102, 37946), (105, 37955), (123, 38030), (153, 38117), (167, 38153),

Gene: Altostratus_41 Start: 26248, Stop: 25892, Start Num: 71
Candidate Starts for Altostratus_41:
(Start: 71 @26248 has 21 MA's), (104, 26173), (106, 26167), (121, 26116), (127, 26071), (137, 26038), (141, 26026), (142, 26023), (154, 26005), (155, 26002), (168, 25972), (184, 25936),

Gene: Anekin_42 Start: 29225, Stop: 29605, Start Num: 57
Candidate Starts for Anekin_42:
(Start: 57 @29225 has 11 MA's), (67, 29243), (86, 29306), (169, 29543),

Gene: ArcusAngelus_86 Start: 50829, Stop: 51188, Start Num: 64
Candidate Starts for ArcusAngelus_86:
(56, 50814), (Start: 64 @50829 has 2 MA's), (110, 50943), (175, 51141), (187, 51177),

Gene: Bhageatrice_46 Start: 31181, Stop: 31543, Start Num: 71

Candidate Starts for Bhageatrice_46:
(28, 30998), (38, 31076), (Start: 71 @31181 has 21 MA's), (89, 31241), (125, 31376), (128, 31388),

Gene: BillyTP_49 Start: 31109, Stop: 31462, Start Num: 71
Candidate Starts for BillyTP_49:
(18, 30884), (24, 30905), (38, 31004), (Start: 71 @31109 has 21 MA's), (97, 31196), (101, 31208), (104, 31217), (113, 31241), (128, 31319), (139, 31352), (177, 31415),

Gene: BlackJade_9 Start: 7571, Stop: 7284, Start Num: 73
Candidate Starts for BlackJade_9:
(73, 7571), (124, 7433), (148, 7376),

Gene: BlueShadow_46 Start: 29854, Stop: 30156, Start Num: 82
Candidate Starts for BlueShadow_46:
(45, 29749), (Start: 82 @29854 has 4 MA's), (129, 30001), (156, 30061), (185, 30130),

Gene: BrayBeast_44 Start: 27825, Stop: 28184, Start Num: 66
Candidate Starts for BrayBeast_44:
(41, 27747), (Start: 66 @27825 has 5 MA's), (83, 27882), (111, 27948), (130, 28035), (149, 28086), (157, 28110), (168, 28134), (171, 28137),

Gene: Bridgette_58 Start: 36187, Stop: 36480, Start Num: 54
Candidate Starts for Bridgette_58:
(33, 36073), (Start: 54 @36187 has 2 MA's), (62, 36199), (127, 36340), (166, 36412), (174, 36427),

Gene: Bubbykins_66 Start: 47506, Stop: 47805, Start Num: 77
Candidate Starts for Bubbykins_66:
(7, 47152), (10, 47167), (12, 47191), (39, 47380), (77, 47506), (88, 47539), (126, 47647), (141, 47695), (168, 47737), (179, 47761),

Gene: Cassini_42 Start: 28534, Stop: 28830, Start Num: 68
Candidate Starts for Cassini_42:
(51, 28498), (Start: 68 @28534 has 1 MA's), (133, 28681), (170, 28771), (180, 28789),

Gene: Chevrolet_89 Start: 50830, Stop: 51189, Start Num: 64
Candidate Starts for Chevrolet_89:
(56, 50815), (Start: 64 @50830 has 2 MA's), (110, 50944), (175, 51142), (187, 51178),

Gene: Constance_62 Start: 40562, Stop: 40960, Start Num: 44
Candidate Starts for Constance_62:
(Start: 44 @40562 has 3 MA's), (129, 40820),

Gene: CosmicBrownie_41 Start: 28275, Stop: 28664, Start Num: 51
Candidate Starts for CosmicBrownie_41:
(30, 28140), (32, 28143), (51, 28275), (76, 28344), (108, 28410), (169, 28602),

Gene: DarwinJr_49 Start: 30723, Stop: 31094, Start Num: 57
Candidate Starts for DarwinJr_49:
(Start: 57 @30723 has 11 MA's), (Start: 71 @30750 has 21 MA's), (138, 30930), (139, 30933), (182, 31056),

Gene: DillyDally_57 Start: 36655, Stop: 37005, Start Num: 66
Candidate Starts for DillyDally_57:

(21, 36463), (41, 36577), (Start: 66 @36655 has 5 MA's), (80, 36700), (111, 36769), (130, 36856), (149, 36907), (157, 36931), (168, 36955), (171, 36958),

Gene: Ding_43 Start: 28971, Stop: 29366, Start Num: 48
Candidate Starts for Ding_43:
(48, 28971), (131, 29223), (160, 29280), (165, 29295),

Gene: DreamEater_68 Start: 41361, Stop: 41675, Start Num: 66
Candidate Starts for DreamEater_68:
(Start: 66 @41361 has 5 MA's), (136, 41535), (164, 41607),

Gene: EGUnicorn_55 Start: 36707, Stop: 37078, Start Num: 61
Candidate Starts for EGUnicorn_55:
(Start: 61 @36707 has 1 MA's), (118, 36854), (119, 36857), (122, 36878), (137, 36935), (139, 36941),

Gene: EvePickles_44 Start: 30359, Stop: 30676, Start Num: 71
Candidate Starts for EvePickles_44:
(Start: 71 @30359 has 21 MA's), (125, 30491), (135, 30527), (136, 30530),

Gene: Faja_46 Start: 30956, Stop: 31330, Start Num: 57
Candidate Starts for Faja_46:
(39, 30887), (42, 30902), (Start: 57 @30956 has 11 MA's), (108, 31082), (123, 31145), (127, 31169),

Gene: Globfish_47 Start: 29845, Stop: 30156, Start Num: 71
Candidate Starts for Globfish_47:
(Start: 71 @29845 has 21 MA's), (127, 29986), (150, 30052), (165, 30085), (184, 30127),

Gene: Gorpy_47 Start: 30846, Stop: 31148, Start Num: 82
Candidate Starts for Gorpy_47:
(Start: 82 @30846 has 4 MA's), (129, 30993), (156, 31053), (184, 31119), (185, 31122),

Gene: Guinevere_49 Start: 32067, Stop: 32372, Start Num: 71
Candidate Starts for Guinevere_49:
(Start: 71 @32067 has 21 MA's), (93, 32136), (165, 32328),

Gene: GumGum_44 Start: 28695, Stop: 29084, Start Num: 51
Candidate Starts for GumGum_44:
(30, 28560), (32, 28563), (51, 28695), (76, 28764), (108, 28830), (169, 29022),

Gene: Henrique_56 Start: 35077, Stop: 35448, Start Num: 54
Candidate Starts for Henrique_56:
(33, 34963), (Start: 54 @35077 has 2 MA's), (69, 35110), (77, 35143), (122, 35275), (163, 35371), (166, 35380),

Gene: Hillester_48 Start: 30341, Stop: 30766, Start Num: 57
Candidate Starts for Hillester_48:
(Start: 57 @30341 has 11 MA's), (108, 30479), (138, 30602), (139, 30605), (185, 30740),

Gene: Hum25_33 Start: 23949, Stop: 23587, Start Num: 57
Candidate Starts for Hum25_33:
(Start: 57 @23949 has 11 MA's), (114, 23814), (128, 23739), (129, 23736), (131, 23727), (155, 23679), (164, 23658), (165, 23655),

Gene: Ichiang_52 Start: 35915, Stop: 36196, Start Num: 71
Candidate Starts for Ichiang_52:
(Start: 71 @35915 has 21 MA's), (94, 35963), (99, 35975), (143, 36104), (146, 36107), (160, 36143),

Gene: Ichiang_46 Start: 31493, Stop: 31798, Start Num: 71
Candidate Starts for Ichiang_46:
(Start: 71 @31493 has 21 MA's), (93, 31562), (165, 31754),

Gene: Isolde_46 Start: 29682, Stop: 30020, Start Num: 71
Candidate Starts for Isolde_46:
(18, 29457), (24, 29478), (38, 29577), (Start: 71 @29682 has 21 MA's), (107, 29769), (123, 29838), (131, 29877), (147, 29907), (165, 29949),

Gene: KayMoney_62 Start: 39908, Stop: 40306, Start Num: 44
Candidate Starts for KayMoney_62:
(5, 39581), (15, 39740), (Start: 44 @39908 has 3 MA's), (129, 40166),

Gene: Kihatsu_55 Start: 37463, Stop: 37744, Start Num: 71
Candidate Starts for Kihatsu_55:
(Start: 71 @37463 has 21 MA's), (94, 37511), (99, 37523), (143, 37652), (160, 37691),

Gene: Kihatsu_48 Start: 33037, Stop: 33342, Start Num: 71
Candidate Starts for Kihatsu_48:
(Start: 71 @33037 has 21 MA's), (93, 33106), (165, 33298),

Gene: Lasker_46 Start: 29990, Stop: 30289, Start Num: 84
Candidate Starts for Lasker_46:
(52, 29900), (Start: 64 @29921 has 2 MA's), (Start: 84 @29990 has 1 MA's), (125, 30122), (127, 30131), (131, 30146), (165, 30218),

Gene: Lawnathon_48 Start: 29793, Stop: 30173, Start Num: 57
Candidate Starts for Lawnathon_48:
(Start: 57 @29793 has 11 MA's), (108, 29931), (138, 30042), (157, 30081), (172, 30117),

Gene: LeBruni_46 Start: 29191, Stop: 29619, Start Num: 57
Candidate Starts for LeBruni_46:
(39, 29122), (42, 29137), (Start: 57 @29191 has 11 MA's), (81, 29257), (138, 29455), (139, 29458), (182, 29581),

Gene: LilSpotty_78 Start: 45396, Stop: 45701, Start Num: 79
Candidate Starts for LilSpotty_78:
(Start: 79 @45396 has 2 MA's), (91, 45426), (118, 45489), (122, 45513), (183, 45672),

Gene: LilyBell_62 Start: 39493, Stop: 39888, Start Num: 44
Candidate Starts for LilyBell_62:
(4, 39130), (Start: 44 @39493 has 3 MA's), (129, 39751),

Gene: LittleRon_54 Start: 35741, Stop: 36034, Start Num: 54
Candidate Starts for LittleRon_54:
(33, 35627), (Start: 54 @35741 has 2 MA's), (62, 35753), (127, 35894), (166, 35966), (174, 35981),

Gene: Mapleville_43 Start: 29506, Stop: 29844, Start Num: 71
Candidate Starts for Mapleville_43:

(18, 29281), (24, 29302), (38, 29401), (Start: 71 @29506 has 21 MA's), (107, 29593), (123, 29662), (131, 29701), (147, 29731), (165, 29773),

Gene: MaterMagnus_47 Start: 29741, Stop: 30043, Start Num: 82
Candidate Starts for MaterMagnus_47:
(Start: 82 @29741 has 4 MA's), (129, 29888), (156, 29948),

Gene: MidnightRain_49 Start: 30942, Stop: 31298, Start Num: 71
Candidate Starts for MidnightRain_49:
(18, 30717), (24, 30738), (38, 30837), (Start: 71 @30942 has 21 MA's), (97, 31029), (101, 31041), (104, 31050), (113, 31074), (127, 31149), (169, 31239),

Gene: Nandita_55 Start: 36477, Stop: 36758, Start Num: 71
Candidate Starts for Nandita_55:
(Start: 71 @36477 has 21 MA's), (94, 36525), (99, 36537), (143, 36666), (160, 36705),

Gene: Nandita_49 Start: 32062, Stop: 32367, Start Num: 71
Candidate Starts for Nandita_49:
(Start: 71 @32062 has 21 MA's), (93, 32131), (165, 32323),

Gene: NewKitty_49 Start: 29701, Stop: 30036, Start Num: 71
Candidate Starts for NewKitty_49:
(38, 29596), (60, 29671), (Start: 71 @29701 has 21 MA's), (90, 29764), (116, 29827), (124, 29878), (127, 29893), (169, 29974), (178, 29992),

Gene: NidoQ_53 Start: 35783, Stop: 36109, Start Num: 72
Candidate Starts for NidoQ_53:
(Start: 72 @35783 has 1 MA's), (163, 36032),

Gene: NikkiHotWheels_56 Start: 34991, Stop: 35272, Start Num: 58
Candidate Starts for NikkiHotWheels_56:
(Start: 58 @34991 has 2 MA's), (77, 35015), (127, 35132), (166, 35204), (174, 35219),

Gene: Persistence_43 Start: 28918, Stop: 29229, Start Num: 58
Candidate Starts for Persistence_43:
(22, 28753), (34, 28819), (36, 28834), (Start: 58 @28918 has 2 MA's), (88, 28999), (117, 29044), (123, 29080), (186, 29221),

Gene: PetriParty_70 Start: 40320, Stop: 40664, Start Num: 66
Candidate Starts for PetriParty_70:
(3, 39873), (6, 39954), (26, 40149), (29, 40158), (41, 40242), (Start: 66 @40320 has 5 MA's),

Gene: Phrank15_46 Start: 29454, Stop: 29732, Start Num: 71
Candidate Starts for Phrank15_46:
(25, 29268), (Start: 71 @29454 has 21 MA's), (125, 29586),

Gene: Pucara_58 Start: 39657, Stop: 40034, Start Num: 44
Candidate Starts for Pucara_58:
(5, 39330), (8, 39408), (Start: 44 @39657 has 3 MA's), (100, 39780), (145, 39921), (154, 39948), (161, 39963),

Gene: QuinnAvery_56 Start: 37283, Stop: 37561, Start Num: 71
Candidate Starts for QuinnAvery_56:

(Start: 71 @37283 has 21 MA's), (132, 37430), (179, 37526),

Gene: REQ3_27 Start: 12625, Stop: 12996, Start Num: 64
Candidate Starts for REQ3_27:
(Start: 64 @12625 has 2 MA's), (120, 12799), (121, 12802), (129, 12850), (172, 12940),

Gene: REQ3_21 Start: 9467, Stop: 9787, Start Num: 74
Candidate Starts for REQ3_21:
(55, 9416), (59, 9422), (74, 9467), (96, 9515), (99, 9524), (128, 9629), (142, 9674),

Gene: RadFad_48 Start: 30341, Stop: 30766, Start Num: 57
Candidate Starts for RadFad_48:
(Start: 57 @30341 has 11 MA's), (108, 30479), (138, 30602), (139, 30605), (185, 30740),

Gene: Raqqa_54 Start: 31854, Stop: 32213, Start Num: 66
Candidate Starts for Raqqa_54:
(41, 31776), (Start: 66 @31854 has 5 MA's), (83, 31911), (111, 31977), (130, 32064), (149, 32115), (157, 32139), (168, 32163), (171, 32166),

Gene: Rebel_55 Start: 35427, Stop: 35744, Start Num: 78
Candidate Starts for Rebel_55:
(70, 35397), (Start: 78 @35427 has 2 MA's), (119, 35526), (128, 35583), (187, 35730),

Gene: Richie_66 Start: 35688, Stop: 36038, Start Num: 68
Candidate Starts for Richie_66:
(Start: 68 @35688 has 1 MA's), (87, 35757), (103, 35784), (159, 35952), (163, 35961),

Gene: RootBeer_51 Start: 36505, Stop: 36915, Start Num: 44
Candidate Starts for RootBeer_51:
(27, 36397), (Start: 44 @36505 has 3 MA's), (123, 36739), (132, 36769), (151, 36823), (167, 36862),

Gene: Sakai_46 Start: 29557, Stop: 29859, Start Num: 82
Candidate Starts for Sakai_46:
(Start: 82 @29557 has 4 MA's), (129, 29704), (156, 29764), (184, 29830), (185, 29833),

Gene: Sarge_42 Start: 26531, Stop: 26854, Start Num: 57
Candidate Starts for Sarge_42:
(Start: 57 @26531 has 11 MA's), (Start: 71 @26558 has 21 MA's), (124, 26690), (127, 26705), (147, 26747),

Gene: Sashimi_59 Start: 34705, Stop: 35055, Start Num: 65
Candidate Starts for Sashimi_59:
(59, 34690), (Start: 65 @34705 has 2 MA's), (85, 34768), (121, 34864), (122, 34873),

Gene: Satrap_48 Start: 30265, Stop: 30582, Start Num: 57
Candidate Starts for Satrap_48:
(39, 30196), (42, 30211), (Start: 57 @30265 has 11 MA's), (120, 30403), (123, 30424), (125, 30439), (138, 30481), (173, 30535), (181, 30547),

Gene: Seahorse_49 Start: 31759, Stop: 32121, Start Num: 63
Candidate Starts for Seahorse_49:
(Start: 63 @31759 has 1 MA's), (127, 31954), (128, 31957),

Gene: SonDevVon_49 Start: 29942, Stop: 30322, Start Num: 57
Candidate Starts for SonDevVon_49:
(Start: 57 @29942 has 11 MA's), (108, 30080), (138, 30191), (157, 30230), (172, 30266),

Gene: SonDevVon_68 Start: 35036, Stop: 35386, Start Num: 68
Candidate Starts for SonDevVon_68:
(11, 34742), (16, 34808), (31, 34871), (Start: 68 @35036 has 1 MA's), (87, 35105), (103, 35132), (159, 35300), (163, 35309),

Gene: SpicyFrank_49 Start: 30340, Stop: 30630, Start Num: 71
Candidate Starts for SpicyFrank_49:
(Start: 71 @30340 has 21 MA's),

Gene: Sporco_49 Start: 30151, Stop: 30489, Start Num: 71
Candidate Starts for Sporco_49:
(60, 30121), (Start: 71 @30151 has 21 MA's), (107, 30235), (111, 30241), (129, 30334), (156, 30394),

Gene: ThayneTheZag_47 Start: 29657, Stop: 29974, Start Num: 71
Candidate Starts for ThayneTheZag_47:
(Start: 71 @29657 has 21 MA's), (125, 29789), (136, 29828),

Gene: Toron_89 Start: 52551, Stop: 52856, Start Num: 78
Candidate Starts for Toron_89:
(Start: 78 @52551 has 2 MA's), (119, 52647), (127, 52701), (187, 52842),

Gene: Tortellini_65 Start: 44207, Stop: 44539, Start Num: 78
Candidate Starts for Tortellini_65:
(9, 43856), (13, 43892), (14, 43898), (23, 43970), (33, 44024), (35, 44048), (40, 44078), (43, 44099), (47, 44111), (Start: 78 @44207 has 2 MA's), (119, 44312), (144, 44417), (166, 44465), (184, 44507),

Gene: Whack_62 Start: 41425, Stop: 41829, Start Num: 50
Candidate Starts for Whack_62:
(8, 41146), (19, 41251), (27, 41287), (37, 41362), (Start: 50 @41425 has 1 MA's), (109, 41575), (113, 41590), (121, 41623), (127, 41665), (158, 41737), (162, 41743),

Gene: YoungHarleezy_47 Start: 30135, Stop: 30518, Start Num: 57
Candidate Starts for YoungHarleezy_47:
(Start: 57 @30135 has 11 MA's), (Start: 71 @30162 has 21 MA's), (92, 30210), (112, 30240), (138, 30354), (139, 30357),

Gene: Zaheer_56 Start: 37545, Stop: 37838, Start Num: 71
Candidate Starts for Zaheer_56:
(1, 36288), (2, 36543), (17, 37329), (20, 37341), (Start: 71 @37545 has 21 MA's), (94, 37593), (99, 37605), (132, 37707), (179, 37803),

Gene: ZenTime222_57 Start: 39491, Stop: 39808, Start Num: 79
Candidate Starts for ZenTime222_57:
(Start: 79 @39491 has 2 MA's), (91, 39521), (118, 39584), (119, 39587), (122, 39608), (137, 39665), (139, 39671), (183, 39767),

Gene: Zucker_56 Start: 33964, Stop: 34314, Start Num: 66
Candidate Starts for Zucker_56:

(21, 33772), (41, 33886), (Start: 66 @33964 has 5 MA's), (80, 34009), (111, 34078), (130, 34165), (149, 34216), (157, 34240), (168, 34264), (171, 34267),

Gene: Zucker_52 Start: 33035, Stop: 33385, Start Num: 65
Candidate Starts for Zucker_52:
(39, 32948), (40, 32951), (47, 32984), (59, 33020), (Start: 65 @33035 has 2 MA's), (85, 33098), (140, 33263), (163, 33308), (181, 33350),

Gene: Zucker_36 Start: 27843, Stop: 28172, Start Num: 75
Candidate Starts for Zucker_36:
(46, 27753), (49, 27765), (53, 27780), (Start: 64 @27798 has 2 MA's), (Start: 75 @27843 has 1 MA's), (95, 27891), (116, 27939), (169, 28110),