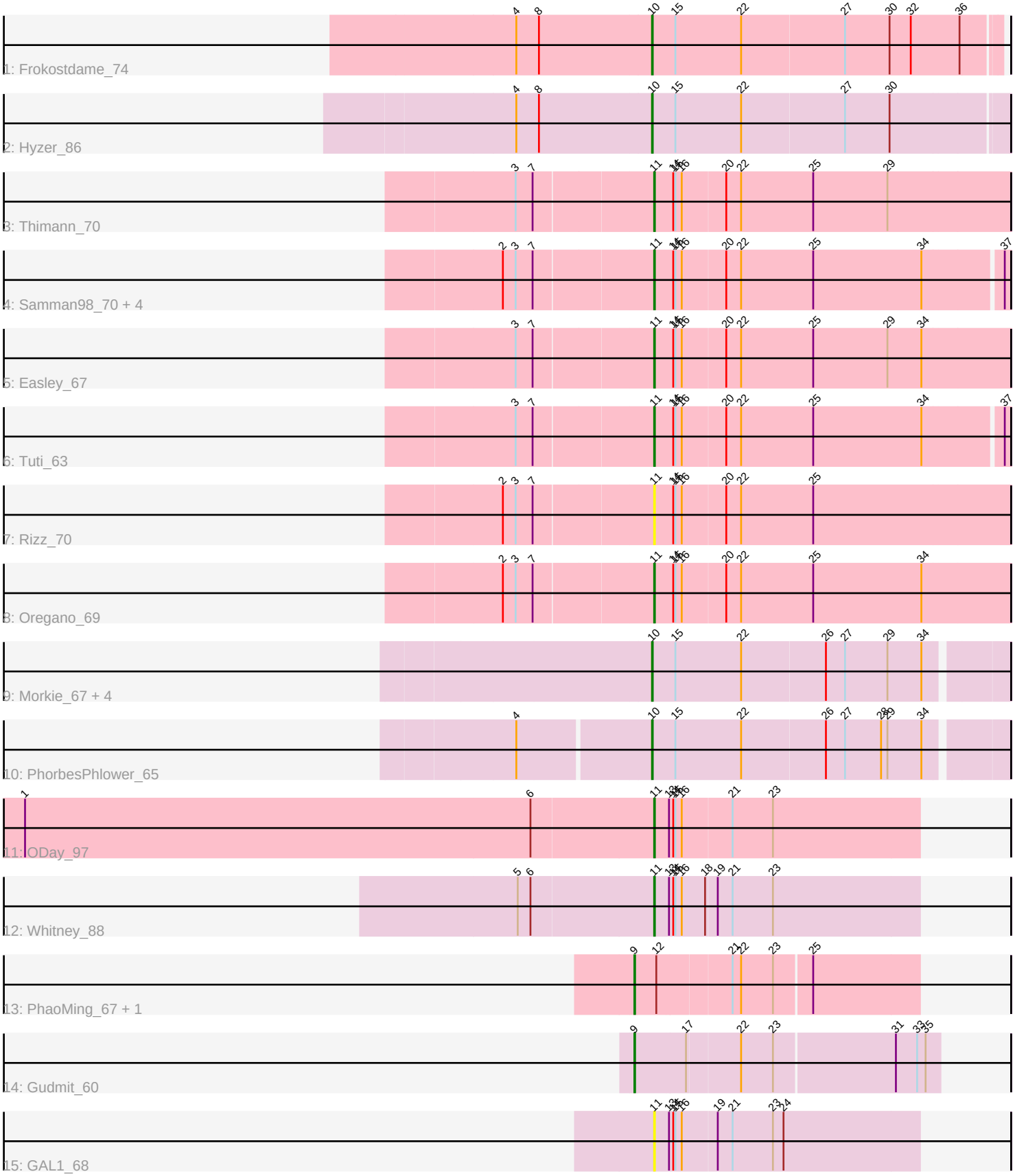
# Pham 347994


1: Frokostdame_74
2: Hyzer_86
3: Thimann_70
4: Samman98_70 + 4
5: Easley_67
6: Tuti_63
7: Rizz_70
8: Oregano_69
9: Morkie_67 + 4
10: PhorbesPhlower_65
11: ODay_97
12: Whitney_88
13: PhaoMing_67 + 1
14: Gudmit_60
15: GAL1_68

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 347994 Report

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

Pham number 347994 has 24 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Frokostdame_74
• Track 2 : Hyzer_86
• Track 3 : Thimann_70
• Track 4 : Samman98_70, Invectra_72, Beenie_63, MichaelScott_70, Clark_68
• Track 5 : Easley_67
• Track 6 : Tuti_63
• Track 7 : Rizz_70
• Track 8 : Oregano_69
• Track 9 : Morkie_67, Kuwabara_85, Lton_64, InLimbo_64, OneDirection_61
• Track 10 : PhorbesPhlower_65
• Track 11 : ODay_97
• Track 12 : Whitney_88
• Track 13 : PhaoMing_67, MortyNRick_81
• Track 14 : Gudmit_60
• Track 15 : GAL1_68

***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 11 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Beenie_63, Clark_68, Easley_67, GAL1_68, Invectra_72, MichaelScott_70, ODay_97, Oregano_69, Rizz_70, Samman98_70, Thimann_70, Tuti_63, Whitney_88,

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

Genes that do not have the "Most Annotated" start:
• Frokostdame_74, Gudmit_60, Hyzer_86, InLimbo_64, Kuwabara_85, Lton_64, Morkie_67, MortyNRick_81, OneDirection_61, PhaoMing_67, PhorbesPhlower_65,

**Summary by start number:**

Start 9:
• Found in 3 of 24 ( 12.5% ) of genes in pham
• Manual Annotations of this start: 2 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Gudmit_60 (singleton), MortyNRick_81 (DN), PhaoMing_67 (UNK),

Start 10:
• Found in 8 of 24 ( 33.3% ) of genes in pham
• Manual Annotations of this start: 7 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Frokostdame_74 (CV), Hyzer_86 (CZ1), InLimbo_64 (DH), Kuwabara_85 (DN4), Lton_64 (CZ), Morkie_67 (DH), OneDirection_61 (CZ6), PhorbesPhlower_65 (DH),

Start 11:
• Found in 13 of 24 ( 54.2% ) of genes in pham
• Manual Annotations of this start: 11 of 20
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beenie_63 (CZ4), Clark_68 (CZ4), Easley_67 (CZ4), GAL1_68 (singleton), Invectra_72 (CZ4), MichaelScott_70 (CZ4), ODay_97 (DN), Oregano_69 (CZ4), Rizz_70 (CZ4), Samman98_70 (CZ4), Thimann_70 (CZ4), Tuti_63 (CZ4), Whitney_88 (DN1),

**Summary by clusters:**

There are 11 clusters represented in this pham: DN, singleton, DH, CZ, CZ1, CZ6, CZ4, DN4, DN1, UNK, CV,

Info for manual annotations of cluster CV:
•Start number 10 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ:
•Start number 10 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 10 was manually annotated 1 time for cluster CZ1.

Info for manual annotations of cluster CZ4:
•Start number 11 was manually annotated 9 times for cluster CZ4.

Info for manual annotations of cluster CZ6:
•Start number 10 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DH:
•Start number 10 was manually annotated 2 times for cluster DH.

Info for manual annotations of cluster DN:
•Start number 9 was manually annotated 1 time for cluster DN.
•Start number 11 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:
•Start number 11 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster DN4:
•Start number 10 was manually annotated 1 time for cluster DN4.

***Gene Information:***

Gene: Beenie_63 Start: 44040, Stop: 44528, Start Num: 11
Candidate Starts for Beenie_63:
(2, 43836), (3, 43854), (7, 43878), (Start: 11 @44040 has 11 MA's), (14, 44067), (15, 44070), (16, 44079), (20, 44139), (22, 44160), (25, 44262), (34, 44415), (37, 44520),

Gene: Clark_68 Start: 43803, Stop: 44291, Start Num: 11
Candidate Starts for Clark_68:
(2, 43599), (3, 43617), (7, 43641), (Start: 11 @43803 has 11 MA's), (14, 43830), (15, 43833), (16, 43842), (20, 43902), (22, 43923), (25, 44025), (34, 44178), (37, 44283),

Gene: Easley_67 Start: 42795, Stop: 43292, Start Num: 11
Candidate Starts for Easley_67:
(3, 42609), (7, 42633), (Start: 11 @42795 has 11 MA's), (14, 42822), (15, 42825), (16, 42834), (20, 42894), (22, 42915), (25, 43017), (29, 43122), (34, 43170),

Gene: Frokostdame_74 Start: 47068, Stop: 47550, Start Num: 10
Candidate Starts for Frokostdame_74:
(4, 46882), (8, 46912), (Start: 10 @47068 has 7 MA's), (15, 47101), (22, 47194), (27, 47338), (30, 47401), (32, 47431), (36, 47500),

Gene: GAL1_68 Start: 43472, Stop: 43843, Start Num: 11
Candidate Starts for GAL1_68:
(Start: 11 @43472 has 11 MA's), (13, 43493), (14, 43499), (15, 43502), (16, 43511), (19, 43559), (21, 43580), (23, 43637), (24, 43652),

Gene: Gudmit_60 Start: 36750, Stop: 37166, Start Num: 9
Candidate Starts for Gudmit_60:
(Start: 9 @36750 has 2 MA's), (17, 36819), (22, 36891), (23, 36936), (31, 37104), (33, 37134), (35, 37146),

Gene: Hyzer_86 Start: 55452, Stop: 55943, Start Num: 10
Candidate Starts for Hyzer_86:
(4, 55266), (8, 55296), (Start: 10 @55452 has 7 MA's), (15, 55485), (22, 55578), (27, 55722), (30, 55785),

Gene: InLimbo_64 Start: 38586, Stop: 39071, Start Num: 10
Candidate Starts for InLimbo_64:
(Start: 10 @38586 has 7 MA's), (15, 38619), (22, 38712), (26, 38829), (27, 38856), (29, 38916), (34, 38964),

Gene: Invectra_72 Start: 45376, Stop: 45864, Start Num: 11
Candidate Starts for Invectra_72:
(2, 45172), (3, 45190), (7, 45214), (Start: 11 @45376 has 11 MA's), (14, 45403), (15, 45406), (16, 45415), (20, 45475), (22, 45496), (25, 45598), (34, 45751), (37, 45856),

Gene: Kuwabara_85 Start: 50759, Stop: 51244, Start Num: 10
Candidate Starts for Kuwabara_85:
(Start: 10 @50759 has 7 MA's), (15, 50792), (22, 50885), (26, 51002), (27, 51029), (29, 51089), (34, 51137),

Gene: Lton_64 Start: 37912, Stop: 38397, Start Num: 10
Candidate Starts for Lton_64:
(Start: 10 @37912 has 7 MA's), (15, 37945), (22, 38038), (26, 38155), (27, 38182), (29, 38242), (34, 38290),

Gene: MichaelScott_70 Start: 44484, Stop: 44972, Start Num: 11
Candidate Starts for MichaelScott_70:
(2, 44280), (3, 44298), (7, 44322), (Start: 11 @44484 has 11 MA's), (14, 44511), (15, 44514), (16, 44523), (20, 44583), (22, 44604), (25, 44706), (34, 44859), (37, 44964),

Gene: Morkie_67 Start: 39060, Stop: 39545, Start Num: 10
Candidate Starts for Morkie_67:
(Start: 10 @39060 has 7 MA's), (15, 39093), (22, 39186), (26, 39303), (27, 39330), (29, 39390), (34, 39438),

Gene: MortyNRick_81 Start: 48398, Stop: 48784, Start Num: 9
Candidate Starts for MortyNRick_81:
(Start: 9 @48398 has 2 MA's), (12, 48428), (21, 48527), (22, 48539), (23, 48584), (25, 48635),

Gene: ODay_97 Start: 51969, Stop: 52340, Start Num: 11
Candidate Starts for ODay_97:
(1, 51084), (6, 51798), (Start: 11 @51969 has 11 MA's), (13, 51990), (14, 51996), (15, 51999), (16, 52008), (21, 52077), (23, 52134),

Gene: OneDirection_61 Start: 36474, Stop: 36959, Start Num: 10
Candidate Starts for OneDirection_61:
(Start: 10 @36474 has 7 MA's), (15, 36507), (22, 36600), (26, 36717), (27, 36744), (29, 36804), (34, 36852),

Gene: Oregano_69 Start: 43358, Stop: 43855, Start Num: 11
Candidate Starts for Oregano_69:
(2, 43154), (3, 43172), (7, 43196), (Start: 11 @43358 has 11 MA's), (14, 43385), (15, 43388), (16, 43397), (20, 43457), (22, 43478), (25, 43580), (34, 43733),

Gene: PhaoMing_67 Start: 42941, Stop: 43327, Start Num: 9
Candidate Starts for PhaoMing_67:
(Start: 9 @42941 has 2 MA's), (12, 42971), (21, 43070), (22, 43082), (23, 43127), (25, 43178),

Gene: PhorbesPhlower_65 Start: 38455, Stop: 38940, Start Num: 10
Candidate Starts for PhorbesPhlower_65:
(4, 38278), (Start: 10 @38455 has 7 MA's), (15, 38488), (22, 38581), (26, 38698), (27, 38725), (28, 38776), (29, 38785), (34, 38833),

Gene: Rizz_70 Start: 44592, Stop: 45089, Start Num: 11
Candidate Starts for Rizz_70:
(2, 44388), (3, 44406), (7, 44430), (Start: 11 @44592 has 11 MA's), (14, 44619), (15, 44622), (16, 44631), (20, 44691), (22, 44712), (25, 44814),

Gene: Samman98_70 Start: 43906, Stop: 44394, Start Num: 11
Candidate Starts for Samman98_70:
(2, 43702), (3, 43720), (7, 43744), (Start: 11 @43906 has 11 MA's), (14, 43933), (15, 43936), (16, 43945), (20, 44005), (22, 44026), (25, 44128), (34, 44281), (37, 44386),

Gene: Thimann_70 Start: 44163, Stop: 44660, Start Num: 11
Candidate Starts for Thimann_70:
(3, 43977), (7, 44001), (Start: 11 @44163 has 11 MA's), (14, 44190), (15, 44193), (16, 44202), (20, 44262), (22, 44283), (25, 44385), (29, 44490),

Gene: Tuti_63 Start: 44342, Stop: 44830, Start Num: 11
Candidate Starts for Tuti_63:
(3, 44156), (7, 44180), (Start: 11 @44342 has 11 MA's), (14, 44369), (15, 44372), (16, 44381), (20, 44441), (22, 44462), (25, 44564), (34, 44717), (37, 44822),

Gene: Whitney_88 Start: 50901, Stop: 51272, Start Num: 11
Candidate Starts for Whitney_88:
(5, 50712), (6, 50730), (Start: 11 @50901 has 11 MA's), (13, 50922), (14, 50928), (15, 50931), (16, 50940), (18, 50973), (19, 50988), (21, 51009), (23, 51066),