# Pham 347940


2 5 7 8 9 12 14 20 24 29 41
1: Loretta_68 + 1
1 5 9 10 12 22 31 33 37 39 40 41
2: Makai_69
3 4 8 22 34 36 39 40 41
3: Truckee_67
3 5 9 15 17 20 21 23 26 33 37 39
4: Spain_67 + 15
3 13 14 19 21 35 39 42
5: Sprinkle_67
3 5 9 15 17 20 21 23 26 33 37 39
6: Egad_67 + 1
3 6 14 16 18 21 25 28 32 39
7: Natasha_70
3 6 11 13 14 19 21 38 39
8: Powelldog_70
3 6 14 16 18 21 25 28 30 32 39
9: RustyBoy_71
3 6 14 16 18 21 25 27 28 29 32 38 39
10: Sporto_66

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 347940 Report

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

Pham number 347940 has 27 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Loretta_68, Ingrid_71
• Track 2 : Makai_69
• Track 3 : Truckee_67
• Track 4 : Spain_67, Salk_67, Sloopyjoe_67, Stayer_67, Linda_67, Raunak_67, Boog_66, BronxBay_67, StarLord_67, Michelle_67, Shiba_66, Jeremy4pt0_66, MrAaronian_67, HerbBucket_65, DoctorPepper_66, Djungelskog_66
• Track 5 : Sprinkle_67
• Track 6 : Egad_67, ProfFrink_67
• Track 7 : Natasha_70
• Track 8 : Powelldog_70
• Track 9 : RustyBoy_71
• Track 10 : Sporto_66

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

The start number called the most often in the published annotations is 3, it was called in 21 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Boog_66, BronxBay_67, Djungelskog_66, DoctorPepper_66, Egad_67, HerbBucket_65, Jeremy4pt0_66, Linda_67, Michelle_67, MrAaronian_67, Natasha_70, Powelldog_70, ProfFrink_67, Raunak_67, RustyBoy_71, Salk_67, Shiba_66, Sloopyjoe_67, Spain_67, Sporto_66, Sprinkle_67, StarLord_67, Stayer_67, Truckee_67,

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

Genes that do not have the "Most Annotated" start:
• Ingrid_71, Loretta_68, Makai_69,

**Summary by start number:**

Start 1:

• Found in 1 of 27 ( 3.7% ) of genes in pham
• Manual Annotations of this start: 1 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Makai_69 (AU5),

Start 2:
• Found in 2 of 27 ( 7.4% ) of genes in pham
• Manual Annotations of this start: 2 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ingrid_71 (AU3), Loretta_68 (AU3),

Start 3:
• Found in 24 of 27 ( 88.9% ) of genes in pham
• Manual Annotations of this start: 21 of 24
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Boog_66 (AW), BronxBay_67 (AW), Djungelskog_66 (AW), DoctorPepper_66 (AW), Egad_67 (AW), HerbBucket_65 (AW), Jeremy4pt0_66 (AW), Linda_67 (AW), Michelle_67 (AW), MrAaronian_67 (AW), Natasha_70 (AW), Powelldog_70 (AW), ProfFrink_67 (AW), Raunak_67 (AW), RustyBoy_71 (AW), Salk_67 (AW), Shiba_66 (AW), Sloopyjoe_67 (AW), Spain_67 (AW), Sporto_66 (AW), Sprinkle_67 (AW), StarLord_67 (AW), Stayer_67 (AW), Truckee_67 (AU5),

**Summary by clusters:**

There are 3 clusters represented in this pham: AU3, AU5, AW,

Info for manual annotations of cluster AU3:
•Start number 2 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU5:
•Start number 1 was manually annotated 1 time for cluster AU5.
•Start number 3 was manually annotated 1 time for cluster AU5.

Info for manual annotations of cluster AW:
•Start number 3 was manually annotated 20 times for cluster AW.

***Gene Information:***

Gene: Boog_66 Start: 42856, Stop: 43689, Start Num: 3
Candidate Starts for Boog_66:
(Start: 3 @42856 has 21 MA's), (5, 42886), (9, 42955), (15, 43105), (17, 43186), (20, 43258), (21, 43276), (23, 43312), (26, 43330), (33, 43507), (37, 43579), (39, 43627),

Gene: BronxBay_67 Start: 43128, Stop: 43961, Start Num: 3
Candidate Starts for BronxBay_67:
(Start: 3 @43128 has 21 MA's), (5, 43158), (9, 43227), (15, 43377), (17, 43458), (20, 43530), (21, 43548), (23, 43584), (26, 43602), (33, 43779), (37, 43851), (39, 43899),

Gene: Djungelskog_66 Start: 43130, Stop: 43963, Start Num: 3
Candidate Starts for Djungelskog_66:

(Start: 3 @43130 has 21 MA's), (5, 43160), (9, 43229), (15, 43379), (17, 43460), (20, 43532), (21, 43550), (23, 43586), (26, 43604), (33, 43781), (37, 43853), (39, 43901),

Gene: DoctorPepper_66 Start: 42832, Stop: 43665, Start Num: 3
Candidate Starts for DoctorPepper_66:
(Start: 3 @42832 has 21 MA's), (5, 42862), (9, 42931), (15, 43081), (17, 43162), (20, 43234), (21, 43252), (23, 43288), (26, 43306), (33, 43483), (37, 43555), (39, 43603),

Gene: Egad_67 Start: 43106, Stop: 43939, Start Num: 3
Candidate Starts for Egad_67:
(Start: 3 @43106 has 21 MA's), (5, 43136), (9, 43205), (15, 43355), (17, 43436), (20, 43508), (21, 43526), (23, 43562), (26, 43580), (33, 43757), (37, 43829), (39, 43877),

Gene: HerbBucket_65 Start: 42838, Stop: 43671, Start Num: 3
Candidate Starts for HerbBucket_65:
(Start: 3 @42838 has 21 MA's), (5, 42868), (9, 42937), (15, 43087), (17, 43168), (20, 43240), (21, 43258), (23, 43294), (26, 43312), (33, 43489), (37, 43561), (39, 43609),

Gene: Ingrid_71 Start: 45546, Stop: 46247, Start Num: 2
Candidate Starts for Ingrid_71:
(Start: 2 @45546 has 2 MA's), (5, 45582), (7, 45597), (8, 45627), (9, 45651), (12, 45720), (14, 45789), (20, 45834), (24, 45876), (29, 45939), (41, 46203),

Gene: Jeremy4pt0_66 Start: 42827, Stop: 43660, Start Num: 3
Candidate Starts for Jeremy4pt0_66:
(Start: 3 @42827 has 21 MA's), (5, 42857), (9, 42926), (15, 43076), (17, 43157), (20, 43229), (21, 43247), (23, 43283), (26, 43301), (33, 43478), (37, 43550), (39, 43598),

Gene: Linda_67 Start: 43125, Stop: 43958, Start Num: 3
Candidate Starts for Linda_67:
(Start: 3 @43125 has 21 MA's), (5, 43155), (9, 43224), (15, 43374), (17, 43455), (20, 43527), (21, 43545), (23, 43581), (26, 43599), (33, 43776), (37, 43848), (39, 43896),

Gene: Loretta_68 Start: 45546, Stop: 46247, Start Num: 2
Candidate Starts for Loretta_68:
(Start: 2 @45546 has 2 MA's), (5, 45582), (7, 45597), (8, 45627), (9, 45651), (12, 45720), (14, 45789), (20, 45834), (24, 45876), (29, 45939), (41, 46203),

Gene: Makai_69 Start: 45687, Stop: 46397, Start Num: 1
Candidate Starts for Makai_69:
(Start: 1 @45687 has 1 MA's), (5, 45726), (9, 45795), (10, 45816), (12, 45864), (22, 46008), (31, 46122), (33, 46212), (37, 46284), (39, 46332), (40, 46344), (41, 46347),

Gene: Michelle_67 Start: 43127, Stop: 43960, Start Num: 3
Candidate Starts for Michelle_67:
(Start: 3 @43127 has 21 MA's), (5, 43157), (9, 43226), (15, 43376), (17, 43457), (20, 43529), (21, 43547), (23, 43583), (26, 43601), (33, 43778), (37, 43850), (39, 43898),

Gene: MrAaronian_67 Start: 43127, Stop: 43960, Start Num: 3
Candidate Starts for MrAaronian_67:
(Start: 3 @43127 has 21 MA's), (5, 43157), (9, 43226), (15, 43376), (17, 43457), (20, 43529), (21, 43547), (23, 43583), (26, 43601), (33, 43778), (37, 43850), (39, 43898),

Gene: Natasha_70 Start: 43431, Stop: 44273, Start Num: 3
Candidate Starts for Natasha_70:
(Start: 3 @43431 has 21 MA's), (6, 43464), (14, 43668), (16, 43731), (18, 43818), (21, 43860), (25, 43908), (28, 43956), (32, 44070), (39, 44211),

Gene: Powelldog_70 Start: 43949, Stop: 44680, Start Num: 3
Candidate Starts for Powelldog_70:
(Start: 3 @43949 has 21 MA's), (5, 43979), (6, 43982), (11, 44072), (13, 44153), (14, 44186), (19, 44240), (21, 44261), (38, 44567), (39, 44612),

Gene: ProfFrink_67 Start: 43105, Stop: 43938, Start Num: 3
Candidate Starts for ProfFrink_67:
(Start: 3 @43105 has 21 MA's), (5, 43135), (9, 43204), (15, 43354), (17, 43435), (20, 43507), (21, 43525), (23, 43561), (26, 43579), (33, 43756), (37, 43828), (39, 43876),

Gene: Raunak_67 Start: 42767, Stop: 43600, Start Num: 3
Candidate Starts for Raunak_67:
(Start: 3 @42767 has 21 MA's), (5, 42797), (9, 42866), (15, 43016), (17, 43097), (20, 43169), (21, 43187), (23, 43223), (26, 43241), (33, 43418), (37, 43490), (39, 43538),

Gene: RustyBoy_71 Start: 43630, Stop: 44472, Start Num: 3
Candidate Starts for RustyBoy_71:
(Start: 3 @43630 has 21 MA's), (6, 43663), (14, 43867), (16, 43930), (18, 44017), (21, 44059), (25, 44107), (28, 44155), (30, 44182), (32, 44269), (39, 44410),

Gene: Salk_67 Start: 43125, Stop: 43958, Start Num: 3
Candidate Starts for Salk_67:
(Start: 3 @43125 has 21 MA's), (5, 43155), (9, 43224), (15, 43374), (17, 43455), (20, 43527), (21, 43545), (23, 43581), (26, 43599), (33, 43776), (37, 43848), (39, 43896),

Gene: Shiba_66 Start: 42783, Stop: 43616, Start Num: 3
Candidate Starts for Shiba_66:
(Start: 3 @42783 has 21 MA's), (5, 42813), (9, 42882), (15, 43032), (17, 43113), (20, 43185), (21, 43203), (23, 43239), (26, 43257), (33, 43434), (37, 43506), (39, 43554),

Gene: Sloopyjoe_67 Start: 43129, Stop: 43962, Start Num: 3
Candidate Starts for Sloopyjoe_67:
(Start: 3 @43129 has 21 MA's), (5, 43159), (9, 43228), (15, 43378), (17, 43459), (20, 43531), (21, 43549), (23, 43585), (26, 43603), (33, 43780), (37, 43852), (39, 43900),

Gene: Spain_67 Start: 43127, Stop: 43960, Start Num: 3
Candidate Starts for Spain_67:
(Start: 3 @43127 has 21 MA's), (5, 43157), (9, 43226), (15, 43376), (17, 43457), (20, 43529), (21, 43547), (23, 43583), (26, 43601), (33, 43778), (37, 43850), (39, 43898),

Gene: Sporto_66 Start: 44241, Stop: 45047, Start Num: 3
Candidate Starts for Sporto_66:
(Start: 3 @44241 has 21 MA's), (6, 44274), (14, 44478), (16, 44544), (18, 44592), (21, 44634), (25, 44682), (27, 44694), (28, 44730), (29, 44736), (32, 44844), (38, 44940), (39, 44985),

Gene: Sprinkle_67 Start: 43665, Stop: 44420, Start Num: 3
Candidate Starts for Sprinkle_67:

(Start: 3 @43665 has 21 MA's), (13, 43869), (14, 43902), (19, 43977), (21, 43998), (35, 44256), (39, 44349), (42, 44379),

Gene: StarLord_67 Start: 43122, Stop: 43955, Start Num: 3
Candidate Starts for StarLord_67:
(Start: 3 @43122 has 21 MA's), (5, 43152), (9, 43221), (15, 43371), (17, 43452), (20, 43524), (21, 43542), (23, 43578), (26, 43596), (33, 43773), (37, 43845), (39, 43893),

Gene: Stayer_67 Start: 43125, Stop: 43958, Start Num: 3
Candidate Starts for Stayer_67:
(Start: 3 @43125 has 21 MA's), (5, 43155), (9, 43224), (15, 43374), (17, 43455), (20, 43527), (21, 43545), (23, 43581), (26, 43599), (33, 43776), (37, 43848), (39, 43896),

Gene: Truckee_67 Start: 45474, Stop: 46175, Start Num: 3
Candidate Starts for Truckee_67:
(Start: 3 @45474 has 21 MA's), (4, 45492), (8, 45549), (22, 45786), (34, 46002), (36, 46044), (39, 46110), (40, 46122), (41, 46125),