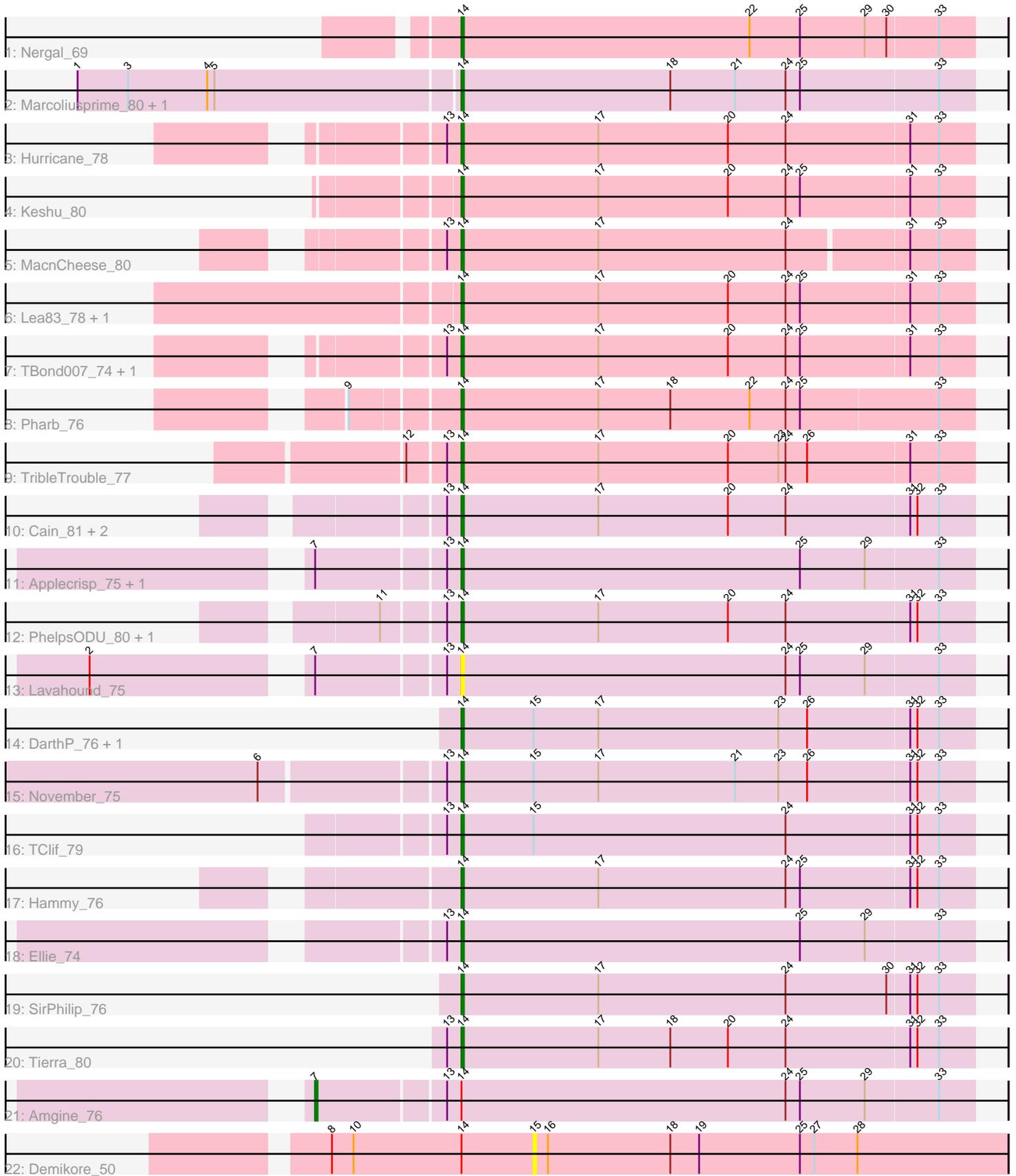# Pham 291406

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 291406 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291406 has 30 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Nergal_69
• Track 2 : Marcoliusprime_80, DismalStressor_81
• Track 3 : Hurricane_78
• Track 4 : Keshu_80
• Track 5 : MacnCheese_80
• Track 6 : Lea83_78, ShedlockHolmes_80
• Track 7 : TBond007_74, Pixie_77
• Track 8 : Pharb_76
• Track 9 : TribleTrouble_77
• Track 10 : Cain_81, Bryler_81, Phrank_81
• Track 11 : Applecrisp_75, Fefferhead_77
• Track 12 : PhelpsODU_80, Unicorn_80
• Track 13 : Lavahound_75
• Track 14 : DarthP_76, Amohnition_76
• Track 15 : November_75
• Track 16 : TClif_79
• Track 17 : Hammy_76
• Track 18 : Ellie_74
• Track 19 : SirPhilip_76
• Track 20 : Tierra_80
• Track 21 : Amgine_76
• Track 22 : Demikore_50

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

The start number called the most often in the published annotations is 14, it was called in 27 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Amohnition_76, Applecrisp_75, Bryler_81, Cain_81, DarthP_76, DismalStressor_81, Ellie_74, Fefferhead_77, Hammy_76, Hurricane_78, Keshu_80, Lavahound_75, Lea83_78, MacnCheese_80, Marcoliusprime_80, Nergal_69, November_75, Pharb_76, PhelpsODU_80, Phrank_81, Pixie_77, ShedlockHolmes_80, SirPhilip_76, TBond007_74, TClif_79, Tierra_80, TribleTrouble_77, Unicorn_80,

Genes that have the "Most Annotated" start but do not call it:
• Amgine_76, Demikore_50,

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

Summary by start number:

Start 7:
• Found in 4 of 30 (13.3%) of genes in pham
• Manual Annotations of this start: 1 of 28
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Amgine_76 (K6),

Start 14:
• Found in 30 of 30 (100.0%) of genes in pham
• Manual Annotations of this start: 27 of 28
• Called 93.3% of time when present
• Phage (with cluster) where this start called: Amohnition_76 (K6), Applecrisp_75 (K6), Bryler_81 (K6), Cain_81 (K6), DarthP_76 (K6), DismalStressor_81 (K2), Ellie_74 (K6), Fefferhead_77 (K6), Hammy_76 (K6), Hurricane_78 (K3), Keshu_80 (K3), Lavahound_75 (K6), Lea83_78 (K3), MacnCheese_80 (K3), Marcoliusprime_80 (K2), Nergal_69 (AG), November_75 (K6), Pharb_76 (K3), PhelpsODU_80 (K6), Phrank_81 (K6), Pixie_77 (K3), ShedlockHolmes_80 (K3), SirPhilip_76 (K6), TBond007_74 (K3), TClif_79 (K6), Tierra_80 (K6), TribleTrouble_77 (K3), Unicorn_80 (K6),

Start 15:
• Found in 5 of 30 (16.7%) of genes in pham
• No Manual Annotations of this start.
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Demikore_50 (U),

Summary by clusters:

There are 5 clusters represented in this pham: K3, K2, U, K6, AG,

Info for manual annotations of cluster AG:
•Start number 14 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster K2:
•Start number 14 was manually annotated 2 times for cluster K2.

Info for manual annotations of cluster K3:
•Start number 14 was manually annotated 9 times for cluster K3.

Info for manual annotations of cluster K6:
•Start number 7 was manually annotated 1 time for cluster K6.
•Start number 14 was manually annotated 15 times for cluster K6.

Gene Information:

Gene: Amgine_76 Start: 51678, Stop: 51947, Start Num: 7
Candidate Starts for Amgine_76:
(Start: 7 @51678 has 1 MA's), (13, 51729), (Start: 14 @51735 has 27 MA's), (24, 51870), (25, 51876), (29, 51903), (33, 51933),

Gene: Amohnition_76 Start: 51628, Stop: 51840, Start Num: 14
Candidate Starts for Amohnition_76:
(Start: 14 @51628 has 27 MA's), (15, 51658), (17, 51685), (23, 51760), (26, 51772), (31, 51814), (32, 51817), (33, 51826),

Gene: Applecrisp_75 Start: 51177, Stop: 51389, Start Num: 14
Candidate Starts for Applecrisp_75:
(Start: 7 @51120 has 1 MA's), (13, 51171), (Start: 14 @51177 has 27 MA's), (25, 51318), (29, 51345), (33, 51375),

Gene: Bryler_81 Start: 50668, Stop: 50880, Start Num: 14
Candidate Starts for Bryler_81:
(13, 50662), (Start: 14 @50668 has 27 MA's), (17, 50725), (20, 50779), (24, 50803), (31, 50854), (32, 50857), (33, 50866),

Gene: Cain_81 Start: 50656, Stop: 50868, Start Num: 14
Candidate Starts for Cain_81:
(13, 50650), (Start: 14 @50656 has 27 MA's), (17, 50713), (20, 50767), (24, 50791), (31, 50842), (32, 50845), (33, 50854),

Gene: DarthP_76 Start: 51481, Stop: 51693, Start Num: 14
Candidate Starts for DarthP_76:
(Start: 14 @51481 has 27 MA's), (15, 51511), (17, 51538), (23, 51613), (26, 51625), (31, 51667), (32, 51670), (33, 51679),

Gene: Demikore_50 Start: 39689, Stop: 39886, Start Num: 15
Candidate Starts for Demikore_50:
(8, 39605), (10, 39614), (Start: 14 @39659 has 27 MA's), (15, 39689), (16, 39695), (18, 39746), (19, 39758), (25, 39800), (27, 39806), (28, 39824),

Gene: DismalStressor_81 Start: 53059, Stop: 53271, Start Num: 14
Candidate Starts for DismalStressor_81:
(1, 52903), (3, 52924), (4, 52957), (5, 52960), (Start: 14 @53059 has 27 MA's), (18, 53146), (21, 53173), (24, 53194), (25, 53200), (33, 53257),

Gene: Ellie_74 Start: 50904, Stop: 51116, Start Num: 14
Candidate Starts for Ellie_74:
(13, 50898), (Start: 14 @50904 has 27 MA's), (25, 51045), (29, 51072), (33, 51102),

Gene: Fefferhead_77 Start: 50965, Stop: 51177, Start Num: 14
Candidate Starts for Fefferhead_77:
(Start: 7 @50908 has 1 MA's), (13, 50959), (Start: 14 @50965 has 27 MA's), (25, 51106), (29, 51133), (33, 51163),

Gene: Hammy_76 Start: 51468, Stop: 51680, Start Num: 14
Candidate Starts for Hammy_76:

(Start: 14 @51468 has 27 MA's), (17, 51525), (24, 51603), (25, 51609), (31, 51654), (32, 51657), (33, 51666),

Gene: Hurricane_78 Start: 51017, Stop: 51229, Start Num: 14
Candidate Starts for Hurricane_78:
(13, 51011), (Start: 14 @51017 has 27 MA's), (17, 51074), (20, 51128), (24, 51152), (31, 51203), (33, 51215),

Gene: Keshu_80 Start: 51207, Stop: 51419, Start Num: 14
Candidate Starts for Keshu_80:
(Start: 14 @51207 has 27 MA's), (17, 51264), (20, 51318), (24, 51342), (25, 51348), (31, 51393), (33, 51405),

Gene: Lavahound_75 Start: 51869, Stop: 52081, Start Num: 14
Candidate Starts for Lavahound_75:
(2, 51734), (Start: 7 @51812 has 1 MA's), (13, 51863), (Start: 14 @51869 has 27 MA's), (24, 52004), (25, 52010), (29, 52037), (33, 52067),

Gene: Lea83_78 Start: 51108, Stop: 51320, Start Num: 14
Candidate Starts for Lea83_78:
(Start: 14 @51108 has 27 MA's), (17, 51165), (20, 51219), (24, 51243), (25, 51249), (31, 51294), (33, 51306),

Gene: MacnCheese_80 Start: 51630, Stop: 51839, Start Num: 14
Candidate Starts for MacnCheese_80:
(13, 51624), (Start: 14 @51630 has 27 MA's), (17, 51687), (24, 51765), (31, 51813), (33, 51825),

Gene: Marcoliusprime_80 Start: 53059, Stop: 53271, Start Num: 14
Candidate Starts for Marcoliusprime_80:
(1, 52903), (3, 52924), (4, 52957), (5, 52960), (Start: 14 @53059 has 27 MA's), (18, 53146), (21, 53173), (24, 53194), (25, 53200), (33, 53257),

Gene: Nergal_69 Start: 47627, Stop: 47839, Start Num: 14
Candidate Starts for Nergal_69:
(Start: 14 @47627 has 27 MA's), (22, 47747), (25, 47768), (29, 47795), (30, 47804), (33, 47825),

Gene: November_75 Start: 51285, Stop: 51497, Start Num: 14
Candidate Starts for November_75:
(6, 51207), (13, 51279), (Start: 14 @51285 has 27 MA's), (15, 51315), (17, 51342), (21, 51399), (23, 51417), (26, 51429), (31, 51471), (32, 51474), (33, 51483),

Gene: Pharb_76 Start: 50297, Stop: 50509, Start Num: 14
Candidate Starts for Pharb_76:
(9, 50255), (Start: 14 @50297 has 27 MA's), (17, 50354), (18, 50384), (22, 50417), (24, 50432), (25, 50438), (33, 50495),

Gene: PhelpsODU_80 Start: 50783, Stop: 50995, Start Num: 14
Candidate Starts for PhelpsODU_80:
(11, 50753), (13, 50777), (Start: 14 @50783 has 27 MA's), (17, 50840), (20, 50894), (24, 50918), (31, 50969), (32, 50972), (33, 50981),

Gene: Phrank_81 Start: 50643, Stop: 50855, Start Num: 14
Candidate Starts for Phrank_81:

(13, 50637), (Start: 14 @50643 has 27 MA's), (17, 50700), (20, 50754), (24, 50778), (31, 50829), (32, 50832), (33, 50841),

Gene: Pixie_77 Start: 50595, Stop: 50807, Start Num: 14
Candidate Starts for Pixie_77:
(13, 50589), (Start: 14 @50595 has 27 MA's), (17, 50652), (20, 50706), (24, 50730), (25, 50736), (31, 50781), (33, 50793),

Gene: ShedlockHolmes_80 Start: 51112, Stop: 51324, Start Num: 14
Candidate Starts for ShedlockHolmes_80:
(Start: 14 @51112 has 27 MA's), (17, 51169), (20, 51223), (24, 51247), (25, 51253), (31, 51298), (33, 51310),

Gene: SirPhilip_76 Start: 51179, Stop: 51391, Start Num: 14
Candidate Starts for SirPhilip_76:
(Start: 14 @51179 has 27 MA's), (17, 51236), (24, 51314), (30, 51356), (31, 51365), (32, 51368), (33, 51377),

Gene: TBond007_74 Start: 50594, Stop: 50806, Start Num: 14
Candidate Starts for TBond007_74:
(13, 50588), (Start: 14 @50594 has 27 MA's), (17, 50651), (20, 50705), (24, 50729), (25, 50735), (31, 50780), (33, 50792),

Gene: TClif_79 Start: 50907, Stop: 51119, Start Num: 14
Candidate Starts for TClif_79:
(13, 50901), (Start: 14 @50907 has 27 MA's), (15, 50937), (24, 51042), (31, 51093), (32, 51096), (33, 51105),

Gene: Tierra_80 Start: 51070, Stop: 51282, Start Num: 14
Candidate Starts for Tierra_80:
(13, 51064), (Start: 14 @51070 has 27 MA's), (17, 51127), (18, 51157), (20, 51181), (24, 51205), (31, 51256), (32, 51259), (33, 51268),

Gene: TribleTrouble_77 Start: 50865, Stop: 51077, Start Num: 14
Candidate Starts for TribleTrouble_77:
(12, 50844), (13, 50859), (Start: 14 @50865 has 27 MA's), (17, 50922), (20, 50976), (23, 50997), (24, 51000), (26, 51009), (31, 51051), (33, 51063),

Gene: Unicorn_80 Start: 50783, Stop: 50995, Start Num: 14
Candidate Starts for Unicorn_80:
(11, 50753), (13, 50777), (Start: 14 @50783 has 27 MA's), (17, 50840), (20, 50894), (24, 50918), (31, 50969), (32, 50972), (33, 50981),