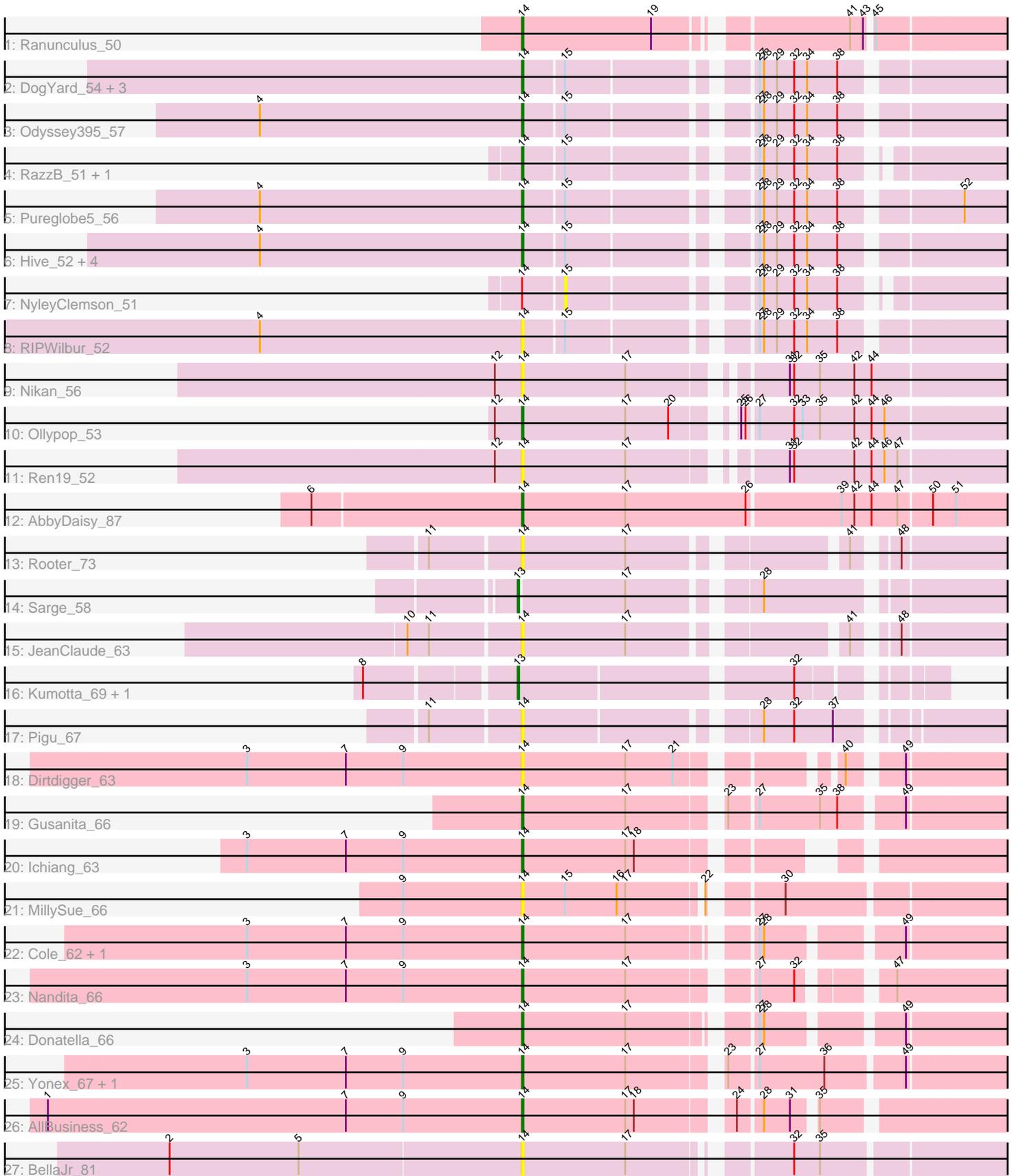# Pham 291337

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 291337 Report

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

Pham number 291337 has 38 members, 16 are drafts.

Phages represented in each track:
• Track 1 : Ranunculus_50
• Track 2 : DogYard_54, Beagle_55, Pointis_53, Kubulix_55
• Track 3 : Odyssey395_57
• Track 4 : RazzB_51, MellowYellow_52
• Track 5 : Pureglobe5_56
• Track 6 : Hive_52, Popstraw_51, Forrestell_52, BetaFish_54, PhuzzTulsa_52
• Track 7 : NyleyClemson_51
• Track 8 : RIPWilbur_52
• Track 9 : Nikan_56
• Track 10 : Ollypop_53
• Track 11 : Ren19_52
• Track 12 : AbbyDaisy_87
• Track 13 : Rooter_73
• Track 14 : Sarge_58
• Track 15 : JeanClaude_63
• Track 16 : Kumotta_69, MargaretKali_65
• Track 17 : Pigu_67
• Track 18 : Dirtdigger_63
• Track 19 : Gusanita_66
• Track 20 : Ichiang_63
• Track 21 : MillySue_66
• Track 22 : Cole_62, BigSherm_63
• Track 23 : Nandita_66
• Track 24 : Donatella_66
• Track 25 : Yonex_67, Ryan_67
• Track 26 : AllBusiness_62
• Track 27 : BellaJr_81

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 19 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AbbyDaisy_87, AllBusiness_62, Beagle_55, BellaJr_81, BetaFish_54, BigSherm_63, Cole_62, Dirtdigger_63, DogYard_54, Donatella_66, Forrestell_52, Gusanita_66, Hive_52, Ichiang_63, JeanClaude_63, Kubulix_55, MellowYellow_52, MillySue_66, Nandita_66, Nikan_56, Odyssey395_57, Ollypop_53, PhuzzTulsa_52, Pigu_67, Pointis_53, Popstraw_51, Pureglobe5_56, RIPWilbur_52, Ranunculus_50, RazzB_51, Ren19_52, Rooter_73, Ryan_67, Yonex_67,

Genes that have the "Most Annotated" start but do not call it:
• NyleyClemson_51,

Genes that do not have the "Most Annotated" start:
• Kumotta_69, MargaretKali_65, Sarge_58,

Summary by start number:

Start 13:
• Found in 3 of 38 (7.9%) of genes in pham
• Manual Annotations of this start: 3 of 22
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kumotta_69 (FB), MargaretKali_65 (FB), Sarge_58 (FB),

Start 14:
• Found in 35 of 38 (92.1%) of genes in pham
• Manual Annotations of this start: 19 of 22
• Called 97.1% of time when present
• Phage (with cluster) where this start called: AbbyDaisy_87 (AY), AllBusiness_62 (FF), Beagle_55 (AP2), BellaJr_81 (FN), BetaFish_54 (AP2), BigSherm_63 (FF), Cole_62 (FF), Dirtdigger_63 (FF), DogYard_54 (AP2), Donatella_66 (FF), Forrestell_52 (AP2), Gusanita_66 (FF), Hive_52 (AP2), Ichiang_63 (FF), JeanClaude_63 (FB), Kubulix_55 (AP2), MellowYellow_52 (AP2), MillySue_66 (FF), Nandita_66 (FF), Nikan_56 (AP2), Odyssey395_57 (AP2), Ollypop_53 (AP2), PhuzzTulsa_52 (AP2), Pigu_67 (FB), Pointis_53 (AP2), Popstraw_51 (AP2), Pureglobe5_56 (AP2), RIPWilbur_52 (AP2), Ranunculus_50 (AP), RazzB_51 (AP2), Ren19_52 (AP2), Rooter_73 (FB), Ryan_67 (FF), Yonex_67 (FF),

Start 15:
• Found in 16 of 38 (42.1%) of genes in pham
• No Manual Annotations of this start.
• Called 6.2% of time when present
• Phage (with cluster) where this start called: NyleyClemson_51 (AP2),

Summary by clusters:

There are 6 clusters represented in this pham: AP2, AP, FB, FF, AY, FN,

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

Info for manual annotations of cluster AP2:
•Start number 14 was manually annotated 10 times for cluster AP2.

Info for manual annotations of cluster AY:

•Start number 14 was manually annotated 1 time for cluster AY.

Info for manual annotations of cluster FB:
•Start number 13 was manually annotated 3 times for cluster FB.

Info for manual annotations of cluster FF:
•Start number 14 was manually annotated 7 times for cluster FF.

Gene Information:

Gene: AbbyDaisy_87 Start: 50090, Stop: 50422, Start Num: 14
Candidate Starts for AbbyDaisy_87:
(6, 49949), (Start: 14 @50090 has 19 MA's), (17, 50162), (26, 50246), (39, 50309), (42, 50318), (44, 50330), (47, 50348), (50, 50369), (51, 50384),

Gene: AllBusiness_62 Start: 41766, Stop: 42065, Start Num: 14
Candidate Starts for AllBusiness_62:
(1, 41439), (7, 41646), (9, 41685), (Start: 14 @41766 has 19 MA's), (17, 41838), (18, 41844), (24, 41901), (28, 41916), (31, 41934), (35, 41946),

Gene: Beagle_55 Start: 39239, Stop: 38943, Start Num: 14
Candidate Starts for Beagle_55:
(Start: 14 @39239 has 19 MA's), (15, 39212), (27, 39101), (28, 39098), (29, 39089), (32, 39077), (34, 39068), (38, 39047),

Gene: BellaJr_81 Start: 47155, Stop: 47460, Start Num: 14
Candidate Starts for BellaJr_81:
(2, 46912), (5, 47002), (Start: 14 @47155 has 19 MA's), (17, 47227), (32, 47320), (35, 47338),

Gene: BetaFish_54 Start: 39723, Stop: 39427, Start Num: 14
Candidate Starts for BetaFish_54:
(4, 39906), (Start: 14 @39723 has 19 MA's), (15, 39696), (27, 39585), (28, 39582), (29, 39573), (32, 39561), (34, 39552), (38, 39531),

Gene: BigSherm_63 Start: 40511, Stop: 40807, Start Num: 14
Candidate Starts for BigSherm_63:
(3, 40322), (7, 40391), (9, 40430), (Start: 14 @40511 has 19 MA's), (17, 40583), (27, 40655), (28, 40658), (49, 40739),

Gene: Cole_62 Start: 40558, Stop: 40854, Start Num: 14
Candidate Starts for Cole_62:
(3, 40369), (7, 40438), (9, 40477), (Start: 14 @40558 has 19 MA's), (17, 40630), (27, 40702), (28, 40705), (49, 40786),

Gene: Dirtdigger_63 Start: 40989, Stop: 41279, Start Num: 14
Candidate Starts for Dirtdigger_63:
(3, 40800), (7, 40869), (9, 40908), (Start: 14 @40989 has 19 MA's), (17, 41061), (21, 41094), (40, 41181), (49, 41211),

Gene: DogYard_54 Start: 39156, Stop: 38860, Start Num: 14

Candidate Starts for DogYard_54:
(Start: 14 @39156 has 19 MA's), (15, 39129), (27, 39018), (28, 39015), (29, 39006), (32, 38994), (34, 38985), (38, 38964),

Gene: Donatella_66 Start: 41180, Stop: 41476, Start Num: 14
Candidate Starts for Donatella_66:
(Start: 14 @41180 has 19 MA's), (17, 41252), (27, 41324), (28, 41327), (49, 41408),

Gene: Forrestell_52 Start: 37800, Stop: 37504, Start Num: 14
Candidate Starts for Forrestell_52:
(4, 37983), (Start: 14 @37800 has 19 MA's), (15, 37773), (27, 37662), (28, 37659), (29, 37650), (32, 37638), (34, 37629), (38, 37608),

Gene: Gusanita_66 Start: 41368, Stop: 41676, Start Num: 14
Candidate Starts for Gusanita_66:
(Start: 14 @41368 has 19 MA's), (17, 41440), (23, 41497), (27, 41515), (35, 41557), (38, 41569), (49, 41608),

Gene: Hive_52 Start: 39337, Stop: 39041, Start Num: 14
Candidate Starts for Hive_52:
(4, 39520), (Start: 14 @39337 has 19 MA's), (15, 39310), (27, 39199), (28, 39196), (29, 39187), (32, 39175), (34, 39166), (38, 39145),

Gene: Ichiang_63 Start: 40540, Stop: 40830, Start Num: 14
Candidate Starts for Ichiang_63:
(3, 40351), (7, 40420), (9, 40459), (Start: 14 @40540 has 19 MA's), (17, 40612), (18, 40618),

Gene: JeanClaude_63 Start: 35141, Stop: 35431, Start Num: 14
Candidate Starts for JeanClaude_63:
(10, 35066), (11, 35081), (Start: 14 @35141 has 19 MA's), (17, 35213), (41, 35339), (48, 35360),

Gene: Kubulix_55 Start: 39104, Stop: 38808, Start Num: 14
Candidate Starts for Kubulix_55:
(Start: 14 @39104 has 19 MA's), (15, 39077), (27, 38966), (28, 38963), (29, 38954), (32, 38942), (34, 38933), (38, 38912),

Gene: Kumotta_69 Start: 37258, Stop: 37515, Start Num: 13
Candidate Starts for Kumotta_69:
(8, 37162), (Start: 13 @37258 has 3 MA's), (32, 37435),

Gene: MargaretKali_65 Start: 35876, Stop: 36133, Start Num: 13
Candidate Starts for MargaretKali_65:
(8, 35780), (Start: 13 @35876 has 3 MA's), (32, 36053),

Gene: MellowYellow_52 Start: 38261, Stop: 37974, Start Num: 14
Candidate Starts for MellowYellow_52:
(Start: 14 @38261 has 19 MA's), (15, 38234), (27, 38123), (28, 38120), (29, 38111), (32, 38099), (34, 38090), (38, 38069),

Gene: MillySue_66 Start: 40687, Stop: 40992, Start Num: 14
Candidate Starts for MillySue_66:
(9, 40606), (Start: 14 @40687 has 19 MA's), (15, 40717), (16, 40753), (17, 40759), (22, 40807), (30, 40846),

Gene: Nandita_66 Start: 41102, Stop: 41398, Start Num: 14
Candidate Starts for Nandita_66:
(3, 40913), (7, 40982), (9, 41021), (Start: 14 @41102 has 19 MA's), (17, 41174), (27, 41249), (32, 41273), (47, 41321),

Gene: Nikan_56 Start: 39907, Stop: 39596, Start Num: 14
Candidate Starts for Nikan_56:
(12, 39925), (Start: 14 @39907 has 19 MA's), (17, 39835), (31, 39745), (32, 39742), (35, 39724), (42, 39700), (44, 39688),

Gene: NyleyClemson_51 Start: 37849, Stop: 37589, Start Num: 15
Candidate Starts for NyleyClemson_51:
(Start: 14 @37876 has 19 MA's), (15, 37849), (27, 37738), (28, 37735), (29, 37726), (32, 37714), (34, 37705), (38, 37684),

Gene: Odyssey395_57 Start: 39463, Stop: 39167, Start Num: 14
Candidate Starts for Odyssey395_57:
(4, 39646), (Start: 14 @39463 has 19 MA's), (15, 39436), (27, 39325), (28, 39322), (29, 39313), (32, 39301), (34, 39292), (38, 39271),

Gene: Ollypop_53 Start: 40130, Stop: 39819, Start Num: 14
Candidate Starts for Ollypop_53:
(12, 40148), (Start: 14 @40130 has 19 MA's), (17, 40058), (20, 40028), (25, 39998), (26, 39995), (27, 39989), (32, 39965), (33, 39959), (35, 39947), (42, 39923), (44, 39911), (46, 39902),

Gene: PhuzzTulsa_52 Start: 39241, Stop: 38945, Start Num: 14
Candidate Starts for PhuzzTulsa_52:
(4, 39424), (Start: 14 @39241 has 19 MA's), (15, 39214), (27, 39103), (28, 39100), (29, 39091), (32, 39079), (34, 39070), (38, 39049),

Gene: Pigu_67 Start: 35049, Stop: 35342, Start Num: 14
Candidate Starts for Pigu_67:
(11, 34989), (Start: 14 @35049 has 19 MA's), (28, 35193), (32, 35214), (37, 35241),

Gene: Pointis_53 Start: 39279, Stop: 38983, Start Num: 14
Candidate Starts for Pointis_53:
(Start: 14 @39279 has 19 MA's), (15, 39252), (27, 39141), (28, 39138), (29, 39129), (32, 39117), (34, 39108), (38, 39087),

Gene: Popstraw_51 Start: 39065, Stop: 38769, Start Num: 14
Candidate Starts for Popstraw_51:
(4, 39248), (Start: 14 @39065 has 19 MA's), (15, 39038), (27, 38927), (28, 38924), (29, 38915), (32, 38903), (34, 38894), (38, 38873),

Gene: Pureglobe5_56 Start: 39710, Stop: 39414, Start Num: 14
Candidate Starts for Pureglobe5_56:
(4, 39893), (Start: 14 @39710 has 19 MA's), (15, 39683), (27, 39572), (28, 39569), (29, 39560), (32, 39548), (34, 39539), (38, 39518), (52, 39446),

Gene: RIPWilbur_52 Start: 38595, Stop: 38299, Start Num: 14
Candidate Starts for RIPWilbur_52:

(4, 38778), (Start: 14 @38595 has 19 MA's), (15, 38568), (27, 38457), (28, 38454), (29, 38445), (32, 38433), (34, 38424), (38, 38403),

Gene: Ranunculus_50 Start: 42260, Stop: 41955, Start Num: 14
Candidate Starts for Ranunculus_50:
(Start: 14 @42260 has 19 MA's), (19, 42170), (41, 42056), (43, 42047), (45, 42044),

Gene: RazzB_51 Start: 38007, Stop: 37720, Start Num: 14
Candidate Starts for RazzB_51:
(Start: 14 @38007 has 19 MA's), (15, 37980), (27, 37869), (28, 37866), (29, 37857), (32, 37845), (34, 37836), (38, 37815),

Gene: Ren19_52 Start: 39433, Stop: 39122, Start Num: 14
Candidate Starts for Ren19_52:
(12, 39451), (Start: 14 @39433 has 19 MA's), (17, 39361), (31, 39271), (32, 39268), (42, 39226), (44, 39214), (46, 39205), (47, 39196),

Gene: Rooter_73 Start: 37104, Stop: 37394, Start Num: 14
Candidate Starts for Rooter_73:
(11, 37044), (Start: 14 @37104 has 19 MA's), (17, 37176), (41, 37302), (48, 37323),

Gene: Ryan_67 Start: 41658, Stop: 41969, Start Num: 14
Candidate Starts for Ryan_67:
(3, 41469), (7, 41538), (9, 41577), (Start: 14 @41658 has 19 MA's), (17, 41730), (23, 41787), (27, 41805), (36, 41850), (49, 41901),

Gene: Sarge_58 Start: 32985, Stop: 33284, Start Num: 13
Candidate Starts for Sarge_58:
(Start: 13 @32985 has 3 MA's), (17, 33057), (28, 33132),

Gene: Yonex_67 Start: 41658, Stop: 41969, Start Num: 14
Candidate Starts for Yonex_67:
(3, 41469), (7, 41538), (9, 41577), (Start: 14 @41658 has 19 MA's), (17, 41730), (23, 41787), (27, 41805), (36, 41850), (49, 41901),