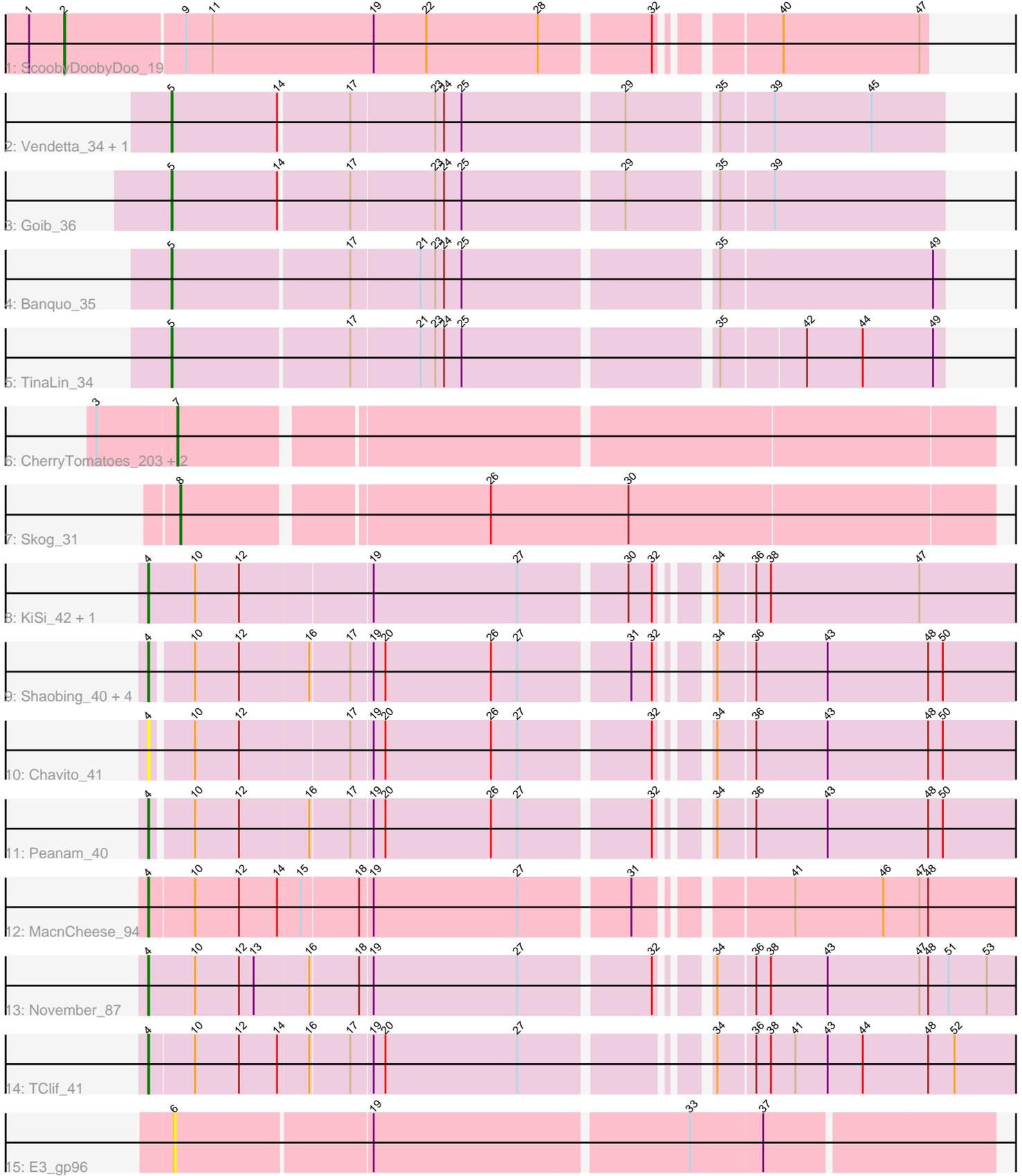# Pham 289732

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 289732 Report

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

Pham number 289732 has 23 members, 5 are drafts.

Phages represented in each track:
• Track 1 : ScoobyDoobyDoo_19
• Track 2 : Vendetta_34, Splinter_34
• Track 3 : Goib_36
• Track 4 : Banquo_35
• Track 5 : TinaLin_34
• Track 6 : CherryTomatoes_203, SCentae_200, Pupper_201
• Track 7 : Skog_31
• Track 8 : KiSi_42, LeMond_42
• Track 9 : Shaobing_40, Dartin_40, Richo_40, McMater_40, Niklas_40
• Track 10 : Chavito_41
• Track 11 : Peanam_40
• Track 12 : MacnCheese_94
• Track 13 : November_87
• Track 14 : TClif_41
• Track 15 : E3_gp96

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

The start number called the most often in the published annotations is 4, it was called in 8 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Chavito_41, Dartin_40, KiSi_42, LeMond_42, MacnCheese_94, McMater_40, Niklas_40, November_87, Peanam_40, Richo_40, Shaobing_40, TClif_41,

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

Genes that do not have the "Most Annotated" start:
• Banquo_35, CherryTomatoes_203, E3_gp96, Goib_36, Pupper_201, SCentae_200, ScoobyDoobyDoo_19, Skog_31, Splinter_34, TinaLin_34, Vendetta_34,

Summary by start number:

Start 2:
• Found in 1 of 23 (4.3%) of genes in pham
• Manual Annotations of this start: 1 of 18
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ScoobyDoobyDoo_19 (C2),

Start 4:
• Found in 12 of 23 (52.2%) of genes in pham
• Manual Annotations of this start: 8 of 18
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chavito_41 (K1), Dartin_40 (K1), KiSi_42 (K1), LeMond_42 (K1), MacnCheese_94 (K3), McMater_40 (K1), Niklas_40 (K1), November_87 (K6), Peanam_40 (K1), Richo_40 (K1), Shaobing_40 (K1), TClif_41 (K6),

Start 5:
• Found in 5 of 23 (21.7%) of genes in pham
• Manual Annotations of this start: 5 of 18
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Banquo_35 (CU1), Goib_36 (CU1), Splinter_34 (CU1), TinaLin_34 (CU1), Vendetta_34 (CU1),

Start 6:
• Found in 1 of 23 (4.3%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: E3_gp96 (singleton),

Start 7:
• Found in 3 of 23 (13.0%) of genes in pham
• Manual Annotations of this start: 3 of 18
• Called 100.0% of time when present
• Phage (with cluster) where this start called: CherryTomatoes_203 (DO), Pupper_201 (DO), SCentae_200 (DO),

Start 8:
• Found in 1 of 23 (4.3%) of genes in pham
• Manual Annotations of this start: 1 of 18
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Skog_31 (DO),

Summary by clusters:

There are 7 clusters represented in this pham: DO, singleton, CU1, K3, K1, K6, C2,

Info for manual annotations of cluster C2:
•Start number 2 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster CU1:
•Start number 5 was manually annotated 5 times for cluster CU1.

Info for manual annotations of cluster DO:
•Start number 7 was manually annotated 3 times for cluster DO.

•Start number 8 was manually annotated 1 time for cluster DO.

Info for manual annotations of cluster K1:
•Start number 4 was manually annotated 5 times for cluster K1.

Info for manual annotations of cluster K3:
•Start number 4 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K6:
•Start number 4 was manually annotated 2 times for cluster K6.

Gene Information:

Gene: Banquo_35 Start: 24903, Stop: 25655, Start Num: 5
Candidate Starts for Banquo_35:
(Start: 5 @24903 has 5 MA's), (17, 25080), (21, 25149), (23, 25164), (24, 25173), (25, 25191), (35, 25431), (49, 25644),

Gene: Chavito_41 Start: 31100, Stop: 31924, Start Num: 4
Candidate Starts for Chavito_41:
(Start: 4 @31100 has 8 MA's), (10, 31139), (12, 31184), (17, 31292), (19, 31313), (20, 31325), (26, 31433), (27, 31460), (32, 31586), (34, 31622), (36, 31658), (43, 31730), (48, 31832), (50, 31847),

Gene: CherryTomatoes_203 Start: 138518, Stop: 139312, Start Num: 7
Candidate Starts for CherryTomatoes_203:
(3, 138437), (Start: 7 @138518 has 3 MA's),

Gene: Dartin_40 Start: 30486, Stop: 31310, Start Num: 4
Candidate Starts for Dartin_40:
(Start: 4 @30486 has 8 MA's), (10, 30525), (12, 30570), (16, 30639), (17, 30678), (19, 30699), (20, 30711), (26, 30819), (27, 30846), (31, 30951), (32, 30972), (34, 31008), (36, 31044), (43, 31116), (48, 31218), (50, 31233),

Gene: E3_gp96 Start: 54822, Stop: 55628, Start Num: 6
Candidate Starts for E3_gp96:
(6, 54822), (19, 55017), (33, 55329), (37, 55401),

Gene: Goib_36 Start: 25321, Stop: 26073, Start Num: 5
Candidate Starts for Goib_36:
(Start: 5 @25321 has 5 MA's), (14, 25429), (17, 25498), (23, 25582), (24, 25591), (25, 25609), (29, 25765), (35, 25849), (39, 25900),

Gene: KiSi_42 Start: 31153, Stop: 31986, Start Num: 4
Candidate Starts for KiSi_42:
(Start: 4 @31153 has 8 MA's), (10, 31201), (12, 31246), (19, 31375), (27, 31522), (30, 31624), (32, 31648), (34, 31684), (36, 31720), (38, 31735), (47, 31885),

Gene: LeMond_42 Start: 31224, Stop: 32057, Start Num: 4
Candidate Starts for LeMond_42:
(Start: 4 @31224 has 8 MA's), (10, 31272), (12, 31317), (19, 31446), (27, 31593), (30, 31695), (32, 31719), (34, 31755), (36, 31791), (38, 31806), (47, 31956),

Gene: MacnCheese_94 Start: 57896, Stop: 58729, Start Num: 4
Candidate Starts for MacnCheese_94:
(Start: 4 @57896 has 8 MA's), (10, 57941), (12, 57986), (14, 58025), (15, 58046), (18, 58103), (19, 58115), (27, 58262), (31, 58367), (41, 58499), (46, 58589), (47, 58625), (48, 58634),

Gene: McMater_40 Start: 30486, Stop: 31310, Start Num: 4
Candidate Starts for McMater_40:
(Start: 4 @30486 has 8 MA's), (10, 30525), (12, 30570), (16, 30639), (17, 30678), (19, 30699), (20, 30711), (26, 30819), (27, 30846), (31, 30951), (32, 30972), (34, 31008), (36, 31044), (43, 31116), (48, 31218), (50, 31233),

Gene: Niklas_40 Start: 30489, Stop: 31313, Start Num: 4
Candidate Starts for Niklas_40:
(Start: 4 @30489 has 8 MA's), (10, 30528), (12, 30573), (16, 30642), (17, 30681), (19, 30702), (20, 30714), (26, 30822), (27, 30849), (31, 30954), (32, 30975), (34, 31011), (36, 31047), (43, 31119), (48, 31221), (50, 31236),

Gene: November_87 Start: 57492, Stop: 58328, Start Num: 4
Candidate Starts for November_87:
(Start: 4 @57492 has 8 MA's), (10, 57540), (12, 57585), (13, 57600), (16, 57654), (18, 57702), (19, 57714), (27, 57861), (32, 57987), (34, 58023), (36, 58059), (38, 58074), (43, 58131), (47, 58224), (48, 58233), (51, 58254), (53, 58293),

Gene: Peanam_40 Start: 30486, Stop: 31310, Start Num: 4
Candidate Starts for Peanam_40:
(Start: 4 @30486 has 8 MA's), (10, 30525), (12, 30570), (16, 30639), (17, 30678), (19, 30699), (20, 30711), (26, 30819), (27, 30846), (32, 30972), (34, 31008), (36, 31044), (43, 31116), (48, 31218), (50, 31233),

Gene: Pupper_201 Start: 138380, Stop: 139174, Start Num: 7
Candidate Starts for Pupper_201:
(3, 138299), (Start: 7 @138380 has 3 MA's),

Gene: Richo_40 Start: 30486, Stop: 31310, Start Num: 4
Candidate Starts for Richo_40:
(Start: 4 @30486 has 8 MA's), (10, 30525), (12, 30570), (16, 30639), (17, 30678), (19, 30699), (20, 30711), (26, 30819), (27, 30846), (31, 30951), (32, 30972), (34, 31008), (36, 31044), (43, 31116), (48, 31218), (50, 31233),

Gene: SCentae_200 Start: 138572, Stop: 139366, Start Num: 7
Candidate Starts for SCentae_200:
(3, 138491), (Start: 7 @138572 has 3 MA's),

Gene: ScoobyDoobyDoo_19 Start: 5999, Stop: 6829, Start Num: 2
Candidate Starts for ScoobyDoobyDoo_19:
(1, 5963), (Start: 2 @5999 has 1 MA's), (9, 6119), (11, 6146), (19, 6311), (22, 6365), (28, 6479), (32, 6584), (40, 6683), (47, 6821),

Gene: Shaobing_40 Start: 30486, Stop: 31310, Start Num: 4
Candidate Starts for Shaobing_40:
(Start: 4 @30486 has 8 MA's), (10, 30525), (12, 30570), (16, 30639), (17, 30678), (19, 30699), (20, 30711), (26, 30819), (27, 30846), (31, 30951), (32, 30972), (34, 31008), (36, 31044), (43, 31116), (48,

31218), (50, 31233),

Gene: Skog_31 Start: 14091, Stop: 14894, Start Num: 8
Candidate Starts for Skog_31:
(Start: 8 @14091 has 1 MA's), (26, 14385), (30, 14526),

Gene: Splinter_34 Start: 25311, Stop: 26063, Start Num: 5
Candidate Starts for Splinter_34:
(Start: 5 @25311 has 5 MA's), (14, 25419), (17, 25488), (23, 25572), (24, 25581), (25, 25599), (29, 25755), (35, 25839), (39, 25890), (45, 25989),

Gene: TClif_41 Start: 30689, Stop: 31522, Start Num: 4
Candidate Starts for TClif_41:
(Start: 4 @30689 has 8 MA's), (10, 30734), (12, 30779), (14, 30818), (16, 30848), (17, 30887), (19, 30908), (20, 30920), (27, 31055), (34, 31217), (36, 31253), (38, 31268), (41, 31292), (43, 31325), (44, 31361), (48, 31427), (52, 31454),

Gene: TinaLin_34 Start: 24579, Stop: 25328, Start Num: 5
Candidate Starts for TinaLin_34:
(Start: 5 @24579 has 5 MA's), (17, 24756), (21, 24825), (23, 24840), (24, 24849), (25, 24867), (35, 25107), (42, 25188), (44, 25245), (49, 25317),

Gene: Vendetta_34 Start: 25311, Stop: 26063, Start Num: 5
Candidate Starts for Vendetta_34:
(Start: 5 @25311 has 5 MA's), (14, 25419), (17, 25488), (23, 25572), (24, 25581), (25, 25599), (29, 25755), (35, 25839), (39, 25890), (45, 25989),