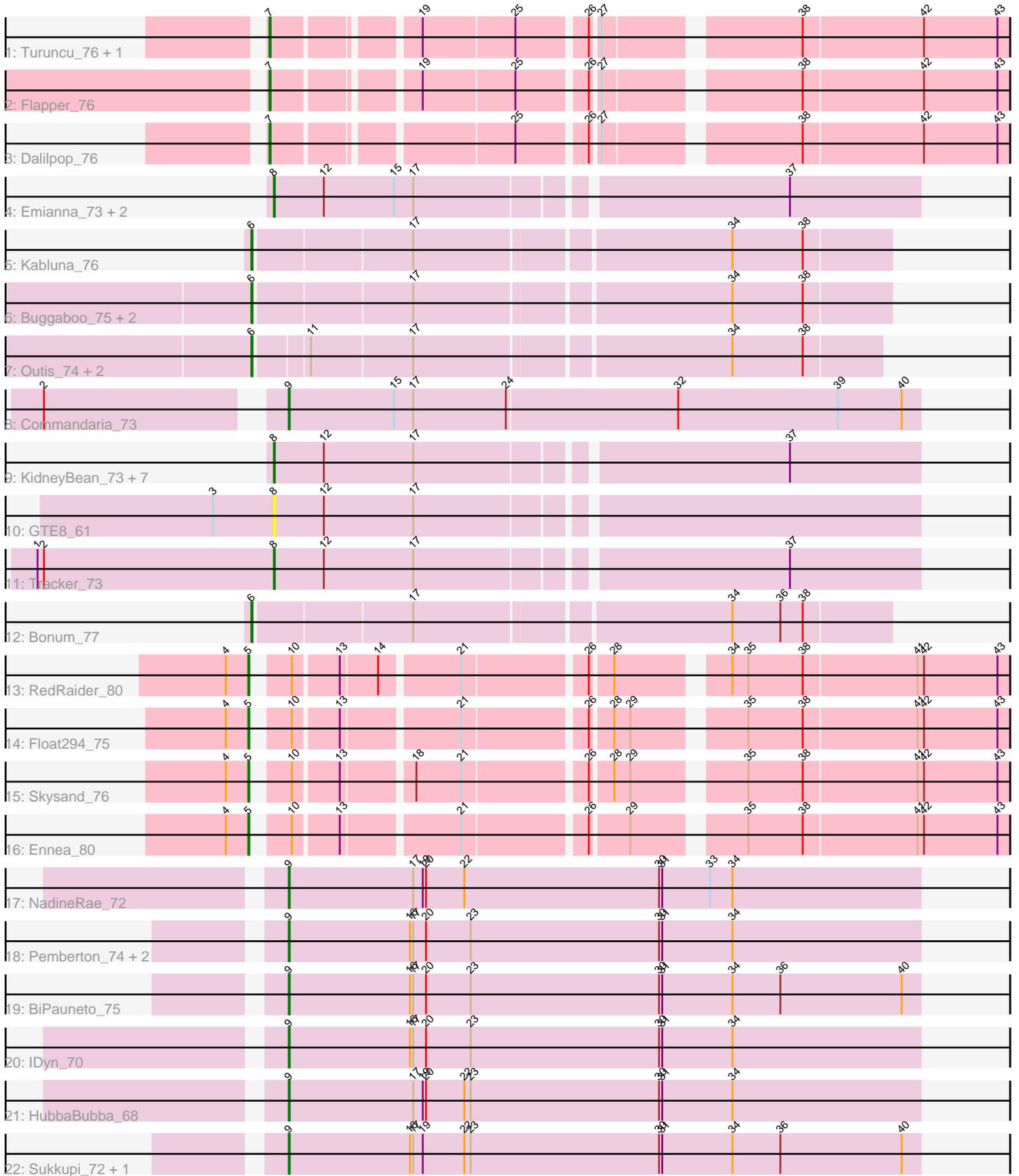# Pham 289558

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 289558 Report

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

Pham number 289558 has 39 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Turuncu_76, GTE5_61
• Track 2 : Flapper_76
• Track 3 : Dalilpop_76
• Track 4 : Emianna_73, NatB6_73, Kurt_73
• Track 5 : Kabluna_76
• Track 6 : Buggaboo_75, SuperSulley_75, NosilaM_74
• Track 7 : Outis_74, MerCougar_76, StarStruck_74
• Track 8 : Commandaria_73
• Track 9 : KidneyBean_73, Wheezy_73, NovumRegina_73, GrootJr_75, Jifall16_72, Arti_72, Phomeo_72, Foxboro_73
• Track 10 : GTE8_61
• Track 11 : Tracker_73
• Track 12 : Bonum_77
• Track 13 : RedRaider_80
• Track 14 : Float294_75
• Track 15 : Skysand_76
• Track 16 : Ennea_80
• Track 17 : NadineRae_72
• Track 18 : Pemberton_74, Marietta_73, WhoseManz_72
• Track 19 : BiPauneto_75
• Track 20 : IDyn_70
• Track 21 : HubbaBubba_68
• Track 22 : Sukkupi_72, Yndexa_72

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

The start number called the most often in the published annotations is 8, it was called in 12 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Arti_72, Emianna_73, Foxboro_73, GTE8_61, GrootJr_75, Jifall16_72, KidneyBean_73, Kurt_73, NatB6_73, NovumRegina_73, Phomeo_72, Tracker_73, Wheezy_73,

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

Genes that do not have the "Most Annotated" start:
• BiPauneto_75, Bonum_77, Buggaboo_75, Commandaria_73, Dalilpop_76, Ennea_80, Flapper_76, Float294_75, GTE5_61, HubbaBubba_68, IDyn_70, Kabluna_76, Marietta_73, MerCougar_76, NadineRae_72, NosilaM_74, Outis_74, Pemberton_74, RedRaider_80, Skysand_76, StarStruck_74, Sukkupi_72, SuperSulley_75, Turuncu_76, WhoseManz_72, Yndexa_72,

Summary by start number:

Start 5:
• Found in 4 of 39 (10.3%) of genes in pham
• Manual Annotations of this start: 4 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Ennea_80 (CR3), Float294_75 (CR3), RedRaider_80 (CR3), Skysand_76 (CR3),

Start 6:
• Found in 8 of 39 (20.5%) of genes in pham
• Manual Annotations of this start: 8 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Bonum_77 (CR2), Buggaboo_75 (CR2), Kabluna_76 (CR2), MerCougar_76 (CR2), NosilaM_74 (CR2), Outis_74 (CR2), StarStruck_74 (CR2), SuperSulley_75 (CR2),

Start 7:
• Found in 4 of 39 (10.3%) of genes in pham
• Manual Annotations of this start: 3 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Dalilpop_76 (CR1), Flapper_76 (CR1), GTE5_61 (CR1), Turuncu_76 (CR1),

Start 8:
• Found in 13 of 39 (33.3%) of genes in pham
• Manual Annotations of this start: 12 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Arti_72 (CR2), Emianna_73 (CR2), Foxboro_73 (CR2), GTE8_61 (CR2), GrootJr_75 (CR2), Jifall16_72 (CR2), KidneyBean_73 (CR2), Kurt_73 (CR2), NatB6_73 (CR2), NovumRegina_73 (CR2), Phomeo_72 (CR2), Tracker_73 (CR2), Wheezy_73 (CR2),

Start 9:
• Found in 10 of 39 (25.6%) of genes in pham
• Manual Annotations of this start: 9 of 36
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BiPauneto_75 (CR4), Commandaria_73 (CR2), HubbaBubba_68 (CR4), IDyn_70 (CR4), Marietta_73 (CR4), NadineRae_72 (CR4), Pemberton_74 (CR4), Sukkupi_72 (CR4), WhoseManz_72 (CR4), Yndexa_72 (CR4),

Summary by clusters:

There are 4 clusters represented in this pham: CR2, CR3, CR1, CR4,

Info for manual annotations of cluster CR1:
•Start number 7 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:
•Start number 6 was manually annotated 8 times for cluster CR2.
•Start number 8 was manually annotated 12 times for cluster CR2.
•Start number 9 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR3:
•Start number 5 was manually annotated 4 times for cluster CR3.

Info for manual annotations of cluster CR4:
•Start number 9 was manually annotated 8 times for cluster CR4.

Gene Information:

Gene: Arti_72 Start: 55984, Stop: 55409, Start Num: 8
Candidate Starts for Arti_72:
(Start: 8 @55984 has 12 MA's), (12, 55939), (17, 55855), (37, 55531),

Gene: BiPauneto_75 Start: 55359, Stop: 54766, Start Num: 9
Candidate Starts for BiPauneto_75:
(Start: 9 @55359 has 9 MA's), (16, 55245), (17, 55242), (20, 55230), (23, 55188), (30, 55011), (31, 55008), (34, 54942), (36, 54897), (40, 54783),

Gene: Bonum_77 Start: 57141, Stop: 56572, Start Num: 6
Candidate Starts for Bonum_77:
(Start: 6 @57141 has 8 MA's), (17, 57000), (34, 56718), (36, 56673), (38, 56652),

Gene: Buggaboo_75 Start: 57707, Stop: 57138, Start Num: 6
Candidate Starts for Buggaboo_75:
(Start: 6 @57707 has 8 MA's), (17, 57566), (34, 57284), (38, 57218),

Gene: Commandaria_73 Start: 56963, Stop: 56376, Start Num: 9
Candidate Starts for Commandaria_73:
(2, 57164), (Start: 9 @56963 has 9 MA's), (15, 56864), (17, 56846), (24, 56759), (32, 56603), (39, 56453), (40, 56393),

Gene: Dalilpop_76 Start: 57918, Stop: 57295, Start Num: 7
Candidate Starts for Dalilpop_76:
(Start: 7 @57918 has 3 MA's), (25, 57717), (26, 57657), (27, 57651), (38, 57486), (42, 57375), (43, 57306),

Gene: Emianna_73 Start: 57195, Stop: 56620, Start Num: 8
Candidate Starts for Emianna_73:
(Start: 8 @57195 has 12 MA's), (12, 57150), (15, 57084), (17, 57066), (37, 56742),

Gene: Ennea_80 Start: 58385, Stop: 57747, Start Num: 5

Candidate Starts for Ennea_80:
(4, 58406), (Start: 5 @58385 has 4 MA's), (10, 58361), (13, 58322), (21, 58220), (26, 58112), (29, 58079), (35, 57989), (38, 57938), (41, 57833), (42, 57827), (43, 57758),

Gene: Flapper_76 Start: 57471, Stop: 56848, Start Num: 7
Candidate Starts for Flapper_76:
(Start: 7 @57471 has 3 MA's), (19, 57354), (25, 57270), (26, 57210), (27, 57204), (38, 57039), (42, 56928), (43, 56859),

Gene: Float294_75 Start: 58291, Stop: 57653, Start Num: 5
Candidate Starts for Float294_75:
(4, 58312), (Start: 5 @58291 has 4 MA's), (10, 58267), (13, 58228), (21, 58126), (26, 58018), (28, 58000), (29, 57985), (35, 57895), (38, 57844), (41, 57739), (42, 57733), (43, 57664),

Gene: Foxboro_73 Start: 57407, Stop: 56832, Start Num: 8
Candidate Starts for Foxboro_73:
(Start: 8 @57407 has 12 MA's), (12, 57362), (17, 57278), (37, 56954),

Gene: GTE5_61 Start: 50149, Stop: 49526, Start Num: 7
Candidate Starts for GTE5_61:
(Start: 7 @50149 has 3 MA's), (19, 50032), (25, 49948), (26, 49888), (27, 49882), (38, 49717), (42, 49606), (43, 49537),

Gene: GTE8_61 Start: 50187, Stop: 49612, Start Num: 8
Candidate Starts for GTE8_61:
(3, 50244), (Start: 8 @50187 has 12 MA's), (12, 50142), (17, 50058),

Gene: GrootJr_75 Start: 56589, Stop: 56014, Start Num: 8
Candidate Starts for GrootJr_75:
(Start: 8 @56589 has 12 MA's), (12, 56544), (17, 56460), (37, 56136),

Gene: HubbaBubba_68 Start: 52207, Stop: 51614, Start Num: 9
Candidate Starts for HubbaBubba_68:
(Start: 9 @52207 has 9 MA's), (17, 52090), (19, 52081), (20, 52078), (22, 52042), (23, 52036), (30, 51859), (31, 51856), (34, 51790),

Gene: IDyn_70 Start: 52954, Stop: 52361, Start Num: 9
Candidate Starts for IDyn_70:
(Start: 9 @52954 has 9 MA's), (16, 52840), (17, 52837), (20, 52825), (23, 52783), (30, 52606), (31, 52603), (34, 52537),

Gene: Jifall16_72 Start: 56900, Stop: 56325, Start Num: 8
Candidate Starts for Jifall16_72:
(Start: 8 @56900 has 12 MA's), (12, 56855), (17, 56771), (37, 56447),

Gene: Kabluna_76 Start: 56470, Stop: 55901, Start Num: 6
Candidate Starts for Kabluna_76:
(Start: 6 @56470 has 8 MA's), (17, 56329), (34, 56047), (38, 55981),

Gene: KidneyBean_73 Start: 57024, Stop: 56449, Start Num: 8
Candidate Starts for KidneyBean_73:
(Start: 8 @57024 has 12 MA's), (12, 56979), (17, 56895), (37, 56571),

Gene: Kurt_73 Start: 57210, Stop: 56635, Start Num: 8
Candidate Starts for Kurt_73:
(Start: 8 @57210 has 12 MA's), (12, 57165), (15, 57099), (17, 57081), (37, 56757),

Gene: Marietta_73 Start: 53254, Stop: 52661, Start Num: 9
Candidate Starts for Marietta_73:
(Start: 9 @53254 has 9 MA's), (16, 53140), (17, 53137), (20, 53125), (23, 53083), (30, 52906), (31, 52903), (34, 52837),

Gene: MerCougar_76 Start: 58174, Stop: 57617, Start Num: 6
Candidate Starts for MerCougar_76:
(Start: 6 @58174 has 8 MA's), (11, 58129), (17, 58036), (34, 57754), (38, 57688),

Gene: NadineRae_72 Start: 52863, Stop: 52270, Start Num: 9
Candidate Starts for NadineRae_72:
(Start: 9 @52863 has 9 MA's), (17, 52746), (19, 52737), (20, 52734), (22, 52698), (30, 52515), (31, 52512), (33, 52467), (34, 52446),

Gene: NatB6_73 Start: 56300, Stop: 55725, Start Num: 8
Candidate Starts for NatB6_73:
(Start: 8 @56300 has 12 MA's), (12, 56255), (15, 56189), (17, 56171), (37, 55847),

Gene: NosilaM_74 Start: 56784, Stop: 56215, Start Num: 6
Candidate Starts for NosilaM_74:
(Start: 6 @56784 has 8 MA's), (17, 56643), (34, 56361), (38, 56295),

Gene: NovumRegina_73 Start: 56588, Stop: 56013, Start Num: 8
Candidate Starts for NovumRegina_73:
(Start: 8 @56588 has 12 MA's), (12, 56543), (17, 56459), (37, 56135),

Gene: Outis_74 Start: 57266, Stop: 56709, Start Num: 6
Candidate Starts for Outis_74:
(Start: 6 @57266 has 8 MA's), (11, 57221), (17, 57128), (34, 56846), (38, 56780),

Gene: Pemberton_74 Start: 53434, Stop: 52841, Start Num: 9
Candidate Starts for Pemberton_74:
(Start: 9 @53434 has 9 MA's), (16, 53320), (17, 53317), (20, 53305), (23, 53263), (30, 53086), (31, 53083), (34, 53017),

Gene: Phomeo_72 Start: 56896, Stop: 56321, Start Num: 8
Candidate Starts for Phomeo_72:
(Start: 8 @56896 has 12 MA's), (12, 56851), (17, 56767), (37, 56443),

Gene: RedRaider_80 Start: 59423, Stop: 58785, Start Num: 5
Candidate Starts for RedRaider_80:
(4, 59444), (Start: 5 @59423 has 4 MA's), (10, 59399), (13, 59360), (14, 59327), (21, 59258), (26, 59150), (28, 59132), (34, 59042), (35, 59027), (38, 58976), (41, 58871), (42, 58865), (43, 58796),

Gene: Skysand_76 Start: 57785, Stop: 57147, Start Num: 5
Candidate Starts for Skysand_76:
(4, 57806), (Start: 5 @57785 has 4 MA's), (10, 57761), (13, 57722), (18, 57662), (21, 57620), (26, 57512), (28, 57494), (29, 57479), (35, 57389), (38, 57338), (41, 57233), (42, 57227), (43, 57158),

Gene: StarStruck_74 Start: 57266, Stop: 56709, Start Num: 6
Candidate Starts for StarStruck_74:
(Start: 6 @57266 has 8 MA's), (11, 57221), (17, 57128), (34, 56846), (38, 56780),

Gene: Sukkupi_72 Start: 54906, Stop: 54313, Start Num: 9
Candidate Starts for Sukkupi_72:
(Start: 9 @54906 has 9 MA's), (16, 54792), (17, 54789), (19, 54780), (22, 54741), (23, 54735), (30, 54558), (31, 54555), (34, 54489), (36, 54444), (40, 54330),

Gene: SuperSulley_75 Start: 57707, Stop: 57138, Start Num: 6
Candidate Starts for SuperSulley_75:
(Start: 6 @57707 has 8 MA's), (17, 57566), (34, 57284), (38, 57218),

Gene: Tracker_73 Start: 56044, Stop: 55469, Start Num: 8
Candidate Starts for Tracker_73:
(1, 56266), (2, 56260), (Start: 8 @56044 has 12 MA's), (12, 55999), (17, 55915), (37, 55591),

Gene: Turuncu_76 Start: 57293, Stop: 56670, Start Num: 7
Candidate Starts for Turuncu_76:
(Start: 7 @57293 has 3 MA's), (19, 57176), (25, 57092), (26, 57032), (27, 57026), (38, 56861), (42, 56750), (43, 56681),

Gene: Wheezy_73 Start: 56258, Stop: 55683, Start Num: 8
Candidate Starts for Wheezy_73:
(Start: 8 @56258 has 12 MA's), (12, 56213), (17, 56129), (37, 55805),

Gene: WhoseManz_72 Start: 52921, Stop: 52328, Start Num: 9
Candidate Starts for WhoseManz_72:
(Start: 9 @52921 has 9 MA's), (16, 52807), (17, 52804), (20, 52792), (23, 52750), (30, 52573), (31, 52570), (34, 52504),

Gene: Yndexa_72 Start: 54906, Stop: 54313, Start Num: 9
Candidate Starts for Yndexa_72:
(Start: 9 @54906 has 9 MA's), (16, 54792), (17, 54789), (19, 54780), (22, 54741), (23, 54735), (30, 54558), (31, 54555), (34, 54489), (36, 54444), (40, 54330),