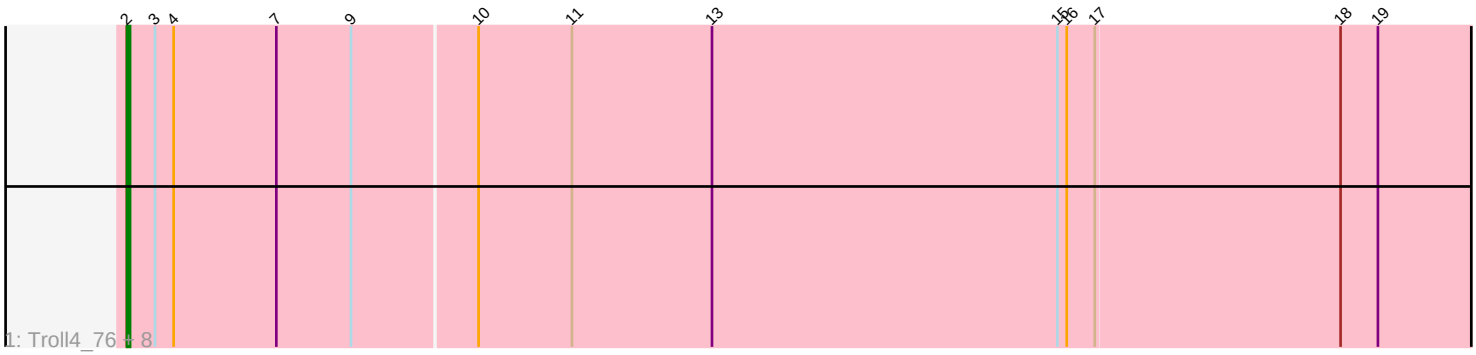
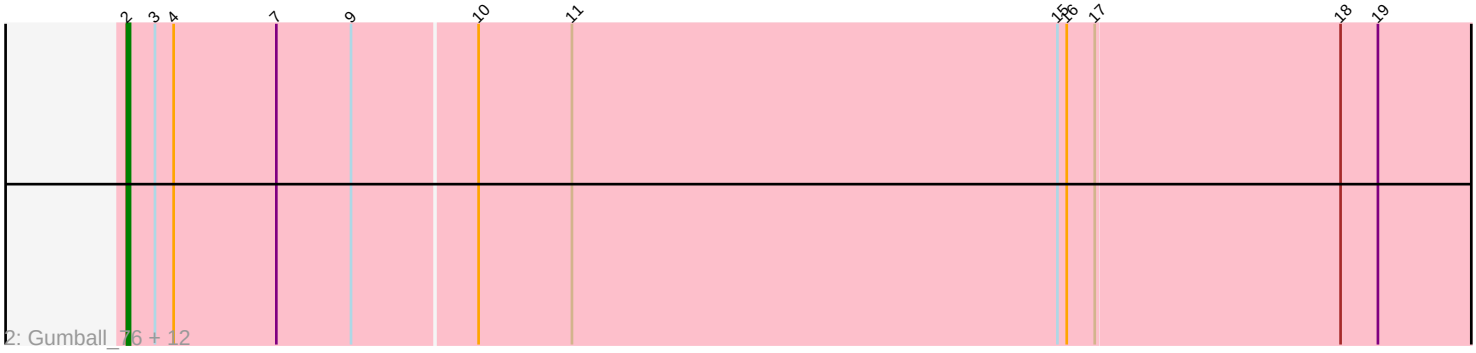
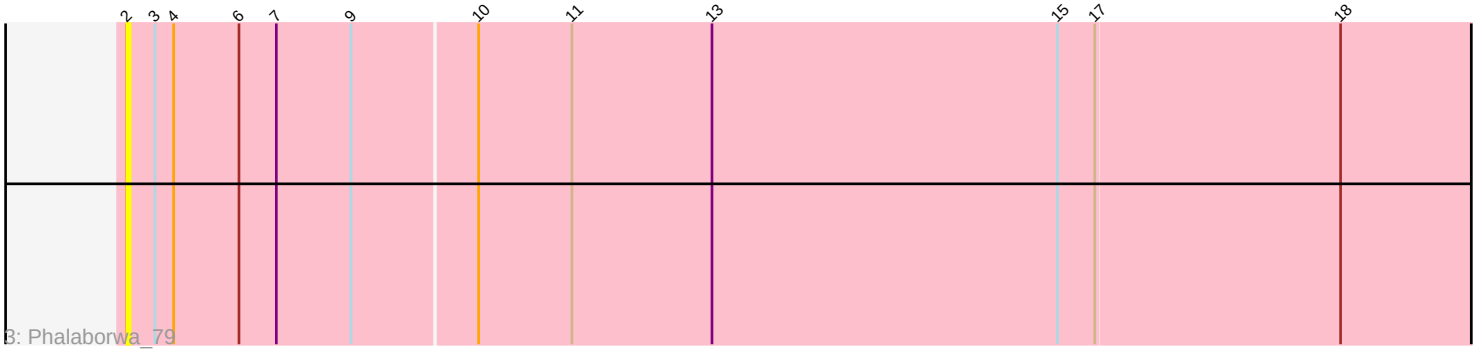
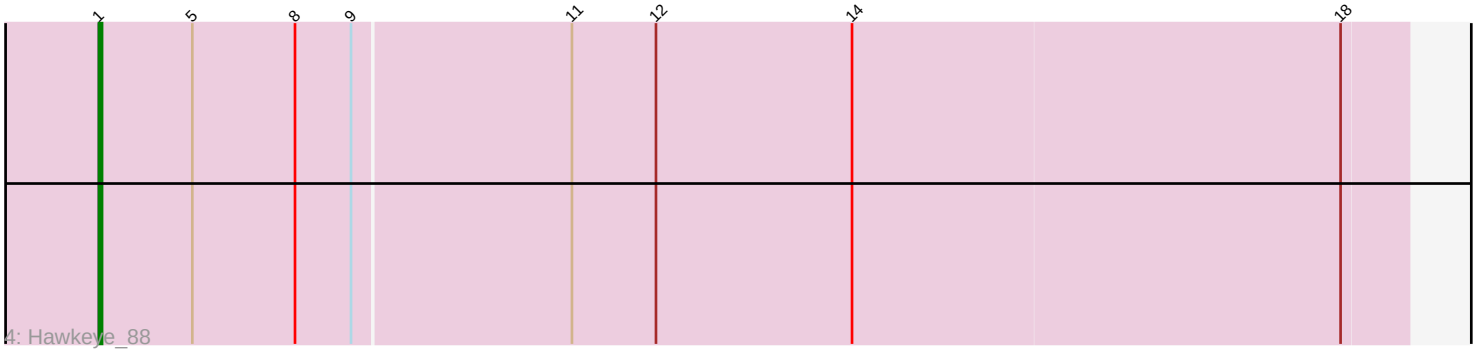
Pham 346121


2
3
4
7
9
10
11
13
15
16
17
18
19
1: Troll4_76 + 8


2
3
4
7
9
10
11
15
16
17
18
19
2: Gumball_76 + 12


2
3
4
6
7
9
10
11
13
15
17
18
3: Phalaborwa_79


1
5
8
9
11
12
14
18
4: Hawkeye_88

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 346121 Report

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

Pham number 346121 has 24 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Troll4_76, Giuseppe_78, BigMama_74, Mopey_78, Thoth_76, Delton_76, Visconti_77, Prager_77, Penelope2018_76
• Track 2 : Gumball_76, Erk16_76, Adjutor_74, SirHarley_78, PBI1_72, WaldoWhy_78, Helpful_79, Chill_78, KandZ_74, Butterscotch_74, SuperheroCarly_76, Nova_76, PLot_76
• Track 3 : Phalaborwa_79
• Track 4 : Hawkeye_88

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

The start number called the most often in the published annotations is 2, it was called in 22 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Adjutor_74, BigMama_74, Butterscotch_74, Chill_78, Delton_76, Erk16_76, Giuseppe_78, Gumball_76, Helpful_79, KandZ_74, Mopey_78, Nova_76, PBI1_72, PLot_76, Penelope2018_76, Phalaborwa_79, Prager_77, SirHarley_78, SuperheroCarly_76, Thoth_76, Troll4_76, Visconti_77, WaldoWhy_78,

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

Genes that do not have the "Most Annotated" start:
• Hawkeye_88,

Summary by start number:

Start 1:
• Found in 1 of 24 (4.2%) of genes in pham
• Manual Annotations of this start: 1 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hawkeye_88 (D2),

Start 2:

• Found in 23 of 24 (95.8%) of genes in pham
• Manual Annotations of this start: 22 of 23
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Adjutor_74 (D1), BigMama_74 (D1), Butterscotch_74 (D1), Chill_78 (D1), Delton_76 (D1), Erk16_76 (D1), Giuseppe_78 (D1), Gumball_76 (D1), Helpful_79 (D1), KandZ_74 (D1), Mopey_78 (D1), Nova_76 (D1), PBI1_72 (D1), PLot_76 (D1), Penelope2018_76 (D1), Phalaborwa_79 (D1), Prager_77 (D1), SirHarley_78 (D1), SuperheroCarly_76 (D1), Thoth_76 (D1), Troll4_76 (D1), Visconti_77 (D1), WaldoWhy_78 (D1),

Summary by clusters:

There are 2 clusters represented in this pham: D2, D1,

Info for manual annotations of cluster D1:
•Start number 2 was manually annotated 22 times for cluster D1.

Info for manual annotations of cluster D2:
•Start number 1 was manually annotated 1 time for cluster D2.

Gene Information:

Gene: Adjutor_74 Start: 56815, Stop: 57255, Start Num: 2
Candidate Starts for Adjutor_74:
(Start: 2 @56815 has 22 MA's), (3, 56824), (4, 56830), (7, 56863), (9, 56887), (10, 56926), (11, 56956), (15, 57112), (16, 57115), (17, 57124), (18, 57202), (19, 57214),

Gene: BigMama_74 Start: 56888, Stop: 57328, Start Num: 2
Candidate Starts for BigMama_74:
(Start: 2 @56888 has 22 MA's), (3, 56897), (4, 56903), (7, 56936), (9, 56960), (10, 56999), (11, 57029), (13, 57074), (15, 57185), (16, 57188), (17, 57197), (18, 57275), (19, 57287),

Gene: Butterscotch_74 Start: 56866, Stop: 57306, Start Num: 2
Candidate Starts for Butterscotch_74:
(Start: 2 @56866 has 22 MA's), (3, 56875), (4, 56881), (7, 56914), (9, 56938), (10, 56977), (11, 57007), (15, 57163), (16, 57166), (17, 57175), (18, 57253), (19, 57265),

Gene: Chill_78 Start: 56843, Stop: 57283, Start Num: 2
Candidate Starts for Chill_78:
(Start: 2 @56843 has 22 MA's), (3, 56852), (4, 56858), (7, 56891), (9, 56915), (10, 56954), (11, 56984), (15, 57140), (16, 57143), (17, 57152), (18, 57230), (19, 57242),

Gene: Delton_76 Start: 57264, Stop: 57704, Start Num: 2
Candidate Starts for Delton_76:
(Start: 2 @57264 has 22 MA's), (3, 57273), (4, 57279), (7, 57312), (9, 57336), (10, 57375), (11, 57405), (13, 57450), (15, 57561), (16, 57564), (17, 57573), (18, 57651), (19, 57663),

Gene: Erk16_76 Start: 56921, Stop: 57361, Start Num: 2
Candidate Starts for Erk16_76:
(Start: 2 @56921 has 22 MA's), (3, 56930), (4, 56936), (7, 56969), (9, 56993), (10, 57032), (11, 57062), (15, 57218), (16, 57221), (17, 57230), (18, 57308), (19, 57320),

Gene: Giuseppe_78 Start: 56793, Stop: 57233, Start Num: 2
Candidate Starts for Giuseppe_78:
(Start: 2 @56793 has 22 MA's), (3, 56802), (4, 56808), (7, 56841), (9, 56865), (10, 56904), (11, 56934), (13, 56979), (15, 57090), (16, 57093), (17, 57102), (18, 57180), (19, 57192),

Gene: Gumball_76 Start: 57266, Stop: 57706, Start Num: 2
Candidate Starts for Gumball_76:
(Start: 2 @57266 has 22 MA's), (3, 57275), (4, 57281), (7, 57314), (9, 57338), (10, 57377), (11, 57407), (15, 57563), (16, 57566), (17, 57575), (18, 57653), (19, 57665),

Gene: Hawkeye_88 Start: 58726, Stop: 59142, Start Num: 1
Candidate Starts for Hawkeye_88:
(Start: 1 @58726 has 1 MA's), (5, 58756), (8, 58789), (9, 58807), (11, 58876), (12, 58903), (14, 58966), (18, 59122),

Gene: Helpful_79 Start: 57181, Stop: 57621, Start Num: 2
Candidate Starts for Helpful_79:
(Start: 2 @57181 has 22 MA's), (3, 57190), (4, 57196), (7, 57229), (9, 57253), (10, 57292), (11, 57322), (15, 57478), (16, 57481), (17, 57490), (18, 57568), (19, 57580),

Gene: KandZ_74 Start: 57012, Stop: 57452, Start Num: 2
Candidate Starts for KandZ_74:
(Start: 2 @57012 has 22 MA's), (3, 57021), (4, 57027), (7, 57060), (9, 57084), (10, 57123), (11, 57153), (15, 57309), (16, 57312), (17, 57321), (18, 57399), (19, 57411),

Gene: Mopey_78 Start: 56819, Stop: 57259, Start Num: 2
Candidate Starts for Mopey_78:
(Start: 2 @56819 has 22 MA's), (3, 56828), (4, 56834), (7, 56867), (9, 56891), (10, 56930), (11, 56960), (13, 57005), (15, 57116), (16, 57119), (17, 57128), (18, 57206), (19, 57218),

Gene: Nova_76 Start: 57289, Stop: 57729, Start Num: 2
Candidate Starts for Nova_76:
(Start: 2 @57289 has 22 MA's), (3, 57298), (4, 57304), (7, 57337), (9, 57361), (10, 57400), (11, 57430), (15, 57586), (16, 57589), (17, 57598), (18, 57676), (19, 57688),

Gene: PBI1_72 Start: 56797, Stop: 57237, Start Num: 2
Candidate Starts for PBI1_72:
(Start: 2 @56797 has 22 MA's), (3, 56806), (4, 56812), (7, 56845), (9, 56869), (10, 56908), (11, 56938), (15, 57094), (16, 57097), (17, 57106), (18, 57184), (19, 57196),

Gene: PLot_76 Start: 56819, Stop: 57259, Start Num: 2
Candidate Starts for PLot_76:
(Start: 2 @56819 has 22 MA's), (3, 56828), (4, 56834), (7, 56867), (9, 56891), (10, 56930), (11, 56960), (15, 57116), (16, 57119), (17, 57128), (18, 57206), (19, 57218),

Gene: Penelope2018_76 Start: 56853, Stop: 57293, Start Num: 2
Candidate Starts for Penelope2018_76:
(Start: 2 @56853 has 22 MA's), (3, 56862), (4, 56868), (7, 56901), (9, 56925), (10, 56964), (11, 56994), (13, 57039), (15, 57150), (16, 57153), (17, 57162), (18, 57240), (19, 57252),

Gene: Phalaborwa_79 Start: 57443, Stop: 57883, Start Num: 2
Candidate Starts for Phalaborwa_79:

(Start: 2 @57443 has 22 MA's), (3, 57452), (4, 57458), (6, 57479), (7, 57491), (9, 57515), (10, 57554), (11, 57584), (13, 57629), (15, 57740), (17, 57752), (18, 57830),

Gene: Prager_77 Start: 56913, Stop: 57353, Start Num: 2
Candidate Starts for Prager_77:
(Start: 2 @56913 has 22 MA's), (3, 56922), (4, 56928), (7, 56961), (9, 56985), (10, 57024), (11, 57054), (13, 57099), (15, 57210), (16, 57213), (17, 57222), (18, 57300), (19, 57312),

Gene: SirHarley_78 Start: 57249, Stop: 57689, Start Num: 2
Candidate Starts for SirHarley_78:
(Start: 2 @57249 has 22 MA's), (3, 57258), (4, 57264), (7, 57297), (9, 57321), (10, 57360), (11, 57390), (15, 57546), (16, 57549), (17, 57558), (18, 57636), (19, 57648),

Gene: SuperheroCarly_76 Start: 57001, Stop: 57441, Start Num: 2
Candidate Starts for SuperheroCarly_76:
(Start: 2 @57001 has 22 MA's), (3, 57010), (4, 57016), (7, 57049), (9, 57073), (10, 57112), (11, 57142), (15, 57298), (16, 57301), (17, 57310), (18, 57388), (19, 57400),

Gene: Thoth_76 Start: 56907, Stop: 57347, Start Num: 2
Candidate Starts for Thoth_76:
(Start: 2 @56907 has 22 MA's), (3, 56916), (4, 56922), (7, 56955), (9, 56979), (10, 57018), (11, 57048), (13, 57093), (15, 57204), (16, 57207), (17, 57216), (18, 57294), (19, 57306),

Gene: Troll4_76 Start: 56975, Stop: 57415, Start Num: 2
Candidate Starts for Troll4_76:
(Start: 2 @56975 has 22 MA's), (3, 56984), (4, 56990), (7, 57023), (9, 57047), (10, 57086), (11, 57116), (13, 57161), (15, 57272), (16, 57275), (17, 57284), (18, 57362), (19, 57374),

Gene: Visconti_77 Start: 56883, Stop: 57323, Start Num: 2
Candidate Starts for Visconti_77:
(Start: 2 @56883 has 22 MA's), (3, 56892), (4, 56898), (7, 56931), (9, 56955), (10, 56994), (11, 57024), (13, 57069), (15, 57180), (16, 57183), (17, 57192), (18, 57270), (19, 57282),

Gene: WaldoWhy_78 Start: 56843, Stop: 57283, Start Num: 2
Candidate Starts for WaldoWhy_78:
(Start: 2 @56843 has 22 MA's), (3, 56852), (4, 56858), (7, 56891), (9, 56915), (10, 56954), (11, 56984), (15, 57140), (16, 57143), (17, 57152), (18, 57230), (19, 57242),