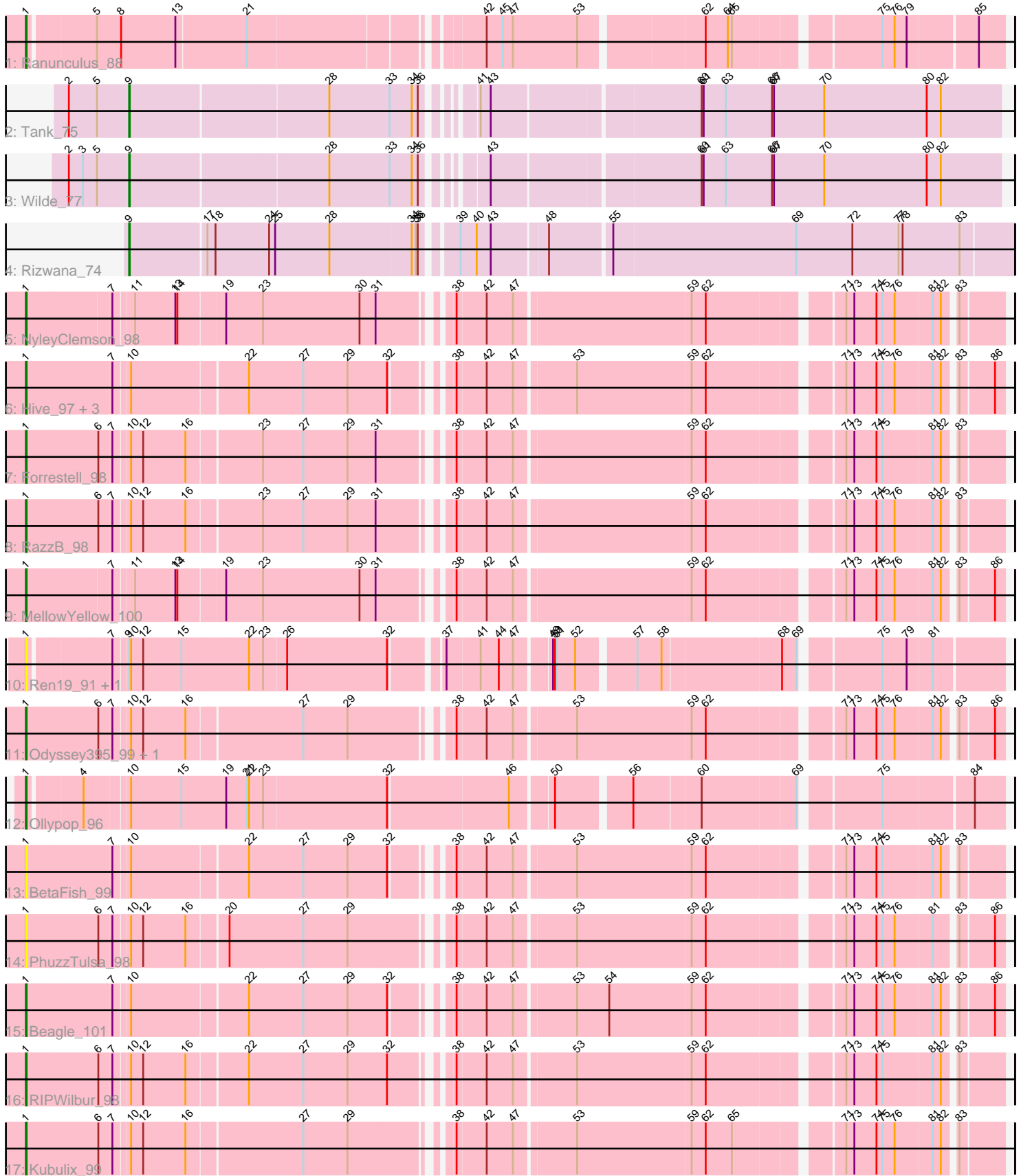


Pham 309250



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 309250 Report

This analysis was run 06/27/26 on database version 652.

Pham number 309250 has 22 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Ranunculus_88
- Track 2 : Tank_75
- Track 3 : Wilde_77
- Track 4 : Rizwana_74
- Track 5 : NyleyClemson_98
- Track 6 : Hive_97, Popstraw_95, Pureglobe5_99, Pointis_96
- Track 7 : Forrestell_98
- Track 8 : RazzB_98
- Track 9 : MellowYellow_100
- Track 10 : Ren19_91, Nikan_96
- Track 11 : Odyssey395_99, DogYard_99
- Track 12 : Ollypop_96
- Track 13 : BetaFish_99
- Track 14 : PhuzzTulsa_98
- Track 15 : Beagle_101
- Track 16 : RIPWilbur_98
- Track 17 : Kubulix_99

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

The start number called the most often in the published annotations is 1, it was called in 13 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beagle_101, BetaFish_99, DogYard_99, Forrestell_98, Hive_97, Kubulix_99, MellowYellow_100, Nikan_96, NyleyClemson_98, Odyssey395_99, Ollypop_96, PhuzzTulsa_98, Pointis_96, Popstraw_95, Pureglobe5_99, RIPWilbur_98, Ranunculus_88, RazzB_98, Ren19_91,

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

-

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

- Rizwana_74, Tank_75, Wilde_77,

Summary by start number:

Start 1:

- Found in 19 of 22 (86.4%) of genes in pham
- Manual Annotations of this start: 13 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beagle_101 (AP2), BetaFish_99 (AP2), DogYard_99 (AP2), Forrestell_98 (AP2), Hive_97 (AP2), Kubulix_99 (AP2), MellowYellow_100 (AP2), Nikan_96 (AP2), NyleyClemson_98 (AP2), Odyssey395_99 (AP2), Ollypop_96 (AP2), PhuzzTulsa_98 (AP2), Pointis_96 (AP2), Popstraw_95 (AP2), Pureglobe5_99 (AP2), RIPWilbur_98 (AP2), Ranunculus_88 (AP), RazzB_98 (AP2), Ren19_91 (AP2),

Start 9:

- Found in 5 of 22 (22.7%) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Rizwana_74 (AP1), Tank_75 (AP1), Wilde_77 (AP1),

Summary by clusters:

There are 3 clusters represented in this pham: AP2, AP, AP1,

Info for manual annotations of cluster AP:

- Start number 1 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 9 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 1 was manually annotated 12 times for cluster AP2.

Gene Information:

Gene: Beagle_101 Start: 59990, Stop: 58668, Start Num: 1

Candidate Starts for Beagle_101:

(Start: 1 @59990 has 13 MA's), (7, 59867), (10, 59846), (22, 59684), (27, 59603), (29, 59537), (32, 59480), (38, 59417), (42, 59375), (47, 59336), (53, 59252), (54, 59204), (59, 59084), (62, 59063), (71, 58883), (73, 58871), (74, 58838), (75, 58829), (76, 58811), (81, 58757), (82, 58745), (83, 58730), (86, 58682),

Gene: BetaFish_99 Start: 60205, Stop: 58883, Start Num: 1

Candidate Starts for BetaFish_99:

(Start: 1 @60205 has 13 MA's), (7, 60082), (10, 60061), (22, 59899), (27, 59818), (29, 59752), (32, 59695), (38, 59632), (42, 59590), (47, 59551), (53, 59467), (59, 59299), (62, 59278), (71, 59098), (73, 59086), (74, 59053), (75, 59044), (81, 58972), (82, 58960), (83, 58945),

Gene: DogYard_99 Start: 59698, Stop: 58373, Start Num: 1

Candidate Starts for DogYard_99:

(Start: 1 @59698 has 13 MA's), (6, 59593), (7, 59575), (10, 59554), (12, 59536), (16, 59473), (27, 59311), (29, 59245), (38, 59122), (42, 59080), (47, 59041), (53, 58957), (59, 58789), (62, 58768), (71, 58588), (73, 58576), (74, 58543), (75, 58534), (76, 58516), (81, 58462), (82, 58450), (83, 58435), (86, 58387),

Gene: Forrestell_98 Start: 58406, Stop: 57081, Start Num: 1

Candidate Starts for Forrestell_98:

(Start: 1 @58406 has 13 MA's), (6, 58301), (7, 58283), (10, 58262), (12, 58244), (16, 58181), (23, 58079), (27, 58019), (29, 57953), (31, 57911), (38, 57830), (42, 57788), (47, 57749), (59, 57497), (62, 57476), (71, 57296), (73, 57284), (74, 57251), (75, 57242), (81, 57170), (82, 57158), (83, 57143),

Gene: Hive_97 Start: 59680, Stop: 58358, Start Num: 1

Candidate Starts for Hive_97:

(Start: 1 @59680 has 13 MA's), (7, 59557), (10, 59536), (22, 59374), (27, 59293), (29, 59227), (32, 59170), (38, 59107), (42, 59065), (47, 59026), (53, 58942), (59, 58774), (62, 58753), (71, 58573), (73, 58561), (74, 58528), (75, 58519), (76, 58501), (81, 58447), (82, 58435), (83, 58420), (86, 58372),

Gene: Kubulix_99 Start: 59365, Stop: 58040, Start Num: 1

Candidate Starts for Kubulix_99:

(Start: 1 @59365 has 13 MA's), (6, 59260), (7, 59242), (10, 59221), (12, 59203), (16, 59140), (27, 58978), (29, 58912), (38, 58789), (42, 58747), (47, 58708), (53, 58624), (59, 58456), (62, 58435), (65, 58396), (71, 58255), (73, 58243), (74, 58210), (75, 58201), (76, 58183), (81, 58129), (82, 58117), (83, 58102),

Gene: MellowYellow_100 Start: 59608, Stop: 58283, Start Num: 1

Candidate Starts for MellowYellow_100:

(Start: 1 @59608 has 13 MA's), (7, 59488), (11, 59461), (13, 59401), (14, 59398), (19, 59332), (23, 59281), (30, 59137), (31, 59113), (38, 59032), (42, 58990), (47, 58951), (59, 58699), (62, 58678), (71, 58498), (73, 58486), (74, 58453), (75, 58444), (76, 58426), (81, 58372), (82, 58360), (83, 58345), (86, 58297),

Gene: Nikan_96 Start: 59380, Stop: 58061, Start Num: 1

Candidate Starts for Nikan_96:

(Start: 1 @59380 has 13 MA's), (7, 59272), (Start: 9 @59254 has 3 MA's), (10, 59251), (12, 59233), (15, 59176), (22, 59080), (23, 59059), (26, 59026), (32, 58879), (37, 58813), (41, 58765), (44, 58738), (47, 58717), (49, 58669), (50, 58666), (51, 58663), (52, 58636), (57, 58558), (58, 58522), (68, 58357), (69, 58336), (75, 58231), (79, 58195), (81, 58159),

Gene: NyleyClemson_98 Start: 59238, Stop: 57913, Start Num: 1

Candidate Starts for NyleyClemson_98:

(Start: 1 @59238 has 13 MA's), (7, 59118), (11, 59091), (13, 59031), (14, 59028), (19, 58962), (23, 58911), (30, 58767), (31, 58743), (38, 58662), (42, 58620), (47, 58581), (59, 58329), (62, 58308), (71, 58128), (73, 58116), (74, 58083), (75, 58074), (76, 58056), (81, 58002), (82, 57990), (83, 57975),

Gene: Odyssey395_99 Start: 59388, Stop: 58063, Start Num: 1

Candidate Starts for Odyssey395_99:

(Start: 1 @59388 has 13 MA's), (6, 59283), (7, 59265), (10, 59244), (12, 59226), (16, 59163), (27, 59001), (29, 58935), (38, 58812), (42, 58770), (47, 58731), (53, 58647), (59, 58479), (62, 58458), (71, 58278), (73, 58266), (74, 58233), (75, 58224), (76, 58206), (81, 58152), (82, 58140), (83, 58125), (86, 58077),

Gene: Ollypop_96 Start: 60723, Stop: 59386, Start Num: 1

Candidate Starts for Ollypop_96:

(Start: 1 @60723 has 13 MA's), (4, 60654), (10, 60594), (15, 60519), (19, 60453), (21, 60426), (22, 60423), (23, 60402), (32, 60222), (46, 60048), (50, 59991), (56, 59889), (60, 59796), (69, 59661), (75, 59556), (84, 59430),

Gene: PhuzzTulsa_98 Start: 59836, Stop: 58511, Start Num: 1

Candidate Starts for PhuzzTulsa_98:

(Start: 1 @59836 has 13 MA's), (6, 59731), (7, 59713), (10, 59692), (12, 59674), (16, 59611), (20, 59557), (27, 59449), (29, 59383), (38, 59260), (42, 59218), (47, 59179), (53, 59095), (59, 58927), (62, 58906), (71, 58726), (73, 58714), (74, 58681), (75, 58672), (76, 58654), (81, 58600), (83, 58573), (86, 58525),

Gene: Pointis_96 Start: 59281, Stop: 57959, Start Num: 1

Candidate Starts for Pointis_96:

(Start: 1 @59281 has 13 MA's), (7, 59158), (10, 59137), (22, 58975), (27, 58894), (29, 58828), (32, 58771), (38, 58708), (42, 58666), (47, 58627), (53, 58543), (59, 58375), (62, 58354), (71, 58174), (73, 58162), (74, 58129), (75, 58120), (76, 58102), (81, 58048), (82, 58036), (83, 58021), (86, 57973),

Gene: Popstraw_95 Start: 59457, Stop: 58135, Start Num: 1

Candidate Starts for Popstraw_95:

(Start: 1 @59457 has 13 MA's), (7, 59334), (10, 59313), (22, 59151), (27, 59070), (29, 59004), (32, 58947), (38, 58884), (42, 58842), (47, 58803), (53, 58719), (59, 58551), (62, 58530), (71, 58350), (73, 58338), (74, 58305), (75, 58296), (76, 58278), (81, 58224), (82, 58212), (83, 58197), (86, 58149),

Gene: Pureglobe5_99 Start: 59946, Stop: 58624, Start Num: 1

Candidate Starts for Pureglobe5_99:

(Start: 1 @59946 has 13 MA's), (7, 59823), (10, 59802), (22, 59640), (27, 59559), (29, 59493), (32, 59436), (38, 59373), (42, 59331), (47, 59292), (53, 59208), (59, 59040), (62, 59019), (71, 58839), (73, 58827), (74, 58794), (75, 58785), (76, 58767), (81, 58713), (82, 58701), (83, 58686), (86, 58638),

Gene: RIPWilbur_98 Start: 59257, Stop: 57932, Start Num: 1

Candidate Starts for RIPWilbur_98:

(Start: 1 @59257 has 13 MA's), (6, 59152), (7, 59134), (10, 59113), (12, 59095), (16, 59032), (22, 58951), (27, 58870), (29, 58804), (32, 58747), (38, 58681), (42, 58639), (47, 58600), (53, 58516), (59, 58348), (62, 58327), (71, 58147), (73, 58135), (74, 58102), (75, 58093), (81, 58021), (82, 58009), (83, 57994),

Gene: Ranunculus_88 Start: 60245, Stop: 58917, Start Num: 1

Candidate Starts for Ranunculus_88:

(Start: 1 @60245 has 13 MA's), (5, 60152), (8, 60116), (13, 60035), (21, 59936), (42, 59624), (45, 59600), (47, 59585), (53, 59489), (62, 59321), (64, 59288), (65, 59282), (75, 59087), (76, 59069), (79, 59051), (85, 58955),

Gene: RazzB_98 Start: 58818, Stop: 57493, Start Num: 1

Candidate Starts for RazzB_98:

(Start: 1 @58818 has 13 MA's), (6, 58713), (7, 58695), (10, 58674), (12, 58656), (16, 58593), (23, 58491), (27, 58431), (29, 58365), (31, 58323), (38, 58242), (42, 58200), (47, 58161), (59, 57909), (62, 57888), (71, 57708), (73, 57696), (74, 57663), (75, 57654), (76, 57636), (81, 57582), (82, 57570), (83, 57555),

Gene: Ren19_91 Start: 58405, Stop: 57086, Start Num: 1

Candidate Starts for Ren19_91:

(Start: 1 @58405 has 13 MA's), (7, 58297), (Start: 9 @58279 has 3 MA's), (10, 58276), (12, 58258), (15, 58201), (22, 58105), (23, 58084), (26, 58051), (32, 57904), (37, 57838), (41, 57790), (44, 57763),

(47, 57742), (49, 57694), (50, 57691), (51, 57688), (52, 57661), (57, 57583), (58, 57547), (68, 57382), (69, 57361), (75, 57256), (79, 57220), (81, 57184),

Gene: Rizwana_74 Start: 53391, Stop: 52132, Start Num: 9

Candidate Starts for Rizwana_74:

(Start: 9 @53391 has 3 MA's), (17, 53280), (18, 53268), (24, 53190), (25, 53181), (28, 53103), (34, 52983), (35, 52977), (36, 52974), (39, 52932), (40, 52908), (43, 52887), (48, 52809), (55, 52722), (69, 52452), (72, 52368), (77, 52299), (78, 52293), (83, 52209),

Gene: Tank_75 Start: 54026, Stop: 52803, Start Num: 9

Candidate Starts for Tank_75:

(2, 54113), (5, 54071), (Start: 9 @54026 has 3 MA's), (28, 53741), (33, 53651), (34, 53618), (36, 53609), (41, 53558), (43, 53543), (60, 53249), (61, 53246), (63, 53213), (66, 53144), (67, 53141), (70, 53066), (80, 52913), (82, 52892),

Gene: Wilde_77 Start: 54367, Stop: 53144, Start Num: 9

Candidate Starts for Wilde_77:

(2, 54454), (3, 54433), (5, 54412), (Start: 9 @54367 has 3 MA's), (28, 54082), (33, 53992), (34, 53959), (36, 53950), (43, 53884), (60, 53590), (61, 53587), (63, 53554), (66, 53485), (67, 53482), (70, 53407), (80, 53254), (82, 53233),