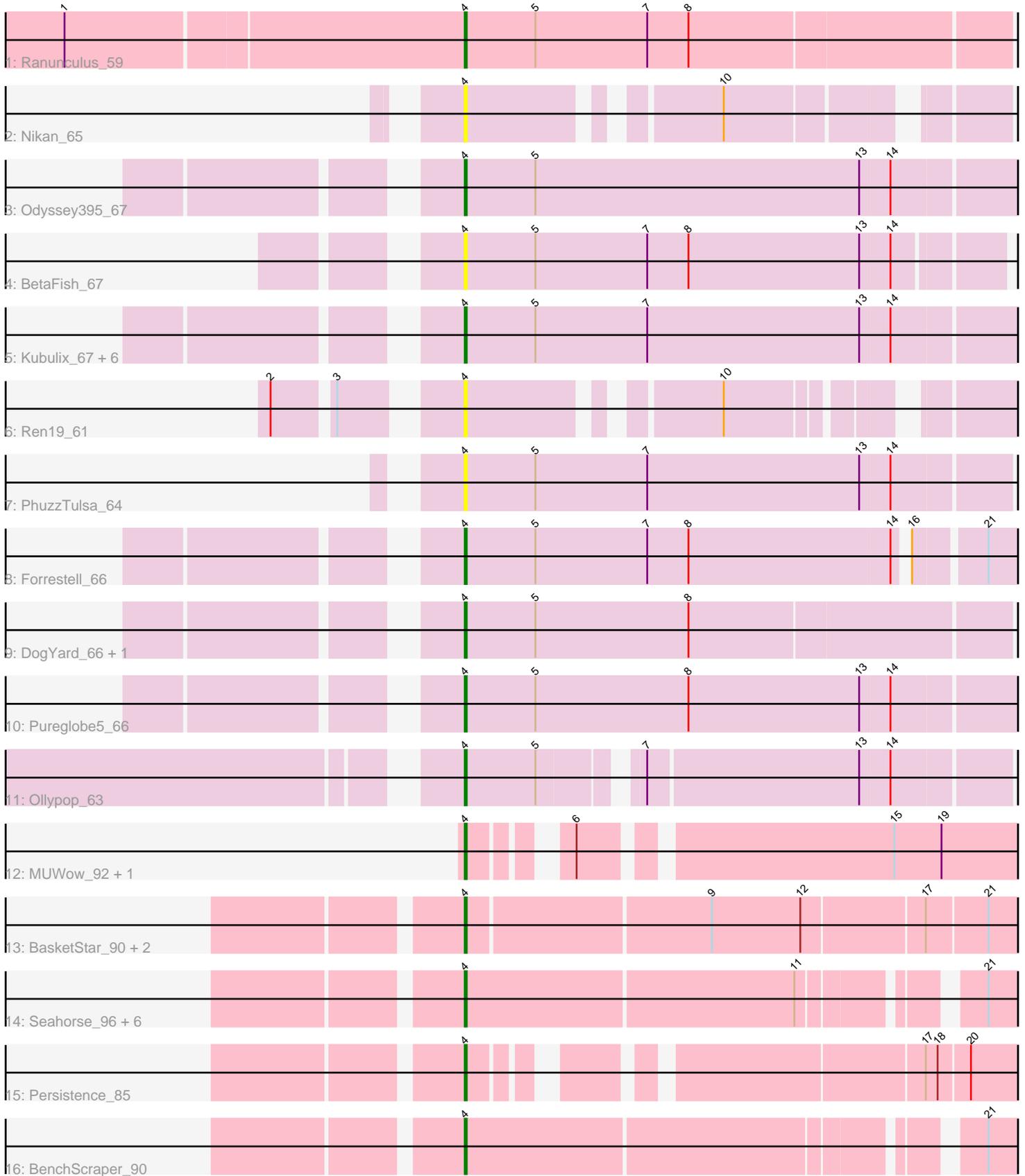# Pham 282359

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 282359 Report

This analysis was run 02/23/26 on database version 636.

Pham number 282359 has 32 members, 13 are drafts.

Phages represented in each track:
• Track 1 : Ranunculus_59
• Track 2 : Nikan_65
• Track 3 : Odyssey395_67
• Track 4 : BetaFish_67
• Track 5 : Kubulix_67, MellowYellow_67, NyleyClemson_66, Beagle_67, RazzB_66, Pointis_64, Hive_63
• Track 6 : Ren19_61
• Track 7 : PhuzzTulsa_64
• Track 8 : Forrestell_66
• Track 9 : DogYard_66, Popstraw_62
• Track 10 : Pureglobe5_66
• Track 11 : Ollypop_63
• Track 12 : MUWow_92, NewKitty_91
• Track 13 : BasketStar_90, DarwinJr_94, Isolde_91
• Track 14 : Seahorse_96, Gorpy_88, Mapleville_84, Crescenzo_93, Nyilah_97, Richie_93, Sakai_87
• Track 15 : Persistence_85
• Track 16 : BenchScraper_90


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

Genes that call this "Most Annotated" start:
• BasketStar_90, Beagle_67, BenchScraper_90, BetaFish_67, Crescenzo_93, DarwinJr_94, DogYard_66, Forrestell_66, Gorpy_88, Hive_63, Isolde_91, Kubulix_67, MUWow_92, Mapleville_84, MellowYellow_67, NewKitty_91, Nikan_65, Nyilah_97, NyleyClemson_66, Odyssey395_67, Ollypop_63, Persistence_85, PhuzzTulsa_64, Pointis_64, Popstraw_62, Pureglobe5_66, Ranunculus_59, RazzB_66, Ren19_61, Richie_93, Sakai_87, Seahorse_96,

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

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

**Summary by start number:**

Start 4:
• Found in 32 of 32 ( 100.0% ) of genes in pham
• Manual Annotations of this start: 19 of 19
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BasketStar_90 (AY), Beagle_67 (AP2), BenchScraper_90 (AY), BetaFish_67 (AP2), Crescenzo_93 (AY), DarwinJr_94 (AY), DogYard_66 (AP2), Forrestell_66 (AP2), Gorpy_88 (AY), Hive_63 (AP2), Isolde_91 (AY), Kubulix_67 (AP2), MUWow_92 (AY), Mapleville_84 (AY), MellowYellow_67 (AP2), NewKitty_91 (AY), Nikan_65 (AP2), Nyilah_97 (AY), NyleyClemson_66 (AP2), Odyssey395_67 (AP2), Ollypop_63 (AP2), Persistence_85 (AY), PhuzzTulsa_64 (AP2), Pointis_64 (AP2), Popstraw_62 (AP2), Pureglobe5_66 (AP2), Ranunculus_59 (AP), RazzB_66 (AP2), Ren19_61 (AP2), Richie_93 (AY), Sakai_87 (AY), Seahorse_96 (AY),

**Summary by clusters:**

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

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

Info for manual annotations of cluster AP2:
•Start number 4 was manually annotated 10 times for cluster AP2.

Info for manual annotations of cluster AY:
•Start number 4 was manually annotated 8 times for cluster AY.


*Gene Information:*
Gene: BasketStar_90 Start: 49766, Stop: 50035, Start Num: 4
Candidate Starts for BasketStar_90:
(Start: 4 @49766 has 19 MA's), (9, 49886), (12, 49931), (17, 49991), (21, 50021),

Gene: Beagle_67 Start: 42365, Stop: 42090, Start Num: 4
Candidate Starts for Beagle_67:
(Start: 4 @42365 has 19 MA's), (5, 42329), (7, 42272), (13, 42164), (14, 42149),

Gene: BenchScraper_90 Start: 48171, Stop: 48425, Start Num: 4
Candidate Starts for BenchScraper_90:
(Start: 4 @48171 has 19 MA's), (21, 48411),

Gene: BetaFish_67 Start: 43321, Stop: 43055, Start Num: 4
Candidate Starts for BetaFish_67:
(Start: 4 @43321 has 19 MA's), (5, 43285), (7, 43228), (8, 43207), (13, 43120), (14, 43105),

Gene: Crescenzo_93 Start: 51175, Stop: 51429, Start Num: 4
Candidate Starts for Crescenzo_93:
(Start: 4 @51175 has 19 MA's), (11, 51340), (21, 51415),

Gene: DarwinJr_94 Start: 51289, Stop: 51558, Start Num: 4
Candidate Starts for DarwinJr_94:
(Start: 4 @51289 has 19 MA's), (9, 51409), (12, 51454), (17, 51514), (21, 51544),

Gene: DogYard_66 Start: 42560, Stop: 42288, Start Num: 4
Candidate Starts for DogYard_66:
(Start: 4 @42560 has 19 MA's), (5, 42524), (8, 42446),

Gene: Forrestell_66 Start: 41892, Stop: 41626, Start Num: 4
Candidate Starts for Forrestell_66:
(Start: 4 @41892 has 19 MA's), (5, 41856), (7, 41799), (8, 41778), (14, 41676), (16, 41673), (21, 41640),

Gene: Gorpy_88 Start: 50899, Stop: 51153, Start Num: 4
Candidate Starts for Gorpy_88:
(Start: 4 @50899 has 19 MA's), (11, 51064), (21, 51139),

Gene: Hive_63 Start: 42585, Stop: 42313, Start Num: 4
Candidate Starts for Hive_63:
(Start: 4 @42585 has 19 MA's), (5, 42549), (7, 42492), (13, 42384), (14, 42369),

Gene: Isolde_91 Start: 50741, Stop: 51010, Start Num: 4
Candidate Starts for Isolde_91:
(Start: 4 @50741 has 19 MA's), (9, 50861), (12, 50906), (17, 50966), (21, 50996),

Gene: Kubulix_67 Start: 42478, Stop: 42203, Start Num: 4
Candidate Starts for Kubulix_67:
(Start: 4 @42478 has 19 MA's), (5, 42442), (7, 42385), (13, 42277), (14, 42262),

Gene: MUWow_92 Start: 50937, Stop: 51179, Start Num: 4
Candidate Starts for MUWow_92:
(Start: 4 @50937 has 19 MA's), (6, 50973), (15, 51117), (19, 51141),

Gene: Mapleville_84 Start: 48385, Stop: 48639, Start Num: 4
Candidate Starts for Mapleville_84:
(Start: 4 @48385 has 19 MA's), (11, 48550), (21, 48625),

Gene: MellowYellow_67 Start: 42565, Stop: 42293, Start Num: 4
Candidate Starts for MellowYellow_67:
(Start: 4 @42565 has 19 MA's), (5, 42529), (7, 42472), (13, 42364), (14, 42349),

Gene: NewKitty_91 Start: 50380, Stop: 50622, Start Num: 4
Candidate Starts for NewKitty_91:
(Start: 4 @50380 has 19 MA's), (6, 50416), (15, 50560), (19, 50584),

Gene: Nikan_65 Start: 42436, Stop: 42206, Start Num: 4
Candidate Starts for Nikan_65:
(Start: 4 @42436 has 19 MA's), (10, 42328),

Gene: Nyilah_97 Start: 49853, Stop: 50107, Start Num: 4
Candidate Starts for Nyilah_97:
(Start: 4 @49853 has 19 MA's), (11, 50018), (21, 50093),

Gene: NyleyClemson_66 Start: 42180, Stop: 41908, Start Num: 4
Candidate Starts for NyleyClemson_66:
(Start: 4 @42180 has 19 MA's), (5, 42144), (7, 42087), (13, 41979), (14, 41964),

Gene: Odyssey395_67 Start: 42602, Stop: 42327, Start Num: 4
Candidate Starts for Odyssey395_67:
(Start: 4 @42602 has 19 MA's), (5, 42566), (13, 42401), (14, 42386),

Gene: Ollypop_63 Start: 43106, Stop: 42852, Start Num: 4
Candidate Starts for Ollypop_63:
(Start: 4 @43106 has 19 MA's), (5, 43070), (7, 43028), (13, 42923), (14, 42908),

Gene: Persistence_85 Start: 47551, Stop: 47787, Start Num: 4
Candidate Starts for Persistence_85:
(Start: 4 @47551 has 19 MA's), (17, 47743), (18, 47749), (20, 47764),

Gene: PhuzzTulsa_64 Start: 42826, Stop: 42554, Start Num: 4
Candidate Starts for PhuzzTulsa_64:
(Start: 4 @42826 has 19 MA's), (5, 42790), (7, 42733), (13, 42625), (14, 42610),

Gene: Pointis_64 Start: 42405, Stop: 42130, Start Num: 4
Candidate Starts for Pointis_64:
(Start: 4 @42405 has 19 MA's), (5, 42369), (7, 42312), (13, 42204), (14, 42189),

Gene: Popstraw_62 Start: 42319, Stop: 42047, Start Num: 4
Candidate Starts for Popstraw_62:
(Start: 4 @42319 has 19 MA's), (5, 42283), (8, 42205),

Gene: Pureglobe5_66 Start: 42849, Stop: 42574, Start Num: 4
Candidate Starts for Pureglobe5_66:
(Start: 4 @42849 has 19 MA's), (5, 42813), (8, 42735), (13, 42648), (14, 42633),

Gene: Ranunculus_59 Start: 44856, Stop: 44584, Start Num: 4
Candidate Starts for Ranunculus_59:
(1, 45054), (Start: 4 @44856 has 19 MA's), (5, 44820), (7, 44763), (8, 44742),

Gene: RazzB_66 Start: 42311, Stop: 42039, Start Num: 4
Candidate Starts for RazzB_66:
(Start: 4 @42311 has 19 MA's), (5, 42275), (7, 42218), (13, 42110), (14, 42095),

Gene: Ren19_61 Start: 42043, Stop: 41816, Start Num: 4
Candidate Starts for Ren19_61:
(2, 42118), (3, 42091), (Start: 4 @42043 has 19 MA's), (10, 41935),

Gene: Richie_93 Start: 50743, Stop: 50997, Start Num: 4
Candidate Starts for Richie_93:
(Start: 4 @50743 has 19 MA's), (11, 50908), (21, 50983),

Gene: Sakai_87 Start: 49610, Stop: 49864, Start Num: 4

Candidate Starts for Sakai_87:
(Start: 4 @49610 has 19 MA's), (11, 49775), (21, 49850),

Gene: Seahorse_96 Start: 54256, Stop: 54510, Start Num: 4
Candidate Starts for Seahorse_96:
(Start: 4 @54256 has 19 MA's), (11, 54421), (21, 54496),