Pham 287998

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 287998 Report

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

Pham number 287998 has 46 members, 6 are drafts.

Phages represented in each track:
• Track 1 : GTE7_74
• Track 2 : Flakey_93, Hotorobo_94, Worcestershire_91, Gorko_91, Sam12_91, Breezic_93, FelixAlejandro_95, BirksAndSocks_95, Ekhein_94, John316_95, CathyBurgh_92, Boneham_94, Msay19_96, BillyBobJr_96, RemRem_95, Poland_96, GourdThymes_92, Jellybones_93, Barbochs_89, Lizzo_92, Sombrero_93, Squibbles_92, Kelzog_94, Butterball_93, CinnamonToast_96
• Track 3 : BigShaq_93, Dakiti_94, BenoitCattle_94, PierreThree_92, Crete_93
• Track 4 : Monty_92, Adgers_95, Exiguo_91, Beaver_95
• Track 5 : Diabla_96
• Track 6 : Chelms_92
• Track 7 : SteveFrench_90
• Track 8 : Eggsie_89
• Track 9 : Linetti_92
• Track 10 : RoyalG_91
• Track 11 : PokyPuppy_90
• Track 12 : MrWormie_84, Luker_85
• Track 13 : Jams_84
• Track 14 : Newt_85

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 29 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Barbochs_89, BenoitCattle_94, BigShaq_93, BillyBobJr_96, BirksAndSocks_95, Boneham_94, Breezic_93, Butterball_93, CathyBurgh_92, CinnamonToast_96, Crete_93, Dakiti_94, Diabla_96, Ekhein_94, FelixAlejandro_95, Flakey_93, GTE7_74, Gorko_91, GourdThymes_92, Hotorobo_94, Jellybones_93, John316_95, Kelzog_94, Linetti_92, Lizzo_92, Msay19_96, PierreThree_92, Poland_96, RemRem_95, RoyalG_91, Sam12_91, Sombrero_93, Squibbles_92, SteveFrench_90, Worcestershire_91,

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

• Adgers_95, Beaver_95, Chelms_92, Exiguo_91, Monty_92,

Genes that do not have the "Most Annotated" start:
• Eggsie_89, Jams_84, Luker_85, MrWormie_84, Newt_85, PokyPuppy_90,

Summary by start number:

Start 1:
• Found in 42 of 46 (91.3%) of genes in pham
• Manual Annotations of this start: 7 of 40
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Adgers_95 (CS2), Beaver_95 (CS2), Chelms_92 (CS2), Eggsie_89 (CS2), Exiguo_91 (CS2), Monty_92 (CS2), PokyPuppy_90 (CS2),

Start 2:
• Found in 4 of 46 (8.7%) of genes in pham
• Manual Annotations of this start: 1 of 40
• Called 25.0% of time when present
• Phage (with cluster) where this start called: Newt_85 (CS3),

Start 3:
• Found in 4 of 46 (8.7%) of genes in pham
• Manual Annotations of this start: 3 of 40
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Jams_84 (CS3), Luker_85 (CS3), MrWormie_84 (CS3),

Start 4:
• Found in 40 of 46 (87.0%) of genes in pham
• Manual Annotations of this start: 29 of 40
• Called 87.5% of time when present
• Phage (with cluster) where this start called: Barbochs_89 (CS2), BenoitCattle_94 (CS2), BigShaq_93 (CS2), BillyBobJr_96 (CS2), BirksAndSocks_95 (CS2), Boneham_94 (CS2), Breezic_93 (CS2), Butterball_93 (CS2), CathyBurgh_92 (CS2), CinnamonToast_96 (CS2), Crete_93 (CS2), Dakiti_94 (CS2), Diabla_96 (CS2), Ekhein_94 (CS2), FelixAlejandro_95 (CS2), Flakey_93 (CS2), GTE7_74 (CS1), Gorko_91 (CS2), GourdThymes_92 (CS2), Hotorobo_94 (CS2), Jellybones_93 (CS2), John316_95 (CS2), Kelzog_94 (CS2), Linetti_92 (CS2), Lizzo_92 (CS2), Msay19_96 (CS2), PierreThree_92 (CS2), Poland_96 (CS2), RemRem_95 (CS2), RoyalG_91 (CS2), Sam12_91 (CS2), Sombrero_93 (CS2), Squibbles_92 (CS2), SteveFrench_90 (CS2), Worcestershire_91 (CS2),

Summary by clusters:

There are 3 clusters represented in this pham: CS1, CS3, CS2,

Info for manual annotations of cluster CS2:
•Start number 1 was manually annotated 7 times for cluster CS2.
•Start number 4 was manually annotated 29 times for cluster CS2.

Info for manual annotations of cluster CS3:

•Start number 2 was manually annotated 1 time for cluster CS3.
•Start number 3 was manually annotated 3 times for cluster CS3.

Gene Information:

Gene: Adgers_95 Start: 68940, Stop: 68716, Start Num: 1
Candidate Starts for Adgers_95:
(Start: 1 @68940 has 7 MA's), (Start: 4 @68919 has 29 MA's), (5, 68901), (7, 68886), (10, 68781), (13, 68742), (16, 68727),

Gene: Barbochs_89 Start: 68089, Stop: 67886, Start Num: 4
Candidate Starts for Barbochs_89:
(Start: 1 @68110 has 7 MA's), (Start: 4 @68089 has 29 MA's), (5, 68071), (7, 68056), (10, 67951), (13, 67912), (16, 67897),

Gene: Beaver_95 Start: 70281, Stop: 70057, Start Num: 1
Candidate Starts for Beaver_95:
(Start: 1 @70281 has 7 MA's), (Start: 4 @70260 has 29 MA's), (5, 70242), (7, 70227), (10, 70122), (13, 70083), (16, 70068),

Gene: BenoitCattle_94 Start: 69655, Stop: 69452, Start Num: 4
Candidate Starts for BenoitCattle_94:
(Start: 1 @69676 has 7 MA's), (Start: 4 @69655 has 29 MA's), (7, 69622), (9, 69544), (10, 69517), (11, 69499), (13, 69478), (16, 69463),

Gene: BigShaq_93 Start: 69245, Stop: 69042, Start Num: 4
Candidate Starts for BigShaq_93:
(Start: 1 @69266 has 7 MA's), (Start: 4 @69245 has 29 MA's), (7, 69212), (9, 69134), (10, 69107), (11, 69089), (13, 69068), (16, 69053),

Gene: BillyBobJr_96 Start: 70367, Stop: 70164, Start Num: 4
Candidate Starts for BillyBobJr_96:
(Start: 1 @70388 has 7 MA's), (Start: 4 @70367 has 29 MA's), (5, 70349), (7, 70334), (10, 70229), (13, 70190), (16, 70175),

Gene: BirksAndSocks_95 Start: 69874, Stop: 69671, Start Num: 4
Candidate Starts for BirksAndSocks_95:
(Start: 1 @69895 has 7 MA's), (Start: 4 @69874 has 29 MA's), (5, 69856), (7, 69841), (10, 69736), (13, 69697), (16, 69682),

Gene: Boneham_94 Start: 69799, Stop: 69596, Start Num: 4
Candidate Starts for Boneham_94:
(Start: 1 @69820 has 7 MA's), (Start: 4 @69799 has 29 MA's), (5, 69781), (7, 69766), (10, 69661), (13, 69622), (16, 69607),

Gene: Breezic_93 Start: 68790, Stop: 68587, Start Num: 4
Candidate Starts for Breezic_93:
(Start: 1 @68811 has 7 MA's), (Start: 4 @68790 has 29 MA's), (5, 68772), (7, 68757), (10, 68652), (13, 68613), (16, 68598),

Gene: Butterball_93 Start: 69804, Stop: 69601, Start Num: 4

Candidate Starts for Butterball_93:
(Start: 1 @69825 has 7 MA's), (Start: 4 @69804 has 29 MA's), (5, 69786), (7, 69771), (10, 69666), (13, 69627), (16, 69612),

Gene: CathyBurgh_92 Start: 68820, Stop: 68617, Start Num: 4
Candidate Starts for CathyBurgh_92:
(Start: 1 @68841 has 7 MA's), (Start: 4 @68820 has 29 MA's), (5, 68802), (7, 68787), (10, 68682), (13, 68643), (16, 68628),

Gene: Chelms_92 Start: 69413, Stop: 69189, Start Num: 1
Candidate Starts for Chelms_92:
(Start: 1 @69413 has 7 MA's), (Start: 4 @69392 has 29 MA's), (7, 69359), (9, 69281), (10, 69254), (11, 69236), (13, 69215), (16, 69200),

Gene: CinnamonToast_96 Start: 70367, Stop: 70164, Start Num: 4
Candidate Starts for CinnamonToast_96:
(Start: 1 @70388 has 7 MA's), (Start: 4 @70367 has 29 MA's), (5, 70349), (7, 70334), (10, 70229), (13, 70190), (16, 70175),

Gene: Crete_93 Start: 69428, Stop: 69225, Start Num: 4
Candidate Starts for Crete_93:
(Start: 1 @69449 has 7 MA's), (Start: 4 @69428 has 29 MA's), (7, 69395), (9, 69317), (10, 69290), (11, 69272), (13, 69251), (16, 69236),

Gene: Dakiti_94 Start: 70335, Stop: 70132, Start Num: 4
Candidate Starts for Dakiti_94:
(Start: 1 @70356 has 7 MA's), (Start: 4 @70335 has 29 MA's), (7, 70302), (9, 70224), (10, 70197), (11, 70179), (13, 70158), (16, 70143),

Gene: Diabla_96 Start: 69788, Stop: 69585, Start Num: 4
Candidate Starts for Diabla_96:
(Start: 1 @69809 has 7 MA's), (Start: 4 @69788 has 29 MA's), (6, 69758), (7, 69755), (9, 69677), (10, 69650), (11, 69632), (12, 69617), (13, 69611), (16, 69596),

Gene: Eggsie_89 Start: 67365, Stop: 67162, Start Num: 1
Candidate Starts for Eggsie_89:
(Start: 1 @67365 has 7 MA's), (6, 67335), (7, 67332), (10, 67227), (12, 67194), (13, 67188), (16, 67173),

Gene: Ekhein_94 Start: 68834, Stop: 68631, Start Num: 4
Candidate Starts for Ekhein_94:
(Start: 1 @68855 has 7 MA's), (Start: 4 @68834 has 29 MA's), (5, 68816), (7, 68801), (10, 68696), (13, 68657), (16, 68642),

Gene: Exiguo_91 Start: 68280, Stop: 68056, Start Num: 1
Candidate Starts for Exiguo_91:
(Start: 1 @68280 has 7 MA's), (Start: 4 @68259 has 29 MA's), (5, 68241), (7, 68226), (10, 68121), (13, 68082), (16, 68067),

Gene: FelixAlejandro_95 Start: 70317, Stop: 70114, Start Num: 4
Candidate Starts for FelixAlejandro_95:
(Start: 1 @70338 has 7 MA's), (Start: 4 @70317 has 29 MA's), (5, 70299), (7, 70284), (10, 70179), (13, 70140), (16, 70125),

Gene: Flakey_93 Start: 69731, Stop: 69528, Start Num: 4
Candidate Starts for Flakey_93:
(Start: 1 @69752 has 7 MA's), (Start: 4 @69731 has 29 MA's), (5, 69713), (7, 69698), (10, 69593), (13, 69554), (16, 69539),

Gene: GTE7_74 Start: 60706, Stop: 60497, Start Num: 4
Candidate Starts for GTE7_74:
(Start: 1 @60727 has 7 MA's), (Start: 4 @60706 has 29 MA's), (17, 60511),

Gene: Gorko_91 Start: 68003, Stop: 67800, Start Num: 4
Candidate Starts for Gorko_91:
(Start: 1 @68024 has 7 MA's), (Start: 4 @68003 has 29 MA's), (5, 67985), (7, 67970), (10, 67865), (13, 67826), (16, 67811),

Gene: GourdThymes_92 Start: 68847, Stop: 68644, Start Num: 4
Candidate Starts for GourdThymes_92:
(Start: 1 @68868 has 7 MA's), (Start: 4 @68847 has 29 MA's), (5, 68829), (7, 68814), (10, 68709), (13, 68670), (16, 68655),

Gene: Hotorobo_94 Start: 69708, Stop: 69505, Start Num: 4
Candidate Starts for Hotorobo_94:
(Start: 1 @69729 has 7 MA's), (Start: 4 @69708 has 29 MA's), (5, 69690), (7, 69675), (10, 69570), (13, 69531), (16, 69516),

Gene: Jams_84 Start: 66446, Stop: 66258, Start Num: 3
Candidate Starts for Jams_84:
(Start: 2 @66449 has 1 MA's), (Start: 3 @66446 has 3 MA's), (8, 66404), (15, 66272),

Gene: Jellybones_93 Start: 70005, Stop: 69802, Start Num: 4
Candidate Starts for Jellybones_93:
(Start: 1 @70026 has 7 MA's), (Start: 4 @70005 has 29 MA's), (5, 69987), (7, 69972), (10, 69867), (13, 69828), (16, 69813),

Gene: John316_95 Start: 69961, Stop: 69758, Start Num: 4
Candidate Starts for John316_95:
(Start: 1 @69982 has 7 MA's), (Start: 4 @69961 has 29 MA's), (5, 69943), (7, 69928), (10, 69823), (13, 69784), (16, 69769),

Gene: Kelzog_94 Start: 69234, Stop: 69031, Start Num: 4
Candidate Starts for Kelzog_94:
(Start: 1 @69255 has 7 MA's), (Start: 4 @69234 has 29 MA's), (5, 69216), (7, 69201), (10, 69096), (13, 69057), (16, 69042),

Gene: Linetti_92 Start: 70352, Stop: 70149, Start Num: 4
Candidate Starts for Linetti_92:
(Start: 1 @70373 has 7 MA's), (Start: 4 @70352 has 29 MA's), (7, 70319), (9, 70241), (10, 70214), (13, 70175), (16, 70160),

Gene: Lizzo_92 Start: 68820, Stop: 68617, Start Num: 4
Candidate Starts for Lizzo_92:
(Start: 1 @68841 has 7 MA's), (Start: 4 @68820 has 29 MA's), (5, 68802), (7, 68787), (10, 68682), (13, 68643), (16, 68628),

Gene: Luker_85 Start: 67464, Stop: 67276, Start Num: 3
Candidate Starts for Luker_85:
(Start: 2 @67467 has 1 MA's), (Start: 3 @67464 has 3 MA's), (8, 67422), (10, 67344), (15, 67290),

Gene: Monty_92 Start: 68543, Stop: 68319, Start Num: 1
Candidate Starts for Monty_92:
(Start: 1 @68543 has 7 MA's), (Start: 4 @68522 has 29 MA's), (5, 68504), (7, 68489), (10, 68384), (13, 68345), (16, 68330),

Gene: MrWormie_84 Start: 66149, Stop: 65961, Start Num: 3
Candidate Starts for MrWormie_84:
(Start: 2 @66152 has 1 MA's), (Start: 3 @66149 has 3 MA's), (8, 66107), (10, 66029), (15, 65975),

Gene: Msay19_96 Start: 70600, Stop: 70397, Start Num: 4
Candidate Starts for Msay19_96:
(Start: 1 @70621 has 7 MA's), (Start: 4 @70600 has 29 MA's), (5, 70582), (7, 70567), (10, 70462), (13, 70423), (16, 70408),

Gene: Newt_85 Start: 67481, Stop: 67290, Start Num: 2
Candidate Starts for Newt_85:
(Start: 2 @67481 has 1 MA's), (Start: 3 @67478 has 3 MA's), (8, 67436), (10, 67358), (15, 67304),

Gene: PierreThree_92 Start: 69966, Stop: 69763, Start Num: 4
Candidate Starts for PierreThree_92:
(Start: 1 @69987 has 7 MA's), (Start: 4 @69966 has 29 MA's), (7, 69933), (9, 69855), (10, 69828), (11, 69810), (13, 69789), (16, 69774),

Gene: PokyPuppy_90 Start: 69257, Stop: 69054, Start Num: 1
Candidate Starts for PokyPuppy_90:
(Start: 1 @69257 has 7 MA's), (6, 69227), (7, 69224), (10, 69119), (11, 69101), (13, 69080), (16, 69065),

Gene: Poland_96 Start: 70582, Stop: 70379, Start Num: 4
Candidate Starts for Poland_96:
(Start: 1 @70603 has 7 MA's), (Start: 4 @70582 has 29 MA's), (5, 70564), (7, 70549), (10, 70444), (13, 70405), (16, 70390),

Gene: RemRem_95 Start: 68817, Stop: 68614, Start Num: 4
Candidate Starts for RemRem_95:
(Start: 1 @68838 has 7 MA's), (Start: 4 @68817 has 29 MA's), (5, 68799), (7, 68784), (10, 68679), (13, 68640), (16, 68625),

Gene: RoyalG_91 Start: 68535, Stop: 68332, Start Num: 4
Candidate Starts for RoyalG_91:
(Start: 1 @68556 has 7 MA's), (Start: 4 @68535 has 29 MA's), (6, 68505), (7, 68502), (10, 68397), (13, 68358), (14, 68355), (16, 68343),

Gene: Sam12_91 Start: 68256, Stop: 68053, Start Num: 4
Candidate Starts for Sam12_91:
(Start: 1 @68277 has 7 MA's), (Start: 4 @68256 has 29 MA's), (5, 68238), (7, 68223), (10, 68118), (13, 68079), (16, 68064),

Gene: Sombrero_93 Start: 68884, Stop: 68681, Start Num: 4
Candidate Starts for Sombrero_93:
(Start: 1 @68905 has 7 MA's), (Start: 4 @68884 has 29 MA's), (5, 68866), (7, 68851), (10, 68746), (13, 68707), (16, 68692),

Gene: Squibbles_92 Start: 69337, Stop: 69134, Start Num: 4
Candidate Starts for Squibbles_92:
(Start: 1 @69358 has 7 MA's), (Start: 4 @69337 has 29 MA's), (5, 69319), (7, 69304), (10, 69199), (13, 69160), (16, 69145),

Gene: SteveFrench_90 Start: 68775, Stop: 68572, Start Num: 4
Candidate Starts for SteveFrench_90:
(Start: 1 @68796 has 7 MA's), (Start: 4 @68775 has 29 MA's), (6, 68745), (7, 68742), (10, 68637), (12, 68604), (13, 68598), (16, 68583),

Gene: Worcestershire_91 Start: 68242, Stop: 68039, Start Num: 4
Candidate Starts for Worcestershire_91:
(Start: 1 @68263 has 7 MA's), (Start: 4 @68242 has 29 MA's), (5, 68224), (7, 68209), (10, 68104), (13, 68065), (16, 68050),