Pham 224868

1: HH92_29 + 16
2: OBUpride_29
3: Amochick_29 + 1
4: Gravaillia_29
5: Gancho_28
6: TurkishDelight_52

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 224868 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224868 has 23 members, 0 are drafts.

Phages represented in each track:
• Track 1 : HH92_29, Giles_29, Dewey_29, Wishmaker_29, Forge_29, LilHazelnut_29, Luke_29, Luna22_29, Ubuntu_29, Kinbote_29, Hail_29, Hadrien_29, Evanesce_29, Webster2_29, DeepSoil15_29, Ein37_29, Amymech_29
• Track 2 : OBUpride_29
• Track 3 : Amochick_29, Daegal_30
• Track 4 : Gravaillia_29
• Track 5 : Gancho_28
• Track 6 : TurkishDelight_52

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

The start number called the most often in the published annotations is 7, it was called in 20 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Amochick_29, Amymech_29, Daegal_30, DeepSoil15_29, Dewey_29, Ein37_29, Evanesce_29, Forge_29, Giles_29, Gravaillia_29, HH92_29, Hadrien_29, Hail_29, Kinbote_29, LilHazelnut_29, Luke_29, Luna22_29, Ubuntu_29, Webster2_29, Wishmaker_29,

Genes that have the "Most Annotated" start but do not call it:
• Gancho_28, OBUpride_29,

Genes that do not have the "Most Annotated" start:
• TurkishDelight_52,

Summary by start number:

Start 3:
• Found in 1 of 23 (4.3%) 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: TurkishDelight_52 (singleton),

Start 5:
• Found in 22 of 23 (95.7%) of genes in pham
• Manual Annotations of this start: 2 of 23
• Called 9.1% of time when present
• Phage (with cluster) where this start called: Gancho_28 (Q), OBUpride_29 (Q),

Start 7:
• Found in 22 of 23 (95.7%) of genes in pham
• Manual Annotations of this start: 20 of 23
• Called 90.9% of time when present
• Phage (with cluster) where this start called: Amochick_29 (Q), Amymech_29 (Q), Daegal_30 (Q), DeepSoil15_29 (Q), Dewey_29 (Q), Ein37_29 (Q), Evanesce_29 (Q), Forge_29 (Q), Giles_29 (Q), Gravaillia_29 (Q), HH92_29 (Q), Hadrien_29 (Q), Hail_29 (Q), Kinbote_29 (Q), LilHazelnut_29 (Q), Luke_29 (Q), Luna22_29 (Q), Ubuntu_29 (Q), Webster2_29 (Q), Wishmaker_29 (Q),

Summary by clusters:

There are 2 clusters represented in this pham: Q, singleton,

Info for manual annotations of cluster Q:
•Start number 5 was manually annotated 2 times for cluster Q.
•Start number 7 was manually annotated 20 times for cluster Q.

Gene Information:

Gene: Amochick_29 Start: 26484, Stop: 25291, Start Num: 7
Candidate Starts for Amochick_29:
(Start: 5 @26526 has 2 MA's), (Start: 7 @26484 has 20 MA's), (9, 26418), (12, 26337), (13, 26298), (14, 26283), (15, 26277), (16, 26265), (18, 26238), (21, 26205), (22, 26148), (23, 26115), (24, 26112), (26, 26064), (27, 26022), (28, 26019), (30, 25995), (31, 25980), (33, 25956), (35, 25941), (38, 25902), (39, 25890), (40, 25851), (42, 25812), (43, 25764), (44, 25761), (48, 25689), (49, 25683), (50, 25671), (51, 25668), (52, 25662), (53, 25608), (54, 25590), (55, 25587), (56, 25560), (60, 25533), (62, 25491), (64, 25464), (65, 25458), (68, 25401), (70, 25338), (71, 25335),

Gene: Amymech_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Amymech_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Daegal_30 Start: 26772, Stop: 25579, Start Num: 7
Candidate Starts for Daegal_30:
(Start: 5 @26814 has 2 MA's), (Start: 7 @26772 has 20 MA's), (9, 26706), (12, 26625), (13, 26586), (14, 26571), (15, 26565), (16, 26553), (18, 26526), (21, 26493), (22, 26436), (23, 26403), (24, 26400), (26, 26352), (27, 26310), (28, 26307), (30, 26283), (31, 26268), (33, 26244), (35, 26229), (38, 26190), (39, 26178), (40, 26139), (42, 26100), (43, 26052), (44, 26049), (48, 25977), (49, 25971), (50, 25959), (51, 25956), (52, 25950), (53, 25896), (54, 25878), (55, 25875), (56, 25848), (60, 25821), (62, 25779),

(64, 25752), (65, 25746), (68, 25689), (70, 25626), (71, 25623),

Gene: DeepSoil15_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for DeepSoil15_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Dewey_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Dewey_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Ein37_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Ein37_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Evanesce_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Evanesce_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Forge_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Forge_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Gancho_28 Start: 26243, Stop: 25008, Start Num: 5
Candidate Starts for Gancho_28:
(Start: 5 @26243 has 2 MA's), (Start: 7 @26201 has 20 MA's), (9, 26135), (11, 26066), (12, 26054), (13, 26015), (14, 26000), (15, 25994), (16, 25982), (21, 25922), (22, 25865), (23, 25832), (24, 25829), (25, 25826), (30, 25712), (31, 25697), (33, 25673), (35, 25658), (36, 25643), (38, 25619), (39, 25607), (40, 25568), (41, 25565), (42, 25529), (43, 25481), (44, 25478), (48, 25406), (49, 25400), (50, 25388),

(51, 25385), (52, 25379), (53, 25325), (55, 25304), (56, 25277), (58, 25259), (59, 25253), (62, 25208), (64, 25181), (65, 25175), (66, 25145), (68, 25118), (70, 25055),

Gene: Giles_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Giles_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Gravaillia_29 Start: 26207, Stop: 25014, Start Num: 7
Candidate Starts for Gravaillia_29:
(Start: 5 @26249 has 2 MA's), (Start: 7 @26207 has 20 MA's), (9, 26141), (11, 26072), (12, 26060), (13, 26021), (14, 26006), (15, 26000), (16, 25988), (21, 25928), (22, 25871), (23, 25838), (24, 25835), (25, 25832), (30, 25718), (31, 25703), (33, 25679), (35, 25664), (36, 25649), (38, 25625), (39, 25613), (40, 25574), (41, 25571), (42, 25535), (43, 25487), (44, 25484), (48, 25412), (49, 25406), (50, 25394), (51, 25391), (52, 25385), (53, 25331), (55, 25310), (56, 25283), (58, 25265), (59, 25259), (62, 25214), (64, 25187), (65, 25181), (66, 25151), (68, 25124), (70, 25061),

Gene: HH92_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for HH92_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Hadrien_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Hadrien_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Hail_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Hail_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Kinbote_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Kinbote_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896),

(39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: LilHazelnut_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for LilHazelnut_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Luke_29 Start: 26433, Stop: 25240, Start Num: 7
Candidate Starts for Luke_29:
(Start: 5 @26475 has 2 MA's), (Start: 7 @26433 has 20 MA's), (9, 26367), (12, 26286), (13, 26247), (14, 26232), (15, 26226), (16, 26214), (18, 26187), (21, 26154), (22, 26097), (23, 26064), (24, 26061), (26, 26013), (27, 25971), (28, 25968), (30, 25944), (31, 25929), (33, 25905), (35, 25890), (38, 25851), (39, 25839), (40, 25800), (42, 25761), (43, 25713), (44, 25710), (48, 25638), (49, 25632), (50, 25620), (51, 25617), (52, 25611), (53, 25557), (54, 25539), (55, 25536), (56, 25509), (58, 25491), (59, 25485), (60, 25482), (62, 25440), (64, 25413), (65, 25407), (68, 25350), (70, 25287), (71, 25284),

Gene: Luna22_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Luna22_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: OBUpride_29 Start: 26514, Stop: 25279, Start Num: 5
Candidate Starts for OBUpride_29:
(Start: 5 @26514 has 2 MA's), (Start: 7 @26472 has 20 MA's), (9, 26406), (12, 26325), (13, 26286), (14, 26271), (15, 26265), (16, 26253), (18, 26226), (21, 26193), (22, 26136), (23, 26103), (24, 26100), (26, 26052), (27, 26010), (28, 26007), (30, 25983), (31, 25968), (33, 25944), (35, 25929), (38, 25890), (39, 25878), (40, 25839), (42, 25800), (43, 25752), (44, 25749), (48, 25677), (49, 25671), (50, 25659), (51, 25656), (52, 25650), (53, 25596), (54, 25578), (55, 25575), (56, 25548), (58, 25530), (59, 25524), (60, 25521), (62, 25479), (64, 25452), (65, 25446), (68, 25389), (70, 25326), (71, 25323),

Gene: TurkishDelight_52 Start: 44050, Stop: 45588, Start Num: 3
Candidate Starts for TurkishDelight_52:
(1, 43657), (2, 43954), (Start: 3 @44050 has 1 MA's), (4, 44173), (6, 44323), (8, 44344), (10, 44425), (17, 44578), (19, 44611), (20, 44614), (24, 44731), (29, 44851), (32, 44884), (34, 44905), (37, 44947), (42, 45058), (43, 45106), (45, 45124), (46, 45142), (47, 45172), (57, 45325), (61, 45358), (63, 45400), (67, 45457), (69, 45514), (72, 45550), (73, 45568),

Gene: Ubuntu_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Ubuntu_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665),

(51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Webster2_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Webster2_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),

Gene: Wishmaker_29 Start: 26478, Stop: 25285, Start Num: 7
Candidate Starts for Wishmaker_29:
(Start: 5 @26520 has 2 MA's), (Start: 7 @26478 has 20 MA's), (9, 26412), (12, 26331), (13, 26292), (14, 26277), (15, 26271), (16, 26259), (18, 26232), (21, 26199), (22, 26142), (23, 26109), (24, 26106), (26, 26058), (27, 26016), (28, 26013), (30, 25989), (31, 25974), (33, 25950), (35, 25935), (38, 25896), (39, 25884), (40, 25845), (42, 25806), (43, 25758), (44, 25755), (48, 25683), (49, 25677), (50, 25665), (51, 25662), (52, 25656), (53, 25602), (54, 25584), (55, 25581), (56, 25554), (58, 25536), (59, 25530), (60, 25527), (62, 25485), (64, 25458), (65, 25452), (68, 25395), (70, 25332), (71, 25329),