

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 296899 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296899 has 24 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Giles_27, HH92_27, OBUpride_27, Wishmaker_27, Dewey_27, LilHazelnut_27, Ubuntu_27, Hail_27, Kinbote_27, Gravaillia_27, Evanesce_27, BloominB_27, Hadrien_27, Webster2_27, DeepSoil15_27, Amymech_27, Ein37_27
- Track 2 : Forge_27, Luke_27
- Track 3 : Daegal_28, Amochick_27
- Track 4 : NovoPizza_24
- Track 5 : Luna22_27
- Track 6 : Gancho_26

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

The start number called the most often in the published annotations is 18, it was called in 22 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amochick_27, Amymech_27, BloominB_27, Daegal_28, DeepSoil15_27, Dewey_27, Ein37_27, Evanesce_27, Forge_27, Gancho_26, Giles_27, Gravaillia_27, HH92_27, Hadrien_27, Hail_27, Kinbote_27, LilHazelnut_27, Luke_27, Luna22_27, OBUpride_27, Ubuntu_27, Webster2_27, Wishmaker_27,

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

-

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

- NovoPizza_24,

Summary by start number:

Start 18:

- 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: Amochick_27 (Q), Amymech_27 (Q), BloominB_27 (Q), Daegal_28 (Q), DeepSoil15_27 (Q), Dewey_27 (Q), Ein37_27 (Q),

Evanesce_27 (Q), Forge_27 (Q), Gancho_26 (Q), Giles_27 (Q), Gravaillia_27 (Q), HH92_27 (Q), Hadrien_27 (Q), Hail_27 (Q), Kinbote_27 (Q), LilHazelNut_27 (Q), Luke_27 (Q), Luna22_27 (Q), OBUpride_27 (Q), Ubuntu_27 (Q), Webster2_27 (Q), Wishmaker_27 (Q),

Start 19:

- 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: NovoPizza_24 (Q),

Summary by clusters:

There is one cluster represented in this pham: Q

Info for manual annotations of cluster Q:

- Start number 18 was manually annotated 22 times for cluster Q.
- Start number 19 was manually annotated 1 time for cluster Q.

Gene Information:

Gene: Amochick_27 Start: 23377, Stop: 24615, Start Num: 18

Candidate Starts for Amochick_27:

(5, 22765), (6, 22831), (9, 22921), (10, 22924), (13, 23074), (14, 23161), (15, 23164), (16, 23302), (Start: 18 @23377 has 22 MA's), (22, 23473), (23, 23500), (24, 23506), (26, 23545), (27, 23554), (30, 23599), (31, 23611), (32, 23650), (34, 23707), (36, 23773), (37, 23812), (40, 23845), (41, 23866), (42, 23872), (43, 23908), (44, 23920), (45, 23923), (47, 23971), (48, 23977), (49, 23980), (50, 23989), (53, 24127), (54, 24220), (57, 24277), (58, 24283), (60, 24367), (61, 24382), (62, 24385), (63, 24451), (64, 24484),

Gene: Amymech_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Amymech_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: BloominB_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for BloominB_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Daegal_28 Start: 23665, Stop: 24903, Start Num: 18

Candidate Starts for Daegal_28:

(5, 23053), (6, 23119), (9, 23209), (10, 23212), (13, 23362), (14, 23449), (15, 23452), (16, 23590), (Start: 18 @23665 has 22 MA's), (22, 23761), (23, 23788), (24, 23794), (26, 23833), (27, 23842), (30, 23887), (31, 23899), (32, 23938), (34, 23995), (36, 24061), (37, 24100), (40, 24133), (41, 24154), (42, 24160), (43, 24196), (44, 24208), (45, 24211), (47, 24259), (48, 24265), (49, 24268), (50, 24277), (53, 24415), (54, 24508), (57, 24565), (58, 24571), (60, 24655), (61, 24670), (62, 24673), (63, 24739), (64, 24772),

Gene: DeepSoil15_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for DeepSoil15_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Dewey_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Dewey_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Ein37_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Ein37_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Evanesce_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Evanesce_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Forge_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Forge_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Gancho_26 Start: 23095, Stop: 24333, Start Num: 18

Candidate Starts for Gancho_26:

(5, 22483), (6, 22549), (10, 22642), (13, 22792), (14, 22879), (15, 22882), (16, 23020), (Start: 18 @23095 has 22 MA's), (22, 23191), (23, 23218), (24, 23224), (26, 23263), (27, 23272), (30, 23317), (31, 23329), (32, 23368), (34, 23425), (35, 23476), (36, 23491), (37, 23530), (40, 23563), (41, 23584), (42, 23590), (43, 23626), (44, 23638), (45, 23641), (47, 23689), (48, 23695), (49, 23698), (50, 23707), (53, 23845), (54, 23938), (57, 23995), (58, 24001), (60, 24085), (61, 24100), (62, 24103), (63, 24169), (64, 24202),

Gene: Giles_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Giles_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Gravaillia_27 Start: 23101, Stop: 24339, Start Num: 18

Candidate Starts for Gravaillia_27:

(5, 22489), (6, 22555), (9, 22645), (10, 22648), (13, 22798), (14, 22885), (15, 22888), (16, 23026), (Start: 18 @23101 has 22 MA's), (22, 23197), (23, 23224), (24, 23230), (26, 23269), (27, 23278), (30, 23323), (31, 23335), (32, 23374), (34, 23431), (35, 23482), (36, 23497), (37, 23536), (40, 23569), (41, 23590), (42, 23596), (43, 23632), (44, 23644), (45, 23647), (47, 23695), (48, 23701), (49, 23704), (50, 23713), (53, 23851), (54, 23944), (57, 24001), (58, 24007), (60, 24091), (61, 24106), (62, 24109), (63, 24175), (64, 24208),

Gene: HH92_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for HH92_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Hadrien_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Hadrien_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Hail_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Hail_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Kinbote_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Kinbote_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: LilHazelnut_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for LilHazelnut_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Luke_27 Start: 23371, Stop: 24564, Start Num: 18

Candidate Starts for Luke_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (30, 23548), (31, 23560), (32, 23599), (34, 23656), (35, 23707), (36, 23722), (37, 23761), (40, 23794), (41, 23815), (42, 23821), (43, 23857), (44, 23869), (45, 23872), (47, 23920), (48, 23926), (49, 23929), (50, 23938), (53, 24076), (54, 24169), (57, 24226), (58, 24232), (60, 24316), (61, 24331), (62, 24334), (63, 24400), (64, 24433),

Gene: Luna22_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Luna22_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (12, 23038), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: NovoPizza_24 Start: 24478, Stop: 25725, Start Num: 19

Candidate Starts for NovoPizza_24:

(1, 22918), (2, 23035), (3, 23296), (4, 23614), (7, 23929), (8, 23953), (11, 24055), (17, 24454), (Start: 19 @24478 has 1 MA's), (20, 24487), (21, 24550), (25, 24616), (28, 24661), (29, 24664), (33, 24763), (34, 24805), (38, 24916), (39, 24925), (46, 25054), (51, 25195), (52, 25216), (54, 25321), (55, 25324), (56, 25348), (59, 25462), (65, 25615), (66, 25705),

Gene: OBUpride_27 Start: 23365, Stop: 24603, Start Num: 18

Candidate Starts for OBUpride_27:

(5, 22753), (6, 22819), (9, 22909), (10, 22912), (13, 23062), (14, 23149), (15, 23152), (16, 23290), (Start: 18 @23365 has 22 MA's), (22, 23461), (23, 23488), (24, 23494), (26, 23533), (27, 23542), (30, 23587), (31, 23599), (32, 23638), (34, 23695), (35, 23746), (36, 23761), (37, 23800), (40, 23833), (41, 23854), (42, 23860), (43, 23896), (44, 23908), (45, 23911), (47, 23959), (48, 23965), (49, 23968), (50, 23977), (53, 24115), (54, 24208), (57, 24265), (58, 24271), (60, 24355), (61, 24370), (62, 24373), (63, 24439), (64, 24472),

Gene: Ubuntu_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Ubuntu_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Webster2_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Webster2_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),

Gene: Wishmaker_27 Start: 23371, Stop: 24609, Start Num: 18

Candidate Starts for Wishmaker_27:

(5, 22759), (6, 22825), (9, 22915), (10, 22918), (13, 23068), (14, 23155), (15, 23158), (16, 23296), (Start: 18 @23371 has 22 MA's), (22, 23467), (23, 23494), (24, 23500), (26, 23539), (27, 23548), (30, 23593), (31, 23605), (32, 23644), (34, 23701), (35, 23752), (36, 23767), (37, 23806), (40, 23839), (41, 23860), (42, 23866), (43, 23902), (44, 23914), (45, 23917), (47, 23965), (48, 23971), (49, 23974), (50, 23983), (53, 24121), (54, 24214), (57, 24271), (58, 24277), (60, 24361), (61, 24376), (62, 24379), (63, 24445), (64, 24478),