

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 194301 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194301 has 24 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Confidence_64
- Track 2 : BritBrat_65
- Track 3 : Ohgeesy_64
- Track 4 : Hyzer_75
- Track 5 : Attis_61, LordFarquaad_63, SoilAssassin_61
- Track 6 : Vasanti_60
- Track 7 : Mcklovin_63
- Track 8 : BBQValindra_59
- Track 9 : ODay_77
- Track 10 : BearBQ_69
- Track 11 : Phabuloso_74
- Track 12 : Horus_71
- Track 13 : Ruthy_63
- Track 14 : Malibo_67
- Track 15 : Popper_52
- Track 16 : Cole_47
- Track 17 : Ryan_51, QuinnAvery_49
- Track 18 : Zaheer_53
- Track 19 : Gusanita_51
- Track 20 : Maja_42
- Track 21 : CocoCinnamon_46

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

The start number called the most often in the published annotations is 20, it was called in 5 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BearBQ_69, BritBrat_65, Horus_71, ODay_77, Phabuloso_74,

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

-

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

- Attis_61, BBQValindra_59, CocoCinnamon_46, Cole_47, Confidence_64, Gusanita_51, Hyzer_75, LordFarquaad_63, Maja_42, Malibo_67, Mcklovin_63, Ohgeesy_64, Popper_52, QuinnAvery_49, Ruthy_63, Ryan_51, SoilAssassin_61, Vasanti_60, Zaheer_53,

Summary by start number:

Start 6:

- Found in 4 of 24 (16.7%) of genes in pham
- Manual Annotations of this start: 3 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attis_61 (CZ2), Hyzer_75 (CZ1), LordFarquaad_63 (CZ2), SoilAssassin_61 (CZ2),

Start 13:

- Found in 2 of 24 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Ruthy_63 (DW),

Start 14:

- Found in 1 of 24 (4.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CocoCinnamon_46 (FO),

Start 16:

- Found in 4 of 24 (16.7%) of genes in pham
- Manual Annotations of this start: 3 of 21
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Confidence_64 (CY1), Mcklovin_63 (CZ4), Ohgeesy_64 (CZ),

Start 17:

- Found in 1 of 24 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BBQValindra_59 (DB),

Start 18:

- Found in 6 of 24 (25.0%) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Maja_42 (FO), Malibo_67 (DW),

Start 20:

- Found in 5 of 24 (20.8%) of genes in pham
- Manual Annotations of this start: 5 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BearBQ_69 (DN), BritBrat_65 (CY2), Horus_71 (DN1), ODay_77 (DN), Phabuloso_74 (DN1),

Start 21:

- Found in 4 of 24 (16.7%) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Cole_47 (FF), QuinnAvery_49 (FF), Ryan_51 (FF),

Start 23:

- Found in 4 of 24 (16.7%) of genes in pham
- Manual Annotations of this start: 3 of 21
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Gusanita_51 (FF), Popper_52 (FF), Zaheer_53 (FF),

Start 24:

- Found in 8 of 24 (33.3%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Vasanti_60 (CZ2),

Summary by clusters:

There are 12 clusters represented in this pham: DN, CY2, CY1, CZ2, CZ1, DB, CZ4, CZ, DN1, FF, DW, FO,

Info for manual annotations of cluster CY1:

- Start number 16 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 20 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ:

- Start number 16 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ2:

- Start number 6 was manually annotated 3 times for cluster CZ2.
- Start number 24 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ4:

- Start number 16 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DB:

- Start number 17 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DN:

- Start number 20 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 20 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DW:

- Start number 13 was manually annotated 1 time for cluster DW.
- Start number 18 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster FF:

- Start number 21 was manually annotated 2 times for cluster FF.
- Start number 23 was manually annotated 3 times for cluster FF.

Info for manual annotations of cluster FO:

- Start number 18 was manually annotated 1 time for cluster FO.

Gene Information:

Gene: Attis_61 Start: 41335, Stop: 42336, Start Num: 6

Candidate Starts for Attis_61:

(2, 41272), (Start: 6 @41335 has 3 MA's), (12, 41413), (Start: 24 @41509 has 1 MA's), (36, 41683), (37, 41686), (38, 41689), (41, 41731), (43, 41764), (44, 41770), (48, 41812), (61, 41947), (66, 41998), (67, 42001), (76, 42133), (83, 42211), (87, 42259), (93, 42295), (94, 42325),

Gene: BBQValindra_59 Start: 41751, Stop: 42629, Start Num: 17

Candidate Starts for BBQValindra_59:

(Start: 16 @41748 has 3 MA's), (Start: 17 @41751 has 1 MA's), (Start: 24 @41802 has 1 MA's), (36, 41976), (38, 41982), (41, 42024), (48, 42105), (50, 42114), (55, 42171), (66, 42291), (87, 42552),

Gene: BearBQ_69 Start: 43538, Stop: 44368, Start Num: 20

Candidate Starts for BearBQ_69:

(Start: 20 @43538 has 5 MA's), (28, 43664), (30, 43685), (33, 43718), (43, 43826), (44, 43832), (48, 43874), (49, 43877), (50, 43883), (51, 43901), (59, 43982), (60, 43985), (63, 44030), (65, 44051), (66, 44057), (70, 44111), (74, 44168), (75, 44171), (82, 44240), (84, 44267), (85, 44282), (90, 44315), (92, 44327), (93, 44336), (94, 44357),

Gene: BritBrat_65 Start: 43022, Stop: 43852, Start Num: 20

Candidate Starts for BritBrat_65:

(Start: 20 @43022 has 5 MA's), (30, 43169), (44, 43316), (48, 43358), (49, 43361), (50, 43367), (51, 43385), (59, 43466), (60, 43469), (65, 43535), (66, 43541), (70, 43595), (71, 43637), (74, 43652), (75, 43655), (80, 43718), (82, 43724), (83, 43745), (84, 43751), (85, 43766), (90, 43799), (92, 43811), (93, 43820), (94, 43841),

Gene: CocoCinnamon_46 Start: 29916, Stop: 30803, Start Num: 14

Candidate Starts for CocoCinnamon_46:

(8, 29853), (10, 29868), (14, 29916), (31, 30102), (34, 30150), (41, 30204), (44, 30237), (48, 30276), (53, 30315), (56, 30351), (59, 30378), (69, 30480), (72, 30555), (77, 30627), (78, 30630), (86, 30696), (91, 30747),

Gene: Cole_47 Start: 33705, Stop: 34544, Start Num: 21

Candidate Starts for Cole_47:

(Start: 18 @33690 has 2 MA's), (19, 33696), (Start: 21 @33705 has 2 MA's), (27, 33792), (31, 33843), (34, 33891), (41, 33945), (42, 33951), (44, 33978), (48, 34017), (52, 34053), (53, 34056), (56, 34092), (59, 34119), (62, 34140), (69, 34221), (72, 34296), (77, 34368), (78, 34371), (86, 34437),

Gene: Confidence_64 Start: 42274, Stop: 43167, Start Num: 16

Candidate Starts for Confidence_64:

(9, 42202), (10, 42205), (Start: 16 @42274 has 3 MA's), (36, 42505), (37, 42508), (38, 42511), (41, 42553), (48, 42634), (61, 42769), (66, 42820), (76, 42964), (87, 43090), (94, 43156),

Gene: Gusanita_51 Start: 34996, Stop: 35799, Start Num: 23

Candidate Starts for Gusanita_51:

(Start: 23 @34996 has 3 MA's), (25, 35044), (26, 35047), (39, 35212), (40, 35215), (48, 35290), (54, 35335), (57, 35386), (58, 35389), (69, 35491), (86, 35707), (88, 35734),

Gene: Horus_71 Start: 43494, Stop: 44324, Start Num: 20

Candidate Starts for Horus_71:

(Start: 20 @43494 has 5 MA's), (28, 43620), (30, 43641), (33, 43674), (43, 43782), (44, 43788), (48, 43830), (49, 43833), (50, 43839), (51, 43857), (59, 43938), (60, 43941), (63, 43986), (65, 44007), (66, 44013), (74, 44124), (75, 44127), (82, 44196), (83, 44217), (84, 44223), (85, 44238), (90, 44271), (93, 44292), (94, 44313),

Gene: Hyzer_75 Start: 50006, Stop: 50998, Start Num: 6

Candidate Starts for Hyzer_75:

(1, 49919), (3, 49952), (Start: 6 @50006 has 3 MA's), (Start: 13 @50087 has 1 MA's), (35, 50342), (38, 50354), (41, 50396), (45, 50447), (48, 50477), (51, 50504), (73, 50771), (76, 50795), (83, 50873), (87, 50921), (94, 50987),

Gene: LordFarquaad_63 Start: 41316, Stop: 42317, Start Num: 6

Candidate Starts for LordFarquaad_63:

(2, 41253), (Start: 6 @41316 has 3 MA's), (12, 41394), (Start: 24 @41490 has 1 MA's), (36, 41664), (37, 41667), (38, 41670), (41, 41712), (43, 41745), (44, 41751), (48, 41793), (61, 41928), (66, 41979), (67, 41982), (76, 42114), (83, 42192), (87, 42240), (93, 42276), (94, 42306),

Gene: Maja_42 Start: 30329, Stop: 31183, Start Num: 18

Candidate Starts for Maja_42:

(Start: 18 @30329 has 2 MA's), (19, 30335), (Start: 21 @30344 has 2 MA's), (Start: 23 @30362 has 3 MA's), (29, 30464), (31, 30482), (34, 30530), (41, 30584), (44, 30617), (53, 30695), (56, 30731), (62, 30779), (69, 30860), (78, 31010), (86, 31076),

Gene: Malibo_67 Start: 44890, Stop: 45759, Start Num: 18

Candidate Starts for Malibo_67:

(Start: 18 @44890 has 2 MA's), (Start: 24 @44935 has 1 MA's), (36, 45109), (37, 45112), (38, 45115), (41, 45157), (48, 45238), (61, 45373), (67, 45427), (76, 45556), (83, 45634), (87, 45682), (94, 45748),

Gene: Mcklovin_63 Start: 46941, Stop: 47825, Start Num: 16

Candidate Starts for Mcklovin_63:

(4, 46821), (Start: 16 @46941 has 3 MA's), (Start: 24 @46998 has 1 MA's), (36, 47172), (38, 47178), (41, 47220), (48, 47301), (61, 47436), (64, 47469), (66, 47487), (68, 47505), (76, 47622), (83, 47700),

Gene: ODay_77 Start: 44730, Stop: 45560, Start Num: 20

Candidate Starts for ODay_77:

(Start: 20 @44730 has 5 MA's), (28, 44856), (30, 44877), (33, 44910), (43, 45018), (44, 45024), (47, 45060), (48, 45066), (49, 45069), (50, 45075), (51, 45093), (59, 45174), (60, 45177), (63, 45222), (64, 45231), (65, 45243), (66, 45249), (70, 45303), (74, 45360), (75, 45363), (80, 45426), (82, 45432), (84, 45459), (85, 45474), (90, 45507), (93, 45528), (94, 45549),

Gene: Ohgeesy_64 Start: 43662, Stop: 44552, Start Num: 16

Candidate Starts for Ohgeesy_64:

(9, 43590), (10, 43593), (Start: 16 @43662 has 3 MA's), (32, 43854), (36, 43893), (37, 43896), (38, 43899), (41, 43941), (48, 44022), (59, 44133), (61, 44157), (68, 44226), (81, 44391), (83, 44421), (93, 44505), (94, 44541),

Gene: Phabuloso_74 Start: 42992, Stop: 43822, Start Num: 20

Candidate Starts for Phabuloso_74:

(Start: 20 @42992 has 5 MA's), (28, 43118), (30, 43139), (33, 43172), (43, 43280), (44, 43286), (48, 43328), (49, 43331), (50, 43337), (51, 43355), (59, 43436), (60, 43439), (63, 43484), (65, 43505), (66, 43511), (70, 43565), (74, 43622), (75, 43625), (80, 43688), (82, 43694), (84, 43721), (85, 43736), (90, 43769), (92, 43781), (93, 43790), (94, 43811),

Gene: Popper_52 Start: 34367, Stop: 35170, Start Num: 23

Candidate Starts for Popper_52:

(Start: 23 @34367 has 3 MA's), (25, 34415), (26, 34418), (39, 34583), (40, 34586), (46, 34634), (48, 34661), (54, 34706), (57, 34757), (58, 34760), (79, 35021),

Gene: QuinnAvery_49 Start: 34788, Stop: 35627, Start Num: 21

Candidate Starts for QuinnAvery_49:

(Start: 18 @34773 has 2 MA's), (19, 34779), (Start: 21 @34788 has 2 MA's), (31, 34926), (34, 34974), (41, 35028), (42, 35034), (44, 35061), (48, 35100), (52, 35136), (53, 35139), (56, 35175), (59, 35202), (62, 35223), (69, 35304), (72, 35379), (77, 35451), (78, 35454), (86, 35520),

Gene: Ruthy_63 Start: 45360, Stop: 46259, Start Num: 13

Candidate Starts for Ruthy_63:

(7, 45288), (Start: 13 @45360 has 1 MA's), (Start: 24 @45447 has 1 MA's), (35, 45615), (38, 45627), (41, 45669), (66, 45936), (85, 46161), (89, 46191),

Gene: Ryan_51 Start: 34472, Stop: 35311, Start Num: 21

Candidate Starts for Ryan_51:

(Start: 18 @34457 has 2 MA's), (19, 34463), (Start: 21 @34472 has 2 MA's), (31, 34610), (34, 34658), (41, 34712), (42, 34718), (44, 34745), (48, 34784), (52, 34820), (53, 34823), (56, 34859), (59, 34886), (62, 34907), (69, 34988), (72, 35063), (77, 35135), (78, 35138), (86, 35204),

Gene: SoilAssassin_61 Start: 41334, Stop: 42335, Start Num: 6

Candidate Starts for SoilAssassin_61:

(2, 41271), (Start: 6 @41334 has 3 MA's), (12, 41412), (Start: 24 @41508 has 1 MA's), (36, 41682), (37, 41685), (38, 41688), (41, 41730), (43, 41763), (44, 41769), (48, 41811), (61, 41946), (66, 41997), (67, 42000), (76, 42132), (83, 42210), (87, 42258), (93, 42294), (94, 42324),

Gene: Vasanti_60 Start: 40525, Stop: 41349, Start Num: 24

Candidate Starts for Vasanti_60:

(5, 40357), (11, 40414), (15, 40453), (Start: 18 @40480 has 2 MA's), (Start: 24 @40525 has 1 MA's), (36, 40699), (37, 40702), (38, 40705), (41, 40747), (44, 40786), (48, 40828), (67, 41017), (76, 41146), (83, 41224), (87, 41272), (94, 41338),

Gene: Zaheer_53 Start: 35680, Stop: 36483, Start Num: 23

Candidate Starts for Zaheer_53:

(22, 35677), (Start: 23 @35680 has 3 MA's), (26, 35731), (31, 35800), (39, 35896), (40, 35899), (43, 35929), (46, 35947), (48, 35974), (54, 36019), (57, 36070), (58, 36073), (69, 36175), (79, 36334), (86, 36391),