

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 295113 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295113 has 20 members, 2 are drafts.

Phages represented in each track:

- Track 1 : BritBrat_72
- Track 2 : Pepperoni_55
- Track 3 : Lton_56
- Track 4 : Denise_56
- Track 5 : OneDirection_55
- Track 6 : Lucky10_58
- Track 7 : Budski_84
- Track 8 : ODay_86
- Track 9 : BearBQ_78
- Track 10 : Kamaru_74
- Track 11 : Periwinkle_88
- Track 12 : Whitney_77
- Track 13 : Getalong_82
- Track 14 : LitninMcQueen_82
- Track 15 : BENtherdunthat_81
- Track 16 : CheeseTouch_85
- Track 17 : Holliday_82
- Track 18 : ShawBrad_84
- Track 19 : Apricot_76
- Track 20 : TinyDot_52

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

The start number called the most often in the published annotations is 21, it was called in 17 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot_76, BENtherdunthat_81, BearBQ_78, Budski_84, CheeseTouch_85, Denise_56, Getalong_82, Holliday_82, Kamaru_74, LitninMcQueen_82, Lton_56, Lucky10_58, ODay_86, OneDirection_55, Pepperoni_55, Periwinkle_88, TinyDot_52, Whitney_77,

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

- ShawBrad_84,

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

- BritBrat_72,

Summary by start number:

Start 19:

- Found in 1 of 20 (5.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ShawBrad_84 (DN1),

Start 21:

- Found in 19 of 20 (95.0%) of genes in pham
- Manual Annotations of this start: 17 of 18
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Apricot_76 (DN3), BENtherdunthat_81 (DN1), BearBQ_78 (DN), Budski_84 (DN), CheeseTouch_85 (DN1), Denise_56 (CZ5), Getalong_82 (DN1), Holliday_82 (DN1), Kamaru_74 (DN1), LitninMcQueen_82 (DN1), Lton_56 (CZ), Lucky10_58 (DH), ODay_86 (DN), OneDirection_55 (CZ6), Pepperoni_55 (CZ), Periwinkle_88 (DN1), TinyDot_52 (singleton), Whitney_77 (DN1),

Start 41:

- Found in 1 of 20 (5.0%) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BritBrat_72 (CY2),

Summary by clusters:

There are 9 clusters represented in this pham: DN, CY2, singleton, DH, CZ6, CZ5, CZ, DN1, DN3,

Info for manual annotations of cluster CY2:

- Start number 41 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CZ:

- Start number 21 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ5:

- Start number 21 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 21 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster DH:

- Start number 21 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:

- Start number 21 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN1:

•Start number 21 was manually annotated 8 times for cluster DN1.

Info for manual annotations of cluster DN3:

•Start number 21 was manually annotated 1 time for cluster DN3.

Gene Information:

Gene: Apricot_76 Start: 43822, Stop: 44436, Start Num: 21

Candidate Starts for Apricot_76:

(15, 43801), (Start: 21 @43822 has 17 MA's), (24, 43900), (26, 43912), (36, 43981), (43, 44053), (51, 44080), (76, 44233), (80, 44296),

Gene: BENtherdunthat_81 Start: 45571, Stop: 46362, Start Num: 21

Candidate Starts for BENtherdunthat_81:

(10, 45517), (16, 45553), (Start: 21 @45571 has 17 MA's), (24, 45649), (26, 45661), (34, 45712), (59, 45901), (65, 45946), (67, 46021), (79, 46141), (80, 46144), (82, 46153), (86, 46162), (89, 46186), (94, 46303), (95, 46309),

Gene: BearBQ_78 Start: 46707, Stop: 47315, Start Num: 21

Candidate Starts for BearBQ_78:

(9, 46653), (Start: 21 @46707 has 17 MA's), (24, 46785), (26, 46797), (29, 46812), (33, 46842), (53, 46932), (61, 46968), (70, 47082), (79, 47169), (80, 47172), (81, 47181), (84, 47187), (88, 47208),

Gene: BritBrat_72 Start: 45785, Stop: 46360, Start Num: 41

Candidate Starts for BritBrat_72:

(7, 45500), (22, 45569), (23, 45572), (27, 45668), (28, 45671), (30, 45686), (31, 45701), (Start: 41 @45785 has 1 MA's), (47, 45845), (62, 45959), (63, 45974), (71, 46094), (79, 46214), (80, 46217), (85, 46232), (87, 46253),

Gene: Budski_84 Start: 46675, Stop: 47340, Start Num: 21

Candidate Starts for Budski_84:

(Start: 21 @46675 has 17 MA's), (24, 46753), (26, 46765), (46, 46927), (69, 47131), (90, 47287),

Gene: CheeseTouch_85 Start: 42327, Stop: 42953, Start Num: 21

Candidate Starts for CheeseTouch_85:

(9, 42273), (Start: 21 @42327 has 17 MA's), (24, 42405), (26, 42417), (58, 42573), (61, 42588), (66, 42669), (79, 42789), (80, 42792), (81, 42801),

Gene: Denise_56 Start: 35910, Stop: 36626, Start Num: 21

Candidate Starts for Denise_56:

(Start: 21 @35910 has 17 MA's), (26, 36009), (45, 36150), (72, 36363), (75, 36393), (77, 36408), (79, 36465), (80, 36468), (97, 36609),

Gene: Getalong_82 Start: 46997, Stop: 47734, Start Num: 21

Candidate Starts for Getalong_82:

(8, 46943), (16, 46979), (Start: 21 @46997 has 17 MA's), (24, 47075), (26, 47087), (39, 47195), (40, 47198), (42, 47222), (43, 47243), (49, 47276), (52, 47300), (64, 47384), (68, 47489), (73, 47525), (74, 47546), (79, 47642), (80, 47645), (82, 47654),

Gene: Holliday_82 Start: 48542, Stop: 49330, Start Num: 21

Candidate Starts for Holliday_82:

(Start: 21 @48542 has 17 MA's), (26, 48632), (34, 48683), (65, 48917), (69, 49001), (79, 49109), (80, 49112), (86, 49130), (89, 49154), (93, 49223), (94, 49271), (95, 49277), (96, 49280),

Gene: Kamaru_74 Start: 44161, Stop: 44814, Start Num: 21

Candidate Starts for Kamaru_74:

(9, 44107), (Start: 21 @44161 has 17 MA's), (26, 44251), (33, 44296), (53, 44386), (61, 44422), (76, 44575), (79, 44635), (80, 44638), (97, 44797),

Gene: LitninMcQueen_82 Start: 45874, Stop: 46599, Start Num: 21

Candidate Starts for LitninMcQueen_82:

(20, 45868), (Start: 21 @45874 has 17 MA's), (26, 45964), (39, 46054), (44, 46102), (56, 46180), (57, 46186), (69, 46327), (79, 46435), (80, 46438), (82, 46447), (91, 46504),

Gene: Lton_56 Start: 33761, Stop: 34471, Start Num: 21

Candidate Starts for Lton_56:

(16, 33743), (Start: 21 @33761 has 17 MA's), (26, 33851), (34, 33902), (65, 34136), (69, 34220), (80, 34331),

Gene: Lucky10_58 Start: 36978, Stop: 37679, Start Num: 21

Candidate Starts for Lucky10_58:

(9, 36924), (Start: 21 @36978 has 17 MA's), (24, 37056), (26, 37068), (32, 37113), (50, 37218), (60, 37284), (69, 37392), (79, 37500), (80, 37503), (97, 37662),

Gene: ODay_86 Start: 47792, Stop: 48577, Start Num: 21

Candidate Starts for ODay_86:

(14, 47759), (Start: 21 @47792 has 17 MA's), (25, 47879), (26, 47882), (38, 47972), (52, 48098), (78, 48365), (79, 48413), (80, 48416), (91, 48482),

Gene: OneDirection_55 Start: 33949, Stop: 34695, Start Num: 21

Candidate Starts for OneDirection_55:

(Start: 21 @33949 has 17 MA's), (26, 34039), (34, 34090), (65, 34324), (69, 34408), (79, 34516), (80, 34519), (97, 34678),

Gene: Pepperoni_55 Start: 35253, Stop: 35927, Start Num: 21

Candidate Starts for Pepperoni_55:

(Start: 21 @35253 has 17 MA's), (24, 35331), (26, 35343), (35, 35406), (37, 35409), (48, 35472), (54, 35502), (55, 35505), (65, 35556), (69, 35640), (79, 35748), (80, 35751),

Gene: Periwinkle_88 Start: 47628, Stop: 48359, Start Num: 21

Candidate Starts for Periwinkle_88:

(15, 47607), (Start: 21 @47628 has 17 MA's), (24, 47703), (26, 47715), (34, 47766), (59, 47955), (65, 48000), (67, 48075), (79, 48195), (80, 48198), (82, 48207), (92, 48264),

Gene: ShawBrad_84 Start: 45302, Stop: 45967, Start Num: 19

Candidate Starts for ShawBrad_84:

(1, 45086), (2, 45104), (3, 45116), (5, 45188), (13, 45275), (19, 45302), (Start: 21 @45314 has 17 MA's), (24, 45392), (26, 45404), (53, 45539), (61, 45575), (76, 45728), (79, 45788), (80, 45791), (97, 45950),

Gene: TinyDot_52 Start: 33073, Stop: 33759, Start Num: 21

Candidate Starts for TinyDot_52:

(9, 33019), (18, 33061), (Start: 21 @33073 has 17 MA's), (26, 33163), (32, 33208), (50, 33313), (60, 33379), (69, 33487), (79, 33595), (80, 33598), (83, 33607),

Gene: Whitney_77 Start: 46318, Stop: 47055, Start Num: 21

Candidate Starts for Whitney_77:

(4, 46171), (6, 46246), (11, 46276), (12, 46279), (17, 46303), (Start: 21 @46318 has 17 MA's), (26, 46408), (39, 46516), (40, 46519), (42, 46543), (43, 46564), (49, 46597), (52, 46621), (64, 46705), (68, 46810), (73, 46846), (74, 46867), (79, 46963), (80, 46966), (82, 46975),