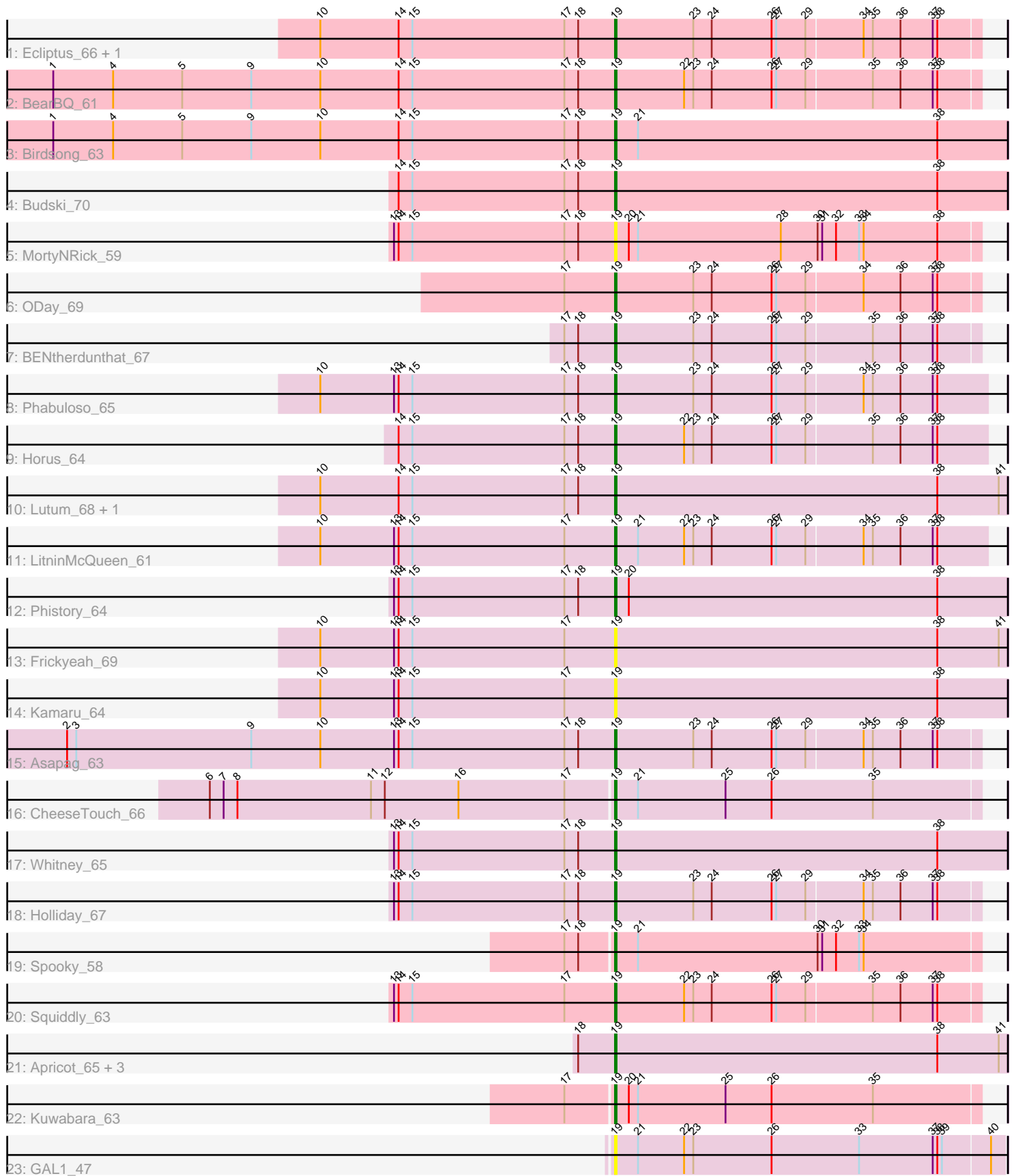


# Pham 3196



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 3196 Report

This analysis was run 04/28/24 on database version 559.

Pham number 3196 has 28 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Ecliptus\_66, Getalong\_66
- Track 2 : BearBQ\_61
- Track 3 : Birdsong\_63
- Track 4 : Budski\_70
- Track 5 : MortyNRick\_59
- Track 6 : ODay\_69
- Track 7 : BENtherdunthat\_67
- Track 8 : Phabuloso\_65
- Track 9 : Horus\_64
- Track 10 : Lutum\_68, Kenna\_63
- Track 11 : LitninMcQueen\_61
- Track 12 : Phistory\_64
- Track 13 : Frickyeh\_69
- Track 14 : Kamaru\_64
- Track 15 : Asapag\_63
- Track 16 : CheeseTouch\_66
- Track 17 : Whitney\_65
- Track 18 : Holliday\_67
- Track 19 : Spooky\_58
- Track 20 : Squiddly\_63
- Track 21 : Apricot\_65, Periwinkle\_75, Crater\_65, Leroy\_65
- Track 22 : Kuwabara\_63
- Track 23 : GAL1\_47

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

The start number called the most often in the published annotations is 19, it was called in 24 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot\_65, Asapag\_63, BENtherdunthat\_67, BearBQ\_61, Birdsong\_63, Budski\_70, CheeseTouch\_66, Crater\_65, Ecliptus\_66, Frickyeh\_69, GAL1\_47, Getalong\_66, Holliday\_67, Horus\_64, Kamaru\_64, Kenna\_63, Kuwabara\_63, Leroy\_65, LitninMcQueen\_61, Lutum\_68, MortyNRick\_59, ODay\_69, Periwinkle\_75,

Phabuloso\_65, Phistory\_64, Spooky\_58, Squiddly\_63, Whitney\_65,

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

- 

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

- 

### **Summary by start number:**

Start 19:

- Found in 28 of 28 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 24 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot\_65 (DN3), Asapag\_63 (DN1), BENTherdunthat\_67 (DN1), BearBQ\_61 (DN), Birdsong\_63 (DN), Budski\_70 (DN), CheeseTouch\_66 (DN1), Crater\_65 (DN3), Ecliptus\_66 (DN), Frickyeah\_69 (DN1), GAL1\_47 (singleton), Getalong\_66 (DN1), Holliday\_67 (DN1), Horus\_64 (DN1), Kamaru\_64 (DN1), Kenna\_63 (DN1), Kuwabara\_63 (DN4), Leroy\_65 (DN1), LitninMcQueen\_61 (DN1), Lutum\_68 (DN1), MortyNRick\_59 (DN), ODay\_69 (DN), Periwinkle\_75 (DN1), Phabuloso\_65 (DN1), Phistory\_64 (DN1), Spooky\_58 (DN2), Squiddly\_63 (DN2), Whitney\_65 (DN1),

### **Summary by clusters:**

There are 6 clusters represented in this pham: DN, singleton, DN4, DN1, DN3, DN2,

Info for manual annotations of cluster DN:

- Start number 19 was manually annotated 5 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 19 was manually annotated 14 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 19 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 19 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 19 was manually annotated 1 time for cluster DN4.

### **Gene Information:**

Gene: Apricot\_65 Start: 39555, Stop: 39809, Start Num: 19

Candidate Starts for Apricot\_65:

(18, 39531), (Start: 19 @39555 has 24 MA's), (38, 39765), (41, 39804),

Gene: Asapag\_63 Start: 39031, Stop: 39264, Start Num: 19

Candidate Starts for Asapag\_63:

(2, 38674), (3, 38680), (9, 38794), (10, 38839), (13, 38887), (14, 38890), (15, 38899), (17, 38998), (18, 39007), (Start: 19 @39031 has 24 MA's), (23, 39082), (24, 39094), (26, 39133), (27, 39136), (29, 39154), (34, 39190), (35, 39196), (36, 39214), (37, 39235), (38, 39238),

Gene: BENtherdunthat\_67 Start: 40515, Stop: 40748, Start Num: 19

Candidate Starts for BENtherdunthat\_67:

(17, 40482), (18, 40491), (Start: 19 @40515 has 24 MA's), (23, 40566), (24, 40578), (26, 40617), (27, 40620), (29, 40638), (35, 40680), (36, 40698), (37, 40719), (38, 40722),

Gene: BearBQ\_61 Start: 40759, Stop: 40992, Start Num: 19

Candidate Starts for BearBQ\_61:

(1, 40393), (4, 40432), (5, 40477), (9, 40522), (10, 40567), (14, 40618), (15, 40627), (17, 40726), (18, 40735), (Start: 19 @40759 has 24 MA's), (22, 40804), (23, 40810), (24, 40822), (26, 40861), (27, 40864), (29, 40882), (35, 40924), (36, 40942), (37, 40963), (38, 40966),

Gene: Birdsong\_63 Start: 39426, Stop: 39680, Start Num: 19

Candidate Starts for Birdsong\_63:

(1, 39060), (4, 39099), (5, 39144), (9, 39189), (10, 39234), (14, 39285), (15, 39294), (17, 39393), (18, 39402), (Start: 19 @39426 has 24 MA's), (21, 39441), (38, 39636),

Gene: Budski\_70 Start: 41547, Stop: 41801, Start Num: 19

Candidate Starts for Budski\_70:

(14, 41406), (15, 41415), (17, 41514), (18, 41523), (Start: 19 @41547 has 24 MA's), (38, 41757),

Gene: CheeseTouch\_66 Start: 36473, Stop: 36709, Start Num: 19

Candidate Starts for CheeseTouch\_66:

(6, 36212), (7, 36221), (8, 36230), (11, 36317), (12, 36326), (16, 36374), (17, 36443), (Start: 19 @36473 has 24 MA's), (21, 36488), (25, 36545), (26, 36575), (35, 36641),

Gene: Crater\_65 Start: 39950, Stop: 40204, Start Num: 19

Candidate Starts for Crater\_65:

(18, 39926), (Start: 19 @39950 has 24 MA's), (38, 40160), (41, 40199),

Gene: Ecliptus\_66 Start: 41747, Stop: 41980, Start Num: 19

Candidate Starts for Ecliptus\_66:

(10, 41555), (14, 41606), (15, 41615), (17, 41714), (18, 41723), (Start: 19 @41747 has 24 MA's), (23, 41798), (24, 41810), (26, 41849), (27, 41852), (29, 41870), (34, 41906), (35, 41912), (36, 41930), (37, 41951), (38, 41954),

Gene: Frickyeh\_69 Start: 40042, Stop: 40296, Start Num: 19

Candidate Starts for Frickyeh\_69:

(10, 39850), (13, 39898), (14, 39901), (15, 39910), (17, 40009), (Start: 19 @40042 has 24 MA's), (38, 40252), (41, 40291),

Gene: GAL1\_47 Start: 34770, Stop: 35021, Start Num: 19

Candidate Starts for GAL1\_47:

(Start: 19 @34770 has 24 MA's), (21, 34785), (22, 34815), (23, 34821), (26, 34872), (33, 34929), (37, 34977), (38, 34980), (39, 34983), (40, 35013),

Gene: Getalong\_66 Start: 41409, Stop: 41642, Start Num: 19

Candidate Starts for Getalong\_66:

(10, 41217), (14, 41268), (15, 41277), (17, 41376), (18, 41385), (Start: 19 @41409 has 24 MA's), (23, 41460), (24, 41472), (26, 41511), (27, 41514), (29, 41532), (34, 41568), (35, 41574), (36, 41592), (37,

41613), (38, 41616),

Gene: Holliday\_67 Start: 41383, Stop: 41616, Start Num: 19

Candidate Starts for Holliday\_67:

(13, 41239), (14, 41242), (15, 41251), (17, 41350), (18, 41359), (Start: 19 @41383 has 24 MA's), (23, 41434), (24, 41446), (26, 41485), (27, 41488), (29, 41506), (34, 41542), (35, 41548), (36, 41566), (37, 41587), (38, 41590),

Gene: Horus\_64 Start: 40617, Stop: 40856, Start Num: 19

Candidate Starts for Horus\_64:

(14, 40476), (15, 40485), (17, 40584), (18, 40593), (Start: 19 @40617 has 24 MA's), (22, 40662), (23, 40668), (24, 40680), (26, 40719), (27, 40722), (29, 40740), (35, 40782), (36, 40800), (37, 40821), (38, 40824),

Gene: Kamaru\_64 Start: 39611, Stop: 39865, Start Num: 19

Candidate Starts for Kamaru\_64:

(10, 39419), (13, 39467), (14, 39470), (15, 39479), (17, 39578), (Start: 19 @39611 has 24 MA's), (38, 39821),

Gene: Kenna\_63 Start: 39580, Stop: 39834, Start Num: 19

Candidate Starts for Kenna\_63:

(10, 39388), (14, 39439), (15, 39448), (17, 39547), (18, 39556), (Start: 19 @39580 has 24 MA's), (38, 39790), (41, 39829),

Gene: Kuwabara\_63 Start: 40871, Stop: 41107, Start Num: 19

Candidate Starts for Kuwabara\_63:

(17, 40841), (Start: 19 @40871 has 24 MA's), (20, 40880), (21, 40886), (25, 40943), (26, 40973), (35, 41039),

Gene: Leroy\_65 Start: 39886, Stop: 40140, Start Num: 19

Candidate Starts for Leroy\_65:

(18, 39862), (Start: 19 @39886 has 24 MA's), (38, 40096), (41, 40135),

Gene: LitninMcQueen\_61 Start: 39358, Stop: 39597, Start Num: 19

Candidate Starts for LitninMcQueen\_61:

(10, 39166), (13, 39214), (14, 39217), (15, 39226), (17, 39325), (Start: 19 @39358 has 24 MA's), (21, 39373), (22, 39403), (23, 39409), (24, 39421), (26, 39460), (27, 39463), (29, 39481), (34, 39517), (35, 39523), (36, 39541), (37, 39562), (38, 39565),

Gene: Lutum\_68 Start: 40744, Stop: 40998, Start Num: 19

Candidate Starts for Lutum\_68:

(10, 40552), (14, 40603), (15, 40612), (17, 40711), (18, 40720), (Start: 19 @40744 has 24 MA's), (38, 40954), (41, 40993),

Gene: MortyNRick\_59 Start: 40788, Stop: 41024, Start Num: 19

Candidate Starts for MortyNRick\_59:

(13, 40644), (14, 40647), (15, 40656), (17, 40755), (18, 40764), (Start: 19 @40788 has 24 MA's), (20, 40797), (21, 40803), (28, 40896), (30, 40920), (31, 40923), (32, 40932), (33, 40947), (34, 40950), (38, 40998),

Gene: ODay\_69 Start: 41688, Stop: 41921, Start Num: 19

Candidate Starts for ODay\_69:

(17, 41655), (Start: 19 @41688 has 24 MA's), (23, 41739), (24, 41751), (26, 41790), (27, 41793), (29, 41811), (34, 41847), (36, 41871), (37, 41892), (38, 41895),

Gene: Periwinkle\_75 Start: 43050, Stop: 43304, Start Num: 19

Candidate Starts for Periwinkle\_75:

(18, 43026), (Start: 19 @43050 has 24 MA's), (38, 43260), (41, 43299),

Gene: Phabuloso\_65 Start: 39789, Stop: 40028, Start Num: 19

Candidate Starts for Phabuloso\_65:

(10, 39597), (13, 39645), (14, 39648), (15, 39657), (17, 39756), (18, 39765), (Start: 19 @39789 has 24 MA's), (23, 39840), (24, 39852), (26, 39891), (27, 39894), (29, 39912), (34, 39948), (35, 39954), (36, 39972), (37, 39993), (38, 39996),

Gene: Phistory\_64 Start: 39115, Stop: 39369, Start Num: 19

Candidate Starts for Phistory\_64:

(13, 38971), (14, 38974), (15, 38983), (17, 39082), (18, 39091), (Start: 19 @39115 has 24 MA's), (20, 39124), (38, 39325),

Gene: Spooky\_58 Start: 38487, Stop: 38723, Start Num: 19

Candidate Starts for Spooky\_58:

(17, 38457), (18, 38466), (Start: 19 @38487 has 24 MA's), (21, 38502), (30, 38619), (31, 38622), (32, 38631), (33, 38646), (34, 38649),

Gene: Squiddly\_63 Start: 40945, Stop: 41178, Start Num: 19

Candidate Starts for Squiddly\_63:

(13, 40801), (14, 40804), (15, 40813), (17, 40912), (Start: 19 @40945 has 24 MA's), (22, 40990), (23, 40996), (24, 41008), (26, 41047), (27, 41050), (29, 41068), (35, 41110), (36, 41128), (37, 41149), (38, 41152),

Gene: Whitney\_65 Start: 41460, Stop: 41714, Start Num: 19

Candidate Starts for Whitney\_65:

(13, 41316), (14, 41319), (15, 41328), (17, 41427), (18, 41436), (Start: 19 @41460 has 24 MA's), (38, 41670),