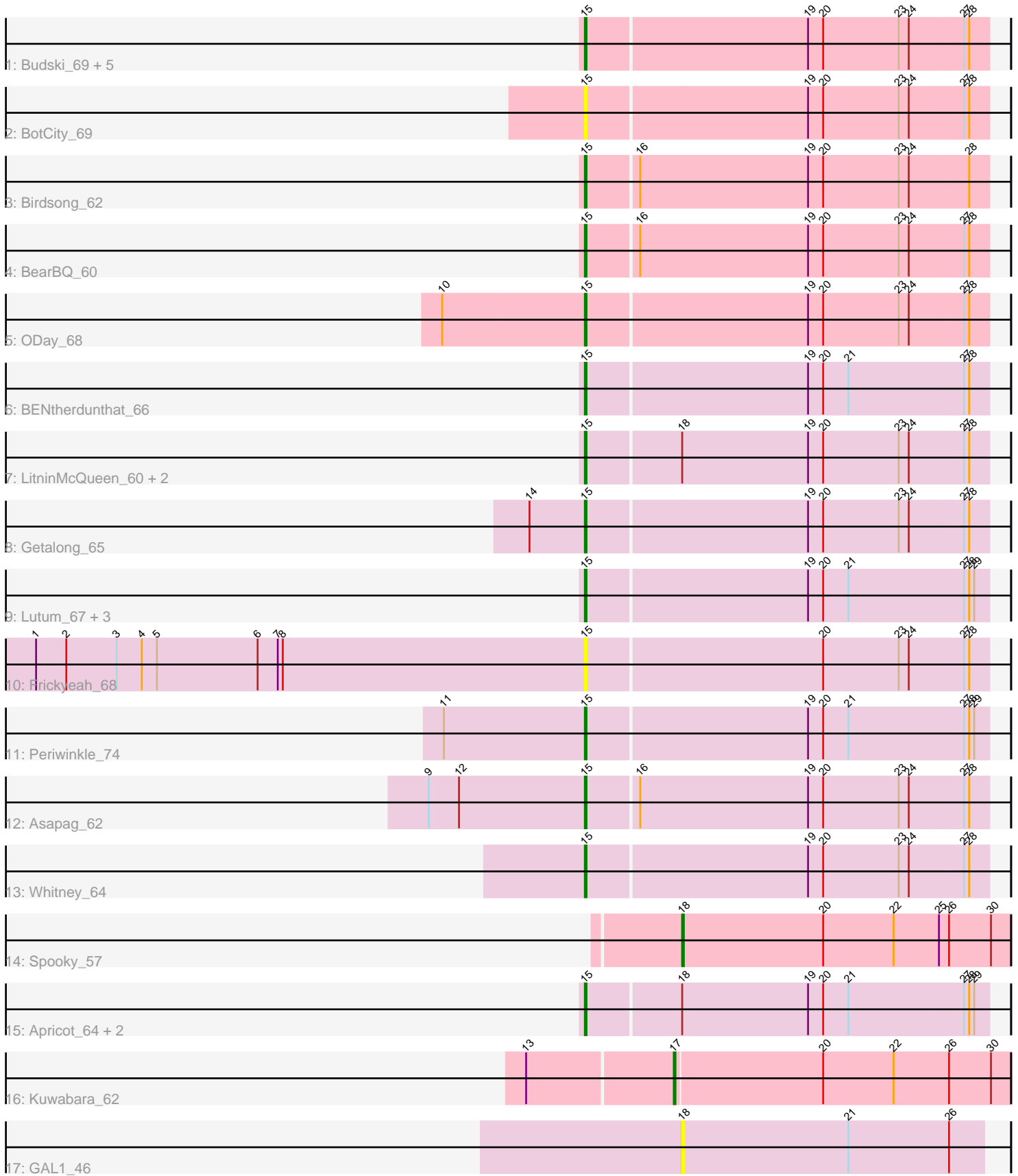


Pham 221676



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 221676 Report

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

Pham number 221676 has 29 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Budski\_69, Phabuloso\_64, Horus\_63, Phistory\_63, MortyNRick\_58, Holliday\_66
- Track 2 : BotCity\_69
- Track 3 : Birdsong\_62
- Track 4 : BearBQ\_60
- Track 5 : ODay\_68
- Track 6 : BENtherdunthat\_66
- Track 7 : LitninMcQueen\_60, Squiddly\_62, Kamaru\_61
- Track 8 : Getalong\_65
- Track 9 : Lutum\_67, Ecliptus\_65, Kenna\_62, ShawBrad\_69
- Track 10 : Frickyeah\_68
- Track 11 : Periwinkle\_74
- Track 12 : Asapag\_62
- Track 13 : Whitney\_64
- Track 14 : Spooky\_57
- Track 15 : Apricot\_64, Crater\_64, Leroy\_64
- Track 16 : Kuwabara\_62
- Track 17 : GAL1\_46

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

The start number called the most often in the published annotations is 15, it was called in 22 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apricot\_64, Asapag\_62, BENtherdunthat\_66, BearBQ\_60, Birdsong\_62, BotCity\_69, Budski\_69, Crater\_64, Ecliptus\_65, Frickyeah\_68, Getalong\_65, Holliday\_66, Horus\_63, Kamaru\_61, Kenna\_62, Leroy\_64, LitninMcQueen\_60, Lutum\_67, MortyNRick\_58, ODay\_68, Periwinkle\_74, Phabuloso\_64, Phistory\_63, ShawBrad\_69, Squiddly\_62, Whitney\_64,

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

-

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

- GAL1\_46, Kuwabara\_62, Spooky\_57,

### Summary by start number:

Start 15:

- Found in 26 of 29 ( 89.7% ) of genes in pham
- Manual Annotations of this start: 22 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apricot\_64 (DN3), Asapag\_62 (DN1), BENTherdunthat\_66 (DN1), BearBQ\_60 (DN), Birdsong\_62 (DN), BotCity\_69 (DN), Budski\_69 (DN), Crater\_64 (DN3), Ecliptus\_65 (DN), Frickyeah\_68 (DN1), Getalong\_65 (DN1), Holliday\_66 (DN1), Horus\_63 (DN1), Kamaru\_61 (DN1), Kenna\_62 (DN1), Leroy\_64 (DN1), LitninMcQueen\_60 (DN1), Lutum\_67 (DN1), MortyNRick\_58 (DN), ODay\_68 (DN), Periwinkle\_74 (DN1), Phabuloso\_64 (DN1), Phistory\_63 (DN1), ShawBrad\_69 (DN1), Squiddly\_62 (DN2), Whitney\_64 (DN1),

Start 17:

- Found in 1 of 29 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kuwabara\_62 (DN4),

Start 18:

- Found in 8 of 29 ( 27.6% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 25.0% of time when present
- Phage (with cluster) where this start called: GAL1\_46 (singleton), Spooky\_57 (DN2),

### 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 15 was manually annotated 5 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 15 was manually annotated 14 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 15 was manually annotated 1 time for cluster DN2.
- Start number 18 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 15 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 17 was manually annotated 1 time for cluster DN4.

### Gene Information:

Gene: Apricot\_64 Start: 39325, Stop: 39558, Start Num: 15

Candidate Starts for Apricot\_64:

(Start: 15 @39325 has 22 MA's), (Start: 18 @39379 has 1 MA's), (19, 39454), (20, 39463), (21, 39478), (27, 39544), (28, 39547), (29, 39550),

Gene: Asapag\_62 Start: 38801, Stop: 39034, Start Num: 15

Candidate Starts for Asapag\_62:

(9, 38708), (12, 38726), (Start: 15 @38801 has 22 MA's), (16, 38831), (19, 38930), (20, 38939), (23, 38984), (24, 38990), (27, 39020), (28, 39023),

Gene: BENtherdunthat\_66 Start: 40285, Stop: 40518, Start Num: 15

Candidate Starts for BENtherdunthat\_66:

(Start: 15 @40285 has 22 MA's), (19, 40414), (20, 40423), (21, 40438), (27, 40504), (28, 40507),

Gene: BearBQ\_60 Start: 40529, Stop: 40762, Start Num: 15

Candidate Starts for BearBQ\_60:

(Start: 15 @40529 has 22 MA's), (16, 40559), (19, 40658), (20, 40667), (23, 40712), (24, 40718), (27, 40748), (28, 40751),

Gene: Birdsong\_62 Start: 39196, Stop: 39429, Start Num: 15

Candidate Starts for Birdsong\_62:

(Start: 15 @39196 has 22 MA's), (16, 39226), (19, 39325), (20, 39334), (23, 39379), (24, 39385), (28, 39418),

Gene: BotCity\_69 Start: 40477, Stop: 40710, Start Num: 15

Candidate Starts for BotCity\_69:

(Start: 15 @40477 has 22 MA's), (19, 40606), (20, 40615), (23, 40660), (24, 40666), (27, 40696), (28, 40699),

Gene: Budski\_69 Start: 41317, Stop: 41550, Start Num: 15

Candidate Starts for Budski\_69:

(Start: 15 @41317 has 22 MA's), (19, 41446), (20, 41455), (23, 41500), (24, 41506), (27, 41536), (28, 41539),

Gene: Crater\_64 Start: 39720, Stop: 39953, Start Num: 15

Candidate Starts for Crater\_64:

(Start: 15 @39720 has 22 MA's), (Start: 18 @39774 has 1 MA's), (19, 39849), (20, 39858), (21, 39873), (27, 39939), (28, 39942), (29, 39945),

Gene: Ecliptus\_65 Start: 41517, Stop: 41750, Start Num: 15

Candidate Starts for Ecliptus\_65:

(Start: 15 @41517 has 22 MA's), (19, 41646), (20, 41655), (21, 41670), (27, 41736), (28, 41739), (29, 41742),

Gene: Frickyeah\_68 Start: 39812, Stop: 40045, Start Num: 15

Candidate Starts for Frickyeah\_68:

(1, 39485), (2, 39503), (3, 39533), (4, 39548), (5, 39557), (6, 39617), (7, 39629), (8, 39632), (Start: 15 @39812 has 22 MA's), (20, 39950), (23, 39995), (24, 40001), (27, 40031), (28, 40034),

Gene: GAL1\_46 Start: 34604, Stop: 34783, Start Num: 18

Candidate Starts for GAL1\_46:

(Start: 18 @34604 has 1 MA's), (21, 34703), (26, 34763),

Gene: Getalong\_65 Start: 41179, Stop: 41412, Start Num: 15

Candidate Starts for Getalong\_65:

(14, 41146), (Start: 15 @41179 has 22 MA's), (19, 41308), (20, 41317), (23, 41362), (24, 41368), (27, 41398), (28, 41401),

Gene: Holliday\_66 Start: 41153, Stop: 41386, Start Num: 15

Candidate Starts for Holliday\_66:

(Start: 15 @41153 has 22 MA's), (19, 41282), (20, 41291), (23, 41336), (24, 41342), (27, 41372), (28, 41375),

Gene: Horus\_63 Start: 40387, Stop: 40620, Start Num: 15

Candidate Starts for Horus\_63:

(Start: 15 @40387 has 22 MA's), (19, 40516), (20, 40525), (23, 40570), (24, 40576), (27, 40606), (28, 40609),

Gene: Kamaru\_61 Start: 39381, Stop: 39614, Start Num: 15

Candidate Starts for Kamaru\_61:

(Start: 15 @39381 has 22 MA's), (Start: 18 @39435 has 1 MA's), (19, 39510), (20, 39519), (23, 39564), (24, 39570), (27, 39600), (28, 39603),

Gene: Kenna\_62 Start: 39350, Stop: 39583, Start Num: 15

Candidate Starts for Kenna\_62:

(Start: 15 @39350 has 22 MA's), (19, 39479), (20, 39488), (21, 39503), (27, 39569), (28, 39572), (29, 39575),

Gene: Kuwabara\_62 Start: 40677, Stop: 40874, Start Num: 17

Candidate Starts for Kuwabara\_62:

(13, 40593), (Start: 17 @40677 has 1 MA's), (20, 40764), (22, 40806), (26, 40839), (30, 40863),

Gene: Leroy\_64 Start: 39656, Stop: 39889, Start Num: 15

Candidate Starts for Leroy\_64:

(Start: 15 @39656 has 22 MA's), (Start: 18 @39710 has 1 MA's), (19, 39785), (20, 39794), (21, 39809), (27, 39875), (28, 39878), (29, 39881),

Gene: LitninMcQueen\_60 Start: 39128, Stop: 39361, Start Num: 15

Candidate Starts for LitninMcQueen\_60:

(Start: 15 @39128 has 22 MA's), (Start: 18 @39182 has 1 MA's), (19, 39257), (20, 39266), (23, 39311), (24, 39317), (27, 39347), (28, 39350),

Gene: Lutum\_67 Start: 40514, Stop: 40747, Start Num: 15

Candidate Starts for Lutum\_67:

(Start: 15 @40514 has 22 MA's), (19, 40643), (20, 40652), (21, 40667), (27, 40733), (28, 40736), (29, 40739),

Gene: MortyNRick\_58 Start: 40558, Stop: 40791, Start Num: 15

Candidate Starts for MortyNRick\_58:

(Start: 15 @40558 has 22 MA's), (19, 40687), (20, 40696), (23, 40741), (24, 40747), (27, 40777), (28, 40780),

Gene: ODay\_68 Start: 41458, Stop: 41691, Start Num: 15

Candidate Starts for ODay\_68:

(10, 41374), (Start: 15 @41458 has 22 MA's), (19, 41587), (20, 41596), (23, 41641), (24, 41647), (27, 41677), (28, 41680),

Gene: Periwinkle\_74 Start: 42820, Stop: 43053, Start Num: 15

Candidate Starts for Periwinkle\_74:

(11, 42736), (Start: 15 @42820 has 22 MA's), (19, 42949), (20, 42958), (21, 42973), (27, 43039), (28, 43042), (29, 43045),

Gene: Phabuloso\_64 Start: 39559, Stop: 39792, Start Num: 15

Candidate Starts for Phabuloso\_64:

(Start: 15 @39559 has 22 MA's), (19, 39688), (20, 39697), (23, 39742), (24, 39748), (27, 39778), (28, 39781),

Gene: Phistory\_63 Start: 38885, Stop: 39118, Start Num: 15

Candidate Starts for Phistory\_63:

(Start: 15 @38885 has 22 MA's), (19, 39014), (20, 39023), (23, 39068), (24, 39074), (27, 39104), (28, 39107),

Gene: ShawBrad\_69 Start: 39976, Stop: 40209, Start Num: 15

Candidate Starts for ShawBrad\_69:

(Start: 15 @39976 has 22 MA's), (19, 40105), (20, 40114), (21, 40129), (27, 40195), (28, 40198), (29, 40201),

Gene: Spooky\_57 Start: 38296, Stop: 38490, Start Num: 18

Candidate Starts for Spooky\_57:

(Start: 18 @38296 has 1 MA's), (20, 38380), (22, 38422), (25, 38449), (26, 38455), (30, 38479),

Gene: Squiddly\_62 Start: 40715, Stop: 40948, Start Num: 15

Candidate Starts for Squiddly\_62:

(Start: 15 @40715 has 22 MA's), (Start: 18 @40769 has 1 MA's), (19, 40844), (20, 40853), (23, 40898), (24, 40904), (27, 40934), (28, 40937),

Gene: Whitney\_64 Start: 41230, Stop: 41463, Start Num: 15

Candidate Starts for Whitney\_64:

(Start: 15 @41230 has 22 MA's), (19, 41359), (20, 41368), (23, 41413), (24, 41419), (27, 41449), (28, 41452),