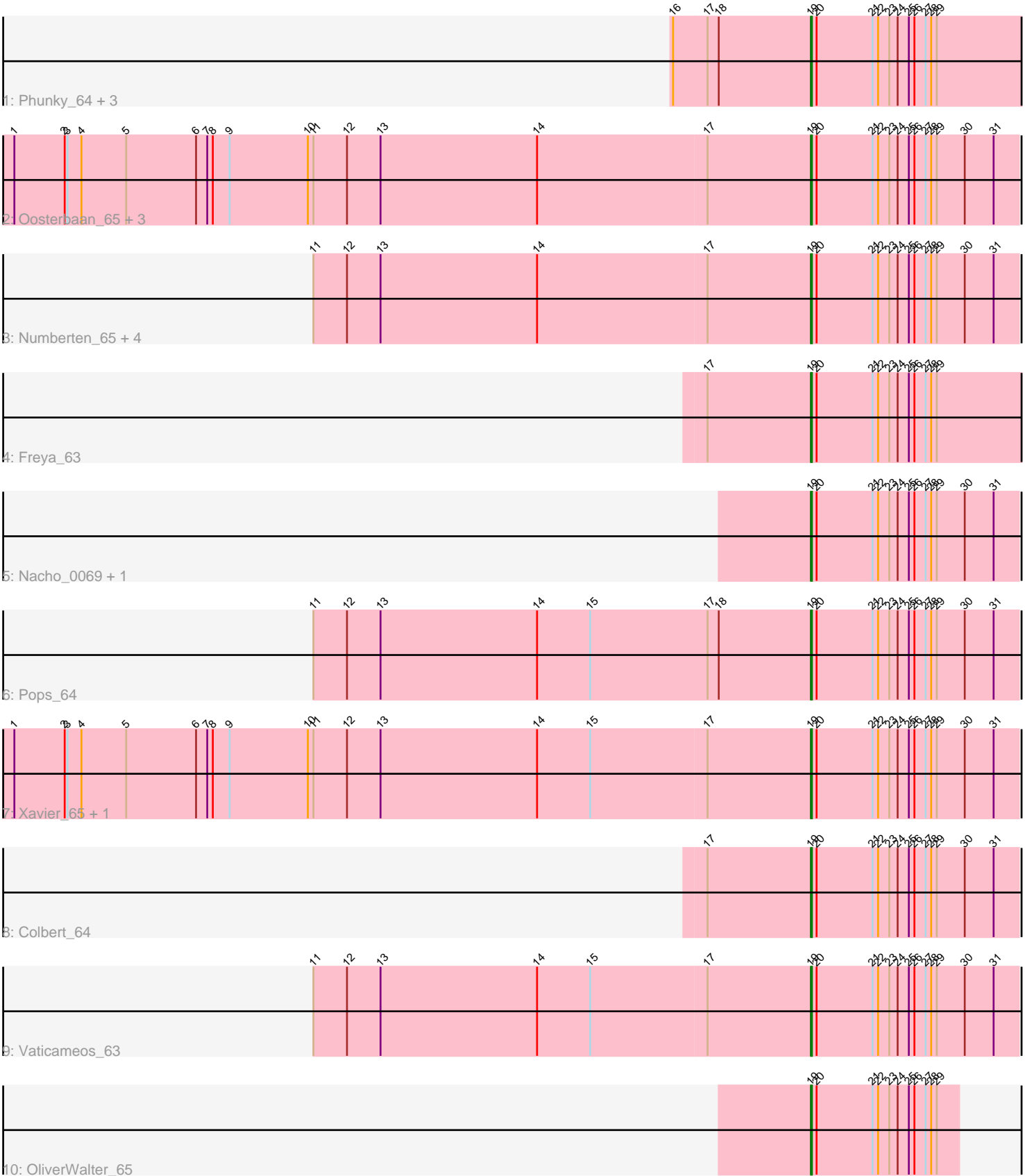


Pham 86523



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 86523 Report

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

Pham number 86523 has 22 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Phunky\_64, Virapocalypse\_67, ShiVal\_64, JangoPhett\_101
- Track 2 : Oosterbaan\_65, Serendipity\_65, ThreeOh3D2\_67, Hertubise\_65
- Track 3 : Numberten\_65, Lulumae\_63, Anderson\_67, Badfish\_66, Hetaeria\_65
- Track 4 : Freya\_63
- Track 5 : Nacho\_0069, Suffolk\_64
- Track 6 : Pops\_64
- Track 7 : Xavier\_65, Megatron\_66
- Track 8 : Colbert\_64
- Track 9 : Vaticameos\_63
- Track 10 : OliverWalter\_65

### ***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 22 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Anderson\_67, Badfish\_66, Colbert\_64, Freya\_63, Hertubise\_65, Hetaeria\_65, JangoPhett\_101, Lulumae\_63, Megatron\_66, Nacho\_0069, Numberten\_65, OliverWalter\_65, Oosterbaan\_65, Phunky\_64, Pops\_64, Serendipity\_65, ShiVal\_64, Suffolk\_64, ThreeOh3D2\_67, Vaticameos\_63, Virapocalypse\_67, Xavier\_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 22 of 22 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 22 of 22
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Anderson\_67 (B1), Badfish\_66 (B1), Colbert\_64 (B1), Freya\_63 (B1), Hertubise\_65 (B1), Hetaeria\_65 (B1), JangoPhett\_101 (B1), Lulumae\_63 (B1), Megatron\_66 (B1), Nacho\_0069 (B1), Numberten\_65 (B1), OliverWalter\_65 (B1), Oosterbaan\_65 (B1), Phunky\_64 (B1), Pops\_64 (B1), Serendipity\_65 (B1), ShiVal\_64 (B1), Suffolk\_64 (B1), ThreeOh3D2\_67 (B1), Vaticameos\_63 (B1), Virapocalypse\_67 (B1), Xavier\_65 (B1),

### **Summary by clusters:**

There is one cluster represented in this pham: B1

Info for manual annotations of cluster B1:

- Start number 19 was manually annotated 22 times for cluster B1.

### **Gene Information:**

Gene: Anderson\_67 Start: 55962, Stop: 56183, Start Num: 19

Candidate Starts for Anderson\_67:

(11, 55431), (12, 55467), (13, 55503), (14, 55671), (17, 55851), (Start: 19 @55962 has 22 MA's), (20, 55968), (21, 56028), (22, 56034), (23, 56046), (24, 56055), (25, 56067), (26, 56073), (27, 56085), (28, 56091), (29, 56097), (30, 56127), (31, 56157),

Gene: Badfish\_66 Start: 56248, Stop: 56469, Start Num: 19

Candidate Starts for Badfish\_66:

(11, 55717), (12, 55753), (13, 55789), (14, 55957), (17, 56137), (Start: 19 @56248 has 22 MA's), (20, 56254), (21, 56314), (22, 56320), (23, 56332), (24, 56341), (25, 56353), (26, 56359), (27, 56371), (28, 56377), (29, 56383), (30, 56413), (31, 56443),

Gene: Colbert\_64 Start: 55301, Stop: 55522, Start Num: 19

Candidate Starts for Colbert\_64:

(17, 55190), (Start: 19 @55301 has 22 MA's), (20, 55307), (21, 55367), (22, 55373), (23, 55385), (24, 55394), (25, 55406), (26, 55412), (27, 55424), (28, 55430), (29, 55436), (30, 55466), (31, 55496),

Gene: Freya\_63 Start: 55433, Stop: 55681, Start Num: 19

Candidate Starts for Freya\_63:

(17, 55322), (Start: 19 @55433 has 22 MA's), (20, 55439), (21, 55499), (22, 55505), (23, 55517), (24, 55526), (25, 55538), (26, 55544), (27, 55556), (28, 55562), (29, 55568),

Gene: Hertubise\_65 Start: 56020, Stop: 56241, Start Num: 19

Candidate Starts for Hertubise\_65:

(1, 55168), (2, 55222), (3, 55225), (4, 55240), (5, 55288), (6, 55363), (7, 55375), (8, 55381), (9, 55399), (10, 55483), (11, 55489), (12, 55525), (13, 55561), (14, 55729), (17, 55909), (Start: 19 @56020 has 22 MA's), (20, 56026), (21, 56086), (22, 56092), (23, 56104), (24, 56113), (25, 56125), (26, 56131), (27, 56143), (28, 56149), (29, 56155), (30, 56185), (31, 56215),

Gene: Hetaeria\_65 Start: 55960, Stop: 56181, Start Num: 19

Candidate Starts for Hetaeria\_65:

(11, 55429), (12, 55465), (13, 55501), (14, 55669), (17, 55849), (Start: 19 @55960 has 22 MA's), (20, 55966), (21, 56026), (22, 56032), (23, 56044), (24, 56053), (25, 56065), (26, 56071), (27, 56083), (28, 56089), (29, 56095), (30, 56125), (31, 56155),

Gene: JangoPhett\_101 Start: 56048, Stop: 56296, Start Num: 19

Candidate Starts for JangoPhett\_101:

(16, 55901), (17, 55937), (18, 55949), (Start: 19 @56048 has 22 MA's), (20, 56054), (21, 56114), (22, 56120), (23, 56132), (24, 56141), (25, 56153), (26, 56159), (27, 56171), (28, 56177), (29, 56183),

Gene: Lulumae\_63 Start: 55437, Stop: 55658, Start Num: 19

Candidate Starts for Lulumae\_63:

(11, 54906), (12, 54942), (13, 54978), (14, 55146), (17, 55326), (Start: 19 @55437 has 22 MA's), (20, 55443), (21, 55503), (22, 55509), (23, 55521), (24, 55530), (25, 55542), (26, 55548), (27, 55560), (28, 55566), (29, 55572), (30, 55602), (31, 55632),

Gene: Megatron\_66 Start: 56230, Stop: 56451, Start Num: 19

Candidate Starts for Megatron\_66:

(1, 55378), (2, 55432), (3, 55435), (4, 55450), (5, 55498), (6, 55573), (7, 55585), (8, 55591), (9, 55609), (10, 55693), (11, 55699), (12, 55735), (13, 55771), (14, 55939), (15, 55996), (17, 56119), (Start: 19 @56230 has 22 MA's), (20, 56236), (21, 56296), (22, 56302), (23, 56314), (24, 56323), (25, 56335), (26, 56341), (27, 56353), (28, 56359), (29, 56365), (30, 56395), (31, 56425),

Gene: Nacho\_0069 Start: 56765, Stop: 56986, Start Num: 19

Candidate Starts for Nacho\_0069:

(Start: 19 @56765 has 22 MA's), (20, 56771), (21, 56831), (22, 56837), (23, 56849), (24, 56858), (25, 56870), (26, 56876), (27, 56888), (28, 56894), (29, 56900), (30, 56930), (31, 56960),

Gene: Numberten\_65 Start: 55950, Stop: 56171, Start Num: 19

Candidate Starts for Numberten\_65:

(11, 55419), (12, 55455), (13, 55491), (14, 55659), (17, 55839), (Start: 19 @55950 has 22 MA's), (20, 55956), (21, 56016), (22, 56022), (23, 56034), (24, 56043), (25, 56055), (26, 56061), (27, 56073), (28, 56079), (29, 56085), (30, 56115), (31, 56145),

Gene: OliverWalter\_65 Start: 56050, Stop: 56208, Start Num: 19

Candidate Starts for OliverWalter\_65:

(Start: 19 @56050 has 22 MA's), (20, 56056), (21, 56116), (22, 56122), (23, 56134), (24, 56143), (25, 56155), (26, 56161), (27, 56173), (28, 56179), (29, 56185),

Gene: Oosterbaan\_65 Start: 56007, Stop: 56228, Start Num: 19

Candidate Starts for Oosterbaan\_65:

(1, 55155), (2, 55209), (3, 55212), (4, 55227), (5, 55275), (6, 55350), (7, 55362), (8, 55368), (9, 55386), (10, 55470), (11, 55476), (12, 55512), (13, 55548), (14, 55716), (17, 55896), (Start: 19 @56007 has 22 MA's), (20, 56013), (21, 56073), (22, 56079), (23, 56091), (24, 56100), (25, 56112), (26, 56118), (27, 56130), (28, 56136), (29, 56142), (30, 56172), (31, 56202),

Gene: Phunky\_64 Start: 55747, Stop: 55995, Start Num: 19

Candidate Starts for Phunky\_64:

(16, 55600), (17, 55636), (18, 55648), (Start: 19 @55747 has 22 MA's), (20, 55753), (21, 55813), (22, 55819), (23, 55831), (24, 55840), (25, 55852), (26, 55858), (27, 55870), (28, 55876), (29, 55882),

Gene: Pops\_64 Start: 55747, Stop: 55968, Start Num: 19

Candidate Starts for Pops\_64:

(11, 55213), (12, 55249), (13, 55285), (14, 55453), (15, 55510), (17, 55636), (18, 55648), (Start: 19 @55747 has 22 MA's), (20, 55753), (21, 55813), (22, 55819), (23, 55831), (24, 55840), (25, 55852), (26, 55858), (27, 55870), (28, 55876), (29, 55882), (30, 55912), (31, 55942),

Gene: Serendipity\_65 Start: 56026, Stop: 56247, Start Num: 19

Candidate Starts for Serendipity\_65:

(1, 55174), (2, 55228), (3, 55231), (4, 55246), (5, 55294), (6, 55369), (7, 55381), (8, 55387), (9, 55405), (10, 55489), (11, 55495), (12, 55531), (13, 55567), (14, 55735), (17, 55915), (Start: 19 @56026 has 22 MA's), (20, 56032), (21, 56092), (22, 56098), (23, 56110), (24, 56119), (25, 56131), (26, 56137), (27, 56149), (28, 56155), (29, 56161), (30, 56191), (31, 56221),

Gene: ShiVal\_64 Start: 55751, Stop: 55999, Start Num: 19

Candidate Starts for ShiVal\_64:

(16, 55604), (17, 55640), (18, 55652), (Start: 19 @55751 has 22 MA's), (20, 55757), (21, 55817), (22, 55823), (23, 55835), (24, 55844), (25, 55856), (26, 55862), (27, 55874), (28, 55880), (29, 55886),

Gene: Suffolk\_64 Start: 55522, Stop: 55743, Start Num: 19

Candidate Starts for Suffolk\_64:

(Start: 19 @55522 has 22 MA's), (20, 55528), (21, 55588), (22, 55594), (23, 55606), (24, 55615), (25, 55627), (26, 55633), (27, 55645), (28, 55651), (29, 55657), (30, 55687), (31, 55717),

Gene: ThreeOh3D2\_67 Start: 56236, Stop: 56457, Start Num: 19

Candidate Starts for ThreeOh3D2\_67:

(1, 55384), (2, 55438), (3, 55441), (4, 55456), (5, 55504), (6, 55579), (7, 55591), (8, 55597), (9, 55615), (10, 55699), (11, 55705), (12, 55741), (13, 55777), (14, 55945), (17, 56125), (Start: 19 @56236 has 22 MA's), (20, 56242), (21, 56302), (22, 56308), (23, 56320), (24, 56329), (25, 56341), (26, 56347), (27, 56359), (28, 56365), (29, 56371), (30, 56401), (31, 56431),

Gene: Vaticameos\_63 Start: 54263, Stop: 54484, Start Num: 19

Candidate Starts for Vaticameos\_63:

(11, 53732), (12, 53768), (13, 53804), (14, 53972), (15, 54029), (17, 54152), (Start: 19 @54263 has 22 MA's), (20, 54269), (21, 54329), (22, 54335), (23, 54347), (24, 54356), (25, 54368), (26, 54374), (27, 54386), (28, 54392), (29, 54398), (30, 54428), (31, 54458),

Gene: Virapocalypse\_67 Start: 56057, Stop: 56305, Start Num: 19

Candidate Starts for Virapocalypse\_67:

(16, 55910), (17, 55946), (18, 55958), (Start: 19 @56057 has 22 MA's), (20, 56063), (21, 56123), (22, 56129), (23, 56141), (24, 56150), (25, 56162), (26, 56168), (27, 56180), (28, 56186), (29, 56192),

Gene: Xavier\_65 Start: 55720, Stop: 55941, Start Num: 19

Candidate Starts for Xavier\_65:

(1, 54868), (2, 54922), (3, 54925), (4, 54940), (5, 54988), (6, 55063), (7, 55075), (8, 55081), (9, 55099), (10, 55183), (11, 55189), (12, 55225), (13, 55261), (14, 55429), (15, 55486), (17, 55609), (Start: 19 @55720 has 22 MA's), (20, 55726), (21, 55786), (22, 55792), (23, 55804), (24, 55813), (25, 55825), (26, 55831), (27, 55843), (28, 55849), (29, 55855), (30, 55885), (31, 55915),