



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 207184 Report

This analysis was run 02/22/25 on database version 588.

Pham number 207184 has 23 members, 1 are drafts.

Phages represented in each track:

- Track 1 : JacoRen57\_22
- Track 2 : PLOT\_33, Giuseppe\_32, BigMama\_30, Adjutor\_33, PBI1\_32, SirHarley\_31, Penelope2018\_32, Mopey\_32, Delton\_32, Thoth\_32, Visconti\_32, Prager\_32, Chill\_33, KandZ\_32, WaldoWhy\_33, Gumball\_31, Nova\_32, Butterscotch\_32, Helpful\_33, Troll4\_32, Erk16\_32
- Track 3 : Phalaborwa\_32

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

The start number called the most often in the published annotations is 1, it was called in 22 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adjutor\_33, BigMama\_30, Butterscotch\_32, Chill\_33, Delton\_32, Erk16\_32, Giuseppe\_32, Gumball\_31, Helpful\_33, JacoRen57\_22, KandZ\_32, Mopey\_32, Nova\_32, PBI1\_32, PLOT\_33, Penelope2018\_32, Phalaborwa\_32, Prager\_32, SirHarley\_31, Thoth\_32, Troll4\_32, Visconti\_32, WaldoWhy\_33,

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 1:

- Found in 23 of 23 ( 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: Adjutor\_33 (D1), BigMama\_30 (D1), Butterscotch\_32 (D1), Chill\_33 (D1), Delton\_32 (D1), Erk16\_32 (D1), Giuseppe\_32 (D1), Gumball\_31 (D1), Helpful\_33 (D1), JacoRen57\_22 (AB), KandZ\_32 (D1), Mopey\_32 (D1), Nova\_32 (D1), PBI1\_32 (D1), PLOT\_33 (D1), Penelope2018\_32 (D1),

Phalaborwa\_32 (D1), Prager\_32 (D1), SirHarley\_31 (D1), Thoth\_32 (D1), Troll4\_32 (D1), Visconti\_32 (D1), WaldoWhy\_33 (D1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: AB, D1,

Info for manual annotations of cluster AB:

•Start number 1 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster D1:

•Start number 1 was manually annotated 21 times for cluster D1.

### **Gene Information:**

Gene: Adjutor\_33 Start: 28574, Stop: 29440, Start Num: 1

Candidate Starts for Adjutor\_33:

(Start: 1 @28574 has 22 MA's), (2, 28706), (5, 28733), (6, 28787), (7, 28814), (9, 28826), (14, 28943), (16, 28961), (17, 29018), (18, 29027), (19, 29030), (21, 29066), (22, 29144), (24, 29171), (25, 29189), (27, 29225), (28, 29243), (29, 29306), (31, 29366),

Gene: BigMama\_30 Start: 28650, Stop: 29516, Start Num: 1

Candidate Starts for BigMama\_30:

(Start: 1 @28650 has 22 MA's), (2, 28782), (5, 28809), (6, 28863), (7, 28890), (9, 28902), (14, 29019), (16, 29037), (17, 29094), (18, 29103), (19, 29106), (21, 29142), (22, 29220), (24, 29247), (25, 29265), (27, 29301), (28, 29319), (29, 29382), (31, 29442),

Gene: Butterscotch\_32 Start: 28634, Stop: 29500, Start Num: 1

Candidate Starts for Butterscotch\_32:

(Start: 1 @28634 has 22 MA's), (2, 28766), (5, 28793), (6, 28847), (7, 28874), (9, 28886), (14, 29003), (16, 29021), (17, 29078), (18, 29087), (19, 29090), (21, 29126), (22, 29204), (24, 29231), (25, 29249), (27, 29285), (28, 29303), (29, 29366), (31, 29426),

Gene: Chill\_33 Start: 28640, Stop: 29506, Start Num: 1

Candidate Starts for Chill\_33:

(Start: 1 @28640 has 22 MA's), (2, 28772), (5, 28799), (6, 28853), (7, 28880), (9, 28892), (14, 29009), (16, 29027), (17, 29084), (18, 29093), (19, 29096), (21, 29132), (22, 29210), (24, 29237), (25, 29255), (27, 29291), (28, 29309), (29, 29372), (31, 29432),

Gene: Delton\_32 Start: 28646, Stop: 29512, Start Num: 1

Candidate Starts for Delton\_32:

(Start: 1 @28646 has 22 MA's), (2, 28778), (5, 28805), (6, 28859), (7, 28886), (9, 28898), (14, 29015), (16, 29033), (17, 29090), (18, 29099), (19, 29102), (21, 29138), (22, 29216), (24, 29243), (25, 29261), (27, 29297), (28, 29315), (29, 29378), (31, 29438),

Gene: Erk16\_32 Start: 28637, Stop: 29503, Start Num: 1

Candidate Starts for Erk16\_32:

(Start: 1 @28637 has 22 MA's), (2, 28769), (5, 28796), (6, 28850), (7, 28877), (9, 28889), (14, 29006), (16, 29024), (17, 29081), (18, 29090), (19, 29093), (21, 29129), (22, 29207), (24, 29234), (25, 29252), (27, 29288), (28, 29306), (29, 29369), (31, 29429),

Gene: Giuseppe\_32 Start: 28626, Stop: 29492, Start Num: 1

Candidate Starts for Giuseppe\_32:

(Start: 1 @28626 has 22 MA's), (2, 28758), (5, 28785), (6, 28839), (7, 28866), (9, 28878), (14, 28995), (16, 29013), (17, 29070), (18, 29079), (19, 29082), (21, 29118), (22, 29196), (24, 29223), (25, 29241), (27, 29277), (28, 29295), (29, 29358), (31, 29418),

Gene: Gumball\_31 Start: 28584, Stop: 29450, Start Num: 1

Candidate Starts for Gumball\_31:

(Start: 1 @28584 has 22 MA's), (2, 28716), (5, 28743), (6, 28797), (7, 28824), (9, 28836), (14, 28953), (16, 28971), (17, 29028), (18, 29037), (19, 29040), (21, 29076), (22, 29154), (24, 29181), (25, 29199), (27, 29235), (28, 29253), (29, 29316), (31, 29376),

Gene: Helpful\_33 Start: 28634, Stop: 29500, Start Num: 1

Candidate Starts for Helpful\_33:

(Start: 1 @28634 has 22 MA's), (2, 28766), (5, 28793), (6, 28847), (7, 28874), (9, 28886), (14, 29003), (16, 29021), (17, 29078), (18, 29087), (19, 29090), (21, 29126), (22, 29204), (24, 29231), (25, 29249), (27, 29285), (28, 29303), (29, 29366), (31, 29426),

Gene: JacoRen57\_22 Start: 22778, Stop: 23644, Start Num: 1

Candidate Starts for JacoRen57\_22:

(Start: 1 @22778 has 22 MA's), (3, 22919), (4, 22922), (8, 23027), (13, 23099), (16, 23165), (17, 23222), (21, 23270), (23, 23372), (28, 23447), (30, 23522), (32, 23579),

Gene: KandZ\_32 Start: 28734, Stop: 29600, Start Num: 1

Candidate Starts for KandZ\_32:

(Start: 1 @28734 has 22 MA's), (2, 28866), (5, 28893), (6, 28947), (7, 28974), (9, 28986), (14, 29103), (16, 29121), (17, 29178), (18, 29187), (19, 29190), (21, 29226), (22, 29304), (24, 29331), (25, 29349), (27, 29385), (28, 29403), (29, 29466), (31, 29526),

Gene: Mopey\_32 Start: 28634, Stop: 29500, Start Num: 1

Candidate Starts for Mopey\_32:

(Start: 1 @28634 has 22 MA's), (2, 28766), (5, 28793), (6, 28847), (7, 28874), (9, 28886), (14, 29003), (16, 29021), (17, 29078), (18, 29087), (19, 29090), (21, 29126), (22, 29204), (24, 29231), (25, 29249), (27, 29285), (28, 29303), (29, 29366), (31, 29426),

Gene: Nova\_32 Start: 29061, Stop: 29927, Start Num: 1

Candidate Starts for Nova\_32:

(Start: 1 @29061 has 22 MA's), (2, 29193), (5, 29220), (6, 29274), (7, 29301), (9, 29313), (14, 29430), (16, 29448), (17, 29505), (18, 29514), (19, 29517), (21, 29553), (22, 29631), (24, 29658), (25, 29676), (27, 29712), (28, 29730), (29, 29793), (31, 29853),

Gene: PBI1\_32 Start: 28565, Stop: 29431, Start Num: 1

Candidate Starts for PBI1\_32:

(Start: 1 @28565 has 22 MA's), (2, 28697), (5, 28724), (6, 28778), (7, 28805), (9, 28817), (14, 28934), (16, 28952), (17, 29009), (18, 29018), (19, 29021), (21, 29057), (22, 29135), (24, 29162), (25, 29180), (27, 29216), (28, 29234), (29, 29297), (31, 29357),

Gene: PLOT\_33 Start: 28637, Stop: 29503, Start Num: 1

Candidate Starts for PLOT\_33:

(Start: 1 @28637 has 22 MA's), (2, 28769), (5, 28796), (6, 28850), (7, 28877), (9, 28889), (14, 29006), (16, 29024), (17, 29081), (18, 29090), (19, 29093), (21, 29129), (22, 29207), (24, 29234), (25, 29252), (27, 29288), (28, 29306), (29, 29369), (31, 29429),

Gene: Penelope2018\_32 Start: 28634, Stop: 29500, Start Num: 1

Candidate Starts for Penelope2018\_32:

(Start: 1 @28634 has 22 MA's), (2, 28766), (5, 28793), (6, 28847), (7, 28874), (9, 28886), (14, 29003), (16, 29021), (17, 29078), (18, 29087), (19, 29090), (21, 29126), (22, 29204), (24, 29231), (25, 29249), (27, 29285), (28, 29303), (29, 29366), (31, 29426),

Gene: Phalaborwa\_32 Start: 28658, Stop: 29524, Start Num: 1

Candidate Starts for Phalaborwa\_32:

(Start: 1 @28658 has 22 MA's), (2, 28790), (6, 28871), (7, 28898), (10, 28931), (11, 28943), (12, 28946), (13, 28979), (15, 29042), (16, 29045), (18, 29111), (19, 29114), (20, 29135), (24, 29255), (26, 29288), (31, 29450),

Gene: Prager\_32 Start: 28646, Stop: 29512, Start Num: 1

Candidate Starts for Prager\_32:

(Start: 1 @28646 has 22 MA's), (2, 28778), (5, 28805), (6, 28859), (7, 28886), (9, 28898), (14, 29015), (16, 29033), (17, 29090), (18, 29099), (19, 29102), (21, 29138), (22, 29216), (24, 29243), (25, 29261), (27, 29297), (28, 29315), (29, 29378), (31, 29438),

Gene: SirHarley\_31 Start: 28566, Stop: 29432, Start Num: 1

Candidate Starts for SirHarley\_31:

(Start: 1 @28566 has 22 MA's), (2, 28698), (5, 28725), (6, 28779), (7, 28806), (9, 28818), (14, 28935), (16, 28953), (17, 29010), (18, 29019), (19, 29022), (21, 29058), (22, 29136), (24, 29163), (25, 29181), (27, 29217), (28, 29235), (29, 29298), (31, 29358),

Gene: Thoth\_32 Start: 28631, Stop: 29497, Start Num: 1

Candidate Starts for Thoth\_32:

(Start: 1 @28631 has 22 MA's), (2, 28763), (5, 28790), (6, 28844), (7, 28871), (9, 28883), (14, 29000), (16, 29018), (17, 29075), (18, 29084), (19, 29087), (21, 29123), (22, 29201), (24, 29228), (25, 29246), (27, 29282), (28, 29300), (29, 29363), (31, 29423),

Gene: Troll4\_32 Start: 28635, Stop: 29501, Start Num: 1

Candidate Starts for Troll4\_32:

(Start: 1 @28635 has 22 MA's), (2, 28767), (5, 28794), (6, 28848), (7, 28875), (9, 28887), (14, 29004), (16, 29022), (17, 29079), (18, 29088), (19, 29091), (21, 29127), (22, 29205), (24, 29232), (25, 29250), (27, 29286), (28, 29304), (29, 29367), (31, 29427),

Gene: Visconti\_32 Start: 28644, Stop: 29510, Start Num: 1

Candidate Starts for Visconti\_32:

(Start: 1 @28644 has 22 MA's), (2, 28776), (5, 28803), (6, 28857), (7, 28884), (9, 28896), (14, 29013), (16, 29031), (17, 29088), (18, 29097), (19, 29100), (21, 29136), (22, 29214), (24, 29241), (25, 29259), (27, 29295), (28, 29313), (29, 29376), (31, 29436),

Gene: WaldoWhy\_33 Start: 28640, Stop: 29506, Start Num: 1

Candidate Starts for WaldoWhy\_33:

(Start: 1 @28640 has 22 MA's), (2, 28772), (5, 28799), (6, 28853), (7, 28880), (9, 28892), (14, 29009), (16, 29027), (17, 29084), (18, 29093), (19, 29096), (21, 29132), (22, 29210), (24, 29237), (25, 29255), (27, 29291), (28, 29309), (29, 29372), (31, 29432),