

Pham 200383



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 200383 Report

This analysis was run 01/18/25 on database version 583.

Pham number 200383 has 44 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Gilberta\_90, Insomnia\_92, Ebony\_91, Snape\_92, Bowtie\_88, Timothy\_92, Mabel\_92, Hutc2\_89, Mulciber\_91, Joselito\_90, Et2Brutus\_92, Orange\_92, Bachome\_90, Lucivia\_93, Aneem\_93, Sham4\_89, Flaverint\_93, Bud\_85, Petersenfast\_86, Fibonacci\_92, TinyTimmy\_90, MaCh\_92, Jabith\_92, Munch\_91, Salz\_88
- Track 2 : AN9\_88, ANI8\_88, C3\_81, VC3\_87
- Track 3 : Bradman\_94, MajorMajor\_88, Quokka\_93
- Track 4 : Ph8s\_92
- Track 5 : Jsquared\_95
- Track 6 : Che12\_92
- Track 7 : L5\_83, SwirlSquare\_93
- Track 8 : Odin\_89
- Track 9 : Caraxes\_91, Superchunk\_90
- Track 10 : TopsytheTRex\_89
- Track 11 : Koduck\_91
- Track 12 : Adzzy\_91
- Track 13 : Anthony\_86

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

The start number called the most often in the published annotations is 4, it was called in 36 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AN9\_88, ANI8\_88, Adzzy\_91, Aneem\_93, Bachome\_90, Bowtie\_88, Bradman\_94, Bud\_85, C3\_81, Caraxes\_91, Che12\_92, Ebony\_91, Et2Brutus\_92, Fibonacci\_92, Flaverint\_93, Gilberta\_90, Hutc2\_89, Insomnia\_92, Jabith\_92, Joselito\_90, Jsquared\_95, Koduck\_91, L5\_83, Lucivia\_93, MaCh\_92, Mabel\_92, MajorMajor\_88, Mulciber\_91, Munch\_91, Odin\_89, Orange\_92, Petersenfast\_86, Ph8s\_92, Quokka\_93, Salz\_88, Sham4\_89, Snape\_92, Superchunk\_90, SwirlSquare\_93, Timothy\_92, TinyTimmy\_90, TopsytheTRex\_89, VC3\_87,

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

-

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

- Anthony\_86,

### Summary by start number:

Start 3:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anthony\_86 (A20),

Start 4:

- Found in 43 of 44 ( 97.7% ) of genes in pham
- Manual Annotations of this start: 36 of 37
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AN9\_88 (A2), ANI8\_88 (A2), Adzzy\_91 (A2), Aneem\_93 (A11), Bachome\_90 (A11), Bowtie\_88 (A11), Bradman\_94 (A2), Bud\_85 (A11), C3\_81 (A2), Caraxes\_91 (A2), Che12\_92 (A2), Ebony\_91 (A11), Et2Brutus\_92 (A11), Fibonacci\_92 (A11), Flaverint\_93 (A11), Gilberta\_90 (A11), Hutc2\_89 (A11), Insomnia\_92 (A11), Jabith\_92 (A11), Joselito\_90 (A11), Jsquared\_95 (A2), Koduck\_91 (A2), L5\_83 (A2), Lucivia\_93 (A11), MaCh\_92 (A11), Mabel\_92 (A11), MajorMajor\_88 (A2), Mulciber\_91 (A11), Munch\_91 (A11), Odin\_89 (A2), Orange\_92 (A11), Petersenfast\_86 (A11), Ph8s\_92 (A2), Quokka\_93 (A2), Salz\_88 (A11), Sham4\_89 (A11), Snape\_92 (A11), Superchunk\_90 (A2), SwirlSquare\_93 (A2), Timothy\_92 (A11), TinyTimmy\_90 (A11), TipsytheTRex\_89 (A2), VC3\_87 (A2),

### Summary by clusters:

There are 3 clusters represented in this pham: A20, A2, A11,

Info for manual annotations of cluster A11:

- Start number 4 was manually annotated 24 times for cluster A11.

Info for manual annotations of cluster A2:

- Start number 4 was manually annotated 12 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 3 was manually annotated 1 time for cluster A20.

### Gene Information:

Gene: AN9\_88 Start: 48050, Stop: 47826, Start Num: 4

Candidate Starts for AN9\_88:

(1, 48167), (2, 48164), (Start: 4 @48050 has 36 MA's), (6, 48035), (8, 48026), (13, 47975), (14, 47966), (15, 47957), (23, 47882), (25, 47873),

Gene: ANI8\_88 Start: 48050, Stop: 47826, Start Num: 4

Candidate Starts for ANI8\_88:

(1, 48167), (2, 48164), (Start: 4 @48050 has 36 MA's), (6, 48035), (8, 48026), (13, 47975), (14, 47966), (15, 47957), (23, 47882), (25, 47873),

Gene: Adzzy\_91 Start: 48978, Stop: 48769, Start Num: 4

Candidate Starts for Adzzy\_91:

(Start: 4 @48978 has 36 MA's), (9, 48936), (13, 48915), (29, 48774),

Gene: Aneem\_93 Start: 49166, Stop: 48945, Start Num: 4

Candidate Starts for Aneem\_93:

(Start: 4 @49166 has 36 MA's), (16, 49064), (21, 49019), (24, 48995), (28, 48950),

Gene: Anthony\_86 Start: 49361, Stop: 49125, Start Num: 3

Candidate Starts for Anthony\_86:

(Start: 3 @49361 has 1 MA's), (7, 49325), (10, 49286), (14, 49262), (15, 49253), (17, 49238), (19, 49220), (23, 49178), (25, 49169),

Gene: Bachome\_90 Start: 48214, Stop: 47993, Start Num: 4

Candidate Starts for Bachome\_90:

(Start: 4 @48214 has 36 MA's), (16, 48112), (21, 48067), (24, 48043), (28, 47998),

Gene: Bowtie\_88 Start: 47773, Stop: 47552, Start Num: 4

Candidate Starts for Bowtie\_88:

(Start: 4 @47773 has 36 MA's), (16, 47671), (21, 47626), (24, 47602), (28, 47557),

Gene: Bradman\_94 Start: 49404, Stop: 49180, Start Num: 4

Candidate Starts for Bradman\_94:

(Start: 4 @49404 has 36 MA's), (10, 49344), (17, 49296), (20, 49263), (22, 49254),

Gene: Bud\_85 Start: 47872, Stop: 47651, Start Num: 4

Candidate Starts for Bud\_85:

(Start: 4 @47872 has 36 MA's), (16, 47770), (21, 47725), (24, 47701), (28, 47656),

Gene: C3\_81 Start: 48050, Stop: 47826, Start Num: 4

Candidate Starts for C3\_81:

(1, 48167), (2, 48164), (Start: 4 @48050 has 36 MA's), (6, 48035), (8, 48026), (13, 47975), (14, 47966), (15, 47957), (23, 47882), (25, 47873),

Gene: Caraxes\_91 Start: 48956, Stop: 48726, Start Num: 4

Candidate Starts for Caraxes\_91:

(Start: 4 @48956 has 36 MA's), (10, 48896), (11, 48890), (17, 48848),

Gene: Che12\_92 Start: 49078, Stop: 48842, Start Num: 4

Candidate Starts for Che12\_92:

(Start: 4 @49078 has 36 MA's), (10, 49018), (17, 48970), (25, 48901), (27, 48874),

Gene: Ebony\_91 Start: 48737, Stop: 48516, Start Num: 4

Candidate Starts for Ebony\_91:

(Start: 4 @48737 has 36 MA's), (16, 48635), (21, 48590), (24, 48566), (28, 48521),

Gene: Et2Brutus\_92 Start: 49014, Stop: 48793, Start Num: 4

Candidate Starts for Et2Brutus\_92:

(Start: 4 @49014 has 36 MA's), (16, 48912), (21, 48867), (24, 48843), (28, 48798),

Gene: Fibonacci\_92 Start: 49020, Stop: 48799, Start Num: 4

Candidate Starts for Fibonacci\_92:

(Start: 4 @49020 has 36 MA's), (16, 48918), (21, 48873), (24, 48849), (28, 48804),

Gene: Flaverint\_93 Start: 49164, Stop: 48943, Start Num: 4

Candidate Starts for Flaverint\_93:

(Start: 4 @49164 has 36 MA's), (16, 49062), (21, 49017), (24, 48993), (28, 48948),

Gene: Gilberta\_90 Start: 48040, Stop: 47819, Start Num: 4

Candidate Starts for Gilberta\_90:

(Start: 4 @48040 has 36 MA's), (16, 47938), (21, 47893), (24, 47869), (28, 47824),

Gene: Hutc2\_89 Start: 47904, Stop: 47683, Start Num: 4

Candidate Starts for Hutc2\_89:

(Start: 4 @47904 has 36 MA's), (16, 47802), (21, 47757), (24, 47733), (28, 47688),

Gene: Insomnia\_92 Start: 49198, Stop: 48977, Start Num: 4

Candidate Starts for Insomnia\_92:

(Start: 4 @49198 has 36 MA's), (16, 49096), (21, 49051), (24, 49027), (28, 48982),

Gene: Jabith\_92 Start: 49212, Stop: 48991, Start Num: 4

Candidate Starts for Jabith\_92:

(Start: 4 @49212 has 36 MA's), (16, 49110), (21, 49065), (24, 49041), (28, 48996),

Gene: Joselito\_90 Start: 48918, Stop: 48697, Start Num: 4

Candidate Starts for Joselito\_90:

(Start: 4 @48918 has 36 MA's), (16, 48816), (21, 48771), (24, 48747), (28, 48702),

Gene: Jsquared\_95 Start: 49647, Stop: 49423, Start Num: 4

Candidate Starts for Jsquared\_95:

(Start: 4 @49647 has 36 MA's), (13, 49572), (15, 49554), (20, 49506), (23, 49479), (25, 49470),

Gene: Koduck\_91 Start: 49028, Stop: 48792, Start Num: 4

Candidate Starts for Koduck\_91:

(Start: 4 @49028 has 36 MA's), (17, 48920), (25, 48851),

Gene: L5\_83 Start: 48732, Stop: 48514, Start Num: 4

Candidate Starts for L5\_83:

(Start: 4 @48732 has 36 MA's), (12, 48660), (18, 48612),

Gene: Lucivia\_93 Start: 49197, Stop: 48976, Start Num: 4

Candidate Starts for Lucivia\_93:

(Start: 4 @49197 has 36 MA's), (16, 49095), (21, 49050), (24, 49026), (28, 48981),

Gene: MaCh\_92 Start: 49161, Stop: 48940, Start Num: 4

Candidate Starts for MaCh\_92:

(Start: 4 @49161 has 36 MA's), (16, 49059), (21, 49014), (24, 48990), (28, 48945),

Gene: Mabel\_92 Start: 49162, Stop: 48941, Start Num: 4

Candidate Starts for Mabel\_92:

(Start: 4 @49162 has 36 MA's), (16, 49060), (21, 49015), (24, 48991), (28, 48946),

Gene: MajorMajor\_88 Start: 47696, Stop: 47472, Start Num: 4

Candidate Starts for MajorMajor\_88:

(Start: 4 @47696 has 36 MA's), (10, 47636), (17, 47588), (20, 47555), (22, 47546),

Gene: Mulciber\_91 Start: 49017, Stop: 48796, Start Num: 4

Candidate Starts for Mulciber\_91:

(Start: 4 @49017 has 36 MA's), (16, 48915), (21, 48870), (24, 48846), (28, 48801),

Gene: Munch\_91 Start: 49166, Stop: 48945, Start Num: 4

Candidate Starts for Munch\_91:

(Start: 4 @49166 has 36 MA's), (16, 49064), (21, 49019), (24, 48995), (28, 48950),

Gene: Odin\_89 Start: 49418, Stop: 49188, Start Num: 4

Candidate Starts for Odin\_89:

(Start: 4 @49418 has 36 MA's), (16, 49310), (18, 49292),

Gene: Orange\_92 Start: 48716, Stop: 48495, Start Num: 4

Candidate Starts for Orange\_92:

(Start: 4 @48716 has 36 MA's), (16, 48614), (21, 48569), (24, 48545), (28, 48500),

Gene: Petersenfast\_86 Start: 47597, Stop: 47376, Start Num: 4

Candidate Starts for Petersenfast\_86:

(Start: 4 @47597 has 36 MA's), (16, 47495), (21, 47450), (24, 47426), (28, 47381),

Gene: Ph8s\_92 Start: 49205, Stop: 48981, Start Num: 4

Candidate Starts for Ph8s\_92:

(Start: 4 @49205 has 36 MA's), (13, 49130), (16, 49103), (17, 49097), (23, 49037), (25, 49028), (26, 49010),

Gene: Quokka\_93 Start: 49405, Stop: 49181, Start Num: 4

Candidate Starts for Quokka\_93:

(Start: 4 @49405 has 36 MA's), (10, 49345), (17, 49297), (20, 49264), (22, 49255),

Gene: Salz\_88 Start: 47826, Stop: 47605, Start Num: 4

Candidate Starts for Salz\_88:

(Start: 4 @47826 has 36 MA's), (16, 47724), (21, 47679), (24, 47655), (28, 47610),

Gene: Sham4\_89 Start: 47912, Stop: 47691, Start Num: 4

Candidate Starts for Sham4\_89:

(Start: 4 @47912 has 36 MA's), (16, 47810), (21, 47765), (24, 47741), (28, 47696),

Gene: Snape\_92 Start: 48705, Stop: 48484, Start Num: 4

Candidate Starts for Snape\_92:

(Start: 4 @48705 has 36 MA's), (16, 48603), (21, 48558), (24, 48534), (28, 48489),

Gene: Superchunk\_90 Start: 48956, Stop: 48726, Start Num: 4

Candidate Starts for Superchunk\_90:

(Start: 4 @48956 has 36 MA's), (10, 48896), (11, 48890), (17, 48848),

Gene: SwirlSquare\_93 Start: 48668, Stop: 48450, Start Num: 4

Candidate Starts for SwirlSquare\_93:

(Start: 4 @48668 has 36 MA's), (12, 48596), (18, 48548),

Gene: Timothy\_92 Start: 48682, Stop: 48461, Start Num: 4

Candidate Starts for Timothy\_92:

(Start: 4 @48682 has 36 MA's), (16, 48580), (21, 48535), (24, 48511), (28, 48466),

Gene: TinyTimmy\_90 Start: 48411, Stop: 48190, Start Num: 4

Candidate Starts for TinyTimmy\_90:

(Start: 4 @48411 has 36 MA's), (16, 48309), (21, 48264), (24, 48240), (28, 48195),

Gene: TopsytheTRex\_89 Start: 49327, Stop: 49109, Start Num: 4

Candidate Starts for TopsytheTRex\_89:

(Start: 4 @49327 has 36 MA's), (5, 49318), (12, 49255), (18, 49207), (28, 49117),

Gene: VC3\_87 Start: 48050, Stop: 47826, Start Num: 4

Candidate Starts for VC3\_87:

(1, 48167), (2, 48164), (Start: 4 @48050 has 36 MA's), (6, 48035), (8, 48026), (13, 47975), (14, 47966),  
(15, 47957), (23, 47882), (25, 47873),