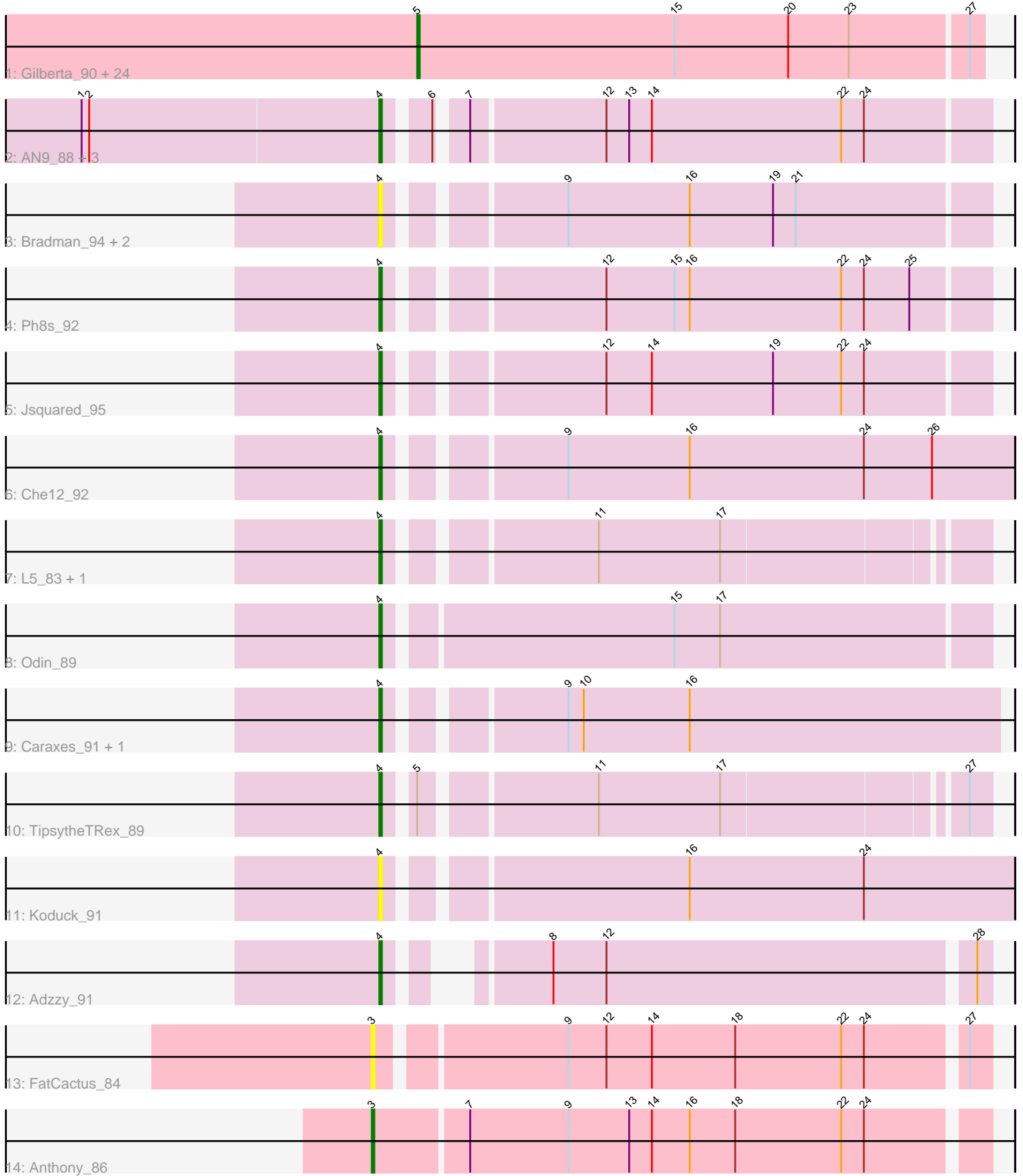


Pham 221547



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 221547 Report

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

Pham number 221547 has 45 members, 8 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, AN18_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 : FatCactus_84
- Track 14 : 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 5, it was called in 24 of the 37 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aneem_93, Bachome_90, Bowtie_88, Bud_85, Ebony_91, Et2Brutus_92, Fibonacci_92, Flaverint_93, Gilberta_90, Hutc2_89, Insomnia_92, Jabith_92, Joselito_90, Lucivia_93, MaCh_92, Mabel_92, Mulciber_91, Munch_91, Orange_92, Petersenfast_86, Salz_88, Sham4_89, Snape_92, Timothy_92, TinyTimmy_90,

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

- TopsytheTRex_89,

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

- AN9_88, ANI8_88, Adzzy_91, Anthony_86, Bradman_94, C3_81, Caraxes_91, Che12_92, FatCactus_84, Jsquared_95, Koduck_91, L5_83, MajorMajor_88, Odin_89, Ph8s_92, Quokka_93, Superchunk_90, SwirlSquare_93, VC3_87,

Summary by start number:

Start 3:

- Found in 2 of 45 (4.4%) 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), FatCactus_84 (A20),

Start 4:

- Found in 18 of 45 (40.0%) of genes in pham
- Manual Annotations of this start: 12 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), Bradman_94 (A2), C3_81 (A2), Caraxes_91 (A2), Che12_92 (A2), Jsquared_95 (A2), Koduck_91 (A2), L5_83 (A2), MajorMajor_88 (A2), Odin_89 (A2), Ph8s_92 (A2), Quokka_93 (A2), Superchunk_90 (A2), SwirlSquare_93 (A2), TopsytheTRex_89 (A2), VC3_87 (A2),

Start 5:

- Found in 26 of 45 (57.8%) of genes in pham
- Manual Annotations of this start: 24 of 37
- Called 96.2% of time when present
- Phage (with cluster) where this start called: Aneem_93 (A11), Bachome_90 (A11), Bowtie_88 (A11), Bud_85 (A11), 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), Lucivia_93 (A11), MaCh_92 (A11), Mabel_92 (A11), Mulciber_91 (A11), Munch_91 (A11), Orange_92 (A11), Petersenfast_86 (A11), Salz_88 (A11), Sham4_89 (A11), Snape_92 (A11), Timothy_92 (A11), TinyTimmy_90 (A11),

Summary by clusters:

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

Info for manual annotations of cluster A11:

- Start number 5 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 12 MA's), (6, 48035), (7, 48026), (12, 47975), (13, 47966), (14, 47957), (22, 47882), (24, 47873),

Gene: ANI8_88 Start: 48050, Stop: 47826, Start Num: 4

Candidate Starts for ANI8_88:

(1, 48167), (2, 48164), (Start: 4 @48050 has 12 MA's), (6, 48035), (7, 48026), (12, 47975), (13, 47966), (14, 47957), (22, 47882), (24, 47873),

Gene: Adzzy_91 Start: 48978, Stop: 48769, Start Num: 4

Candidate Starts for Adzzy_91:

(Start: 4 @48978 has 12 MA's), (8, 48936), (12, 48915), (28, 48774),

Gene: Aneem_93 Start: 49166, Stop: 48945, Start Num: 5

Candidate Starts for Aneem_93:

(Start: 5 @49166 has 24 MA's), (15, 49064), (20, 49019), (23, 48995), (27, 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), (9, 49286), (13, 49262), (14, 49253), (16, 49238), (18, 49220), (22, 49178), (24, 49169),

Gene: Bachome_90 Start: 48214, Stop: 47993, Start Num: 5

Candidate Starts for Bachome_90:

(Start: 5 @48214 has 24 MA's), (15, 48112), (20, 48067), (23, 48043), (27, 47998),

Gene: Bowtie_88 Start: 47773, Stop: 47552, Start Num: 5

Candidate Starts for Bowtie_88:

(Start: 5 @47773 has 24 MA's), (15, 47671), (20, 47626), (23, 47602), (27, 47557),

Gene: Bradman_94 Start: 49404, Stop: 49180, Start Num: 4

Candidate Starts for Bradman_94:

(Start: 4 @49404 has 12 MA's), (9, 49344), (16, 49296), (19, 49263), (21, 49254),

Gene: Bud_85 Start: 47872, Stop: 47651, Start Num: 5

Candidate Starts for Bud_85:

(Start: 5 @47872 has 24 MA's), (15, 47770), (20, 47725), (23, 47701), (27, 47656),

Gene: C3_81 Start: 48050, Stop: 47826, Start Num: 4

Candidate Starts for C3_81:

(1, 48167), (2, 48164), (Start: 4 @48050 has 12 MA's), (6, 48035), (7, 48026), (12, 47975), (13, 47966), (14, 47957), (22, 47882), (24, 47873),

Gene: Caraxes_91 Start: 48956, Stop: 48726, Start Num: 4

Candidate Starts for Caraxes_91:

(Start: 4 @48956 has 12 MA's), (9, 48896), (10, 48890), (16, 48848),

Gene: Che12_92 Start: 49078, Stop: 48842, Start Num: 4

Candidate Starts for Che12_92:

(Start: 4 @49078 has 12 MA's), (9, 49018), (16, 48970), (24, 48901), (26, 48874),

Gene: Ebony_91 Start: 48737, Stop: 48516, Start Num: 5

Candidate Starts for Ebony_91:

(Start: 5 @48737 has 24 MA's), (15, 48635), (20, 48590), (23, 48566), (27, 48521),

Gene: Et2Brutus_92 Start: 49014, Stop: 48793, Start Num: 5

Candidate Starts for Et2Brutus_92:

(Start: 5 @49014 has 24 MA's), (15, 48912), (20, 48867), (23, 48843), (27, 48798),

Gene: FatCactus_84 Start: 48770, Stop: 48540, Start Num: 3

Candidate Starts for FatCactus_84:

(Start: 3 @48770 has 1 MA's), (9, 48701), (12, 48686), (14, 48668), (18, 48635), (22, 48593), (24, 48584), (27, 48548),

Gene: Fibonacci_92 Start: 49020, Stop: 48799, Start Num: 5

Candidate Starts for Fibonacci_92:

(Start: 5 @49020 has 24 MA's), (15, 48918), (20, 48873), (23, 48849), (27, 48804),

Gene: Flaverint_93 Start: 49164, Stop: 48943, Start Num: 5

Candidate Starts for Flaverint_93:

(Start: 5 @49164 has 24 MA's), (15, 49062), (20, 49017), (23, 48993), (27, 48948),

Gene: Gilberta_90 Start: 48040, Stop: 47819, Start Num: 5

Candidate Starts for Gilberta_90:

(Start: 5 @48040 has 24 MA's), (15, 47938), (20, 47893), (23, 47869), (27, 47824),

Gene: Hutc2_89 Start: 47904, Stop: 47683, Start Num: 5

Candidate Starts for Hutc2_89:

(Start: 5 @47904 has 24 MA's), (15, 47802), (20, 47757), (23, 47733), (27, 47688),

Gene: Insomnia_92 Start: 49198, Stop: 48977, Start Num: 5

Candidate Starts for Insomnia_92:

(Start: 5 @49198 has 24 MA's), (15, 49096), (20, 49051), (23, 49027), (27, 48982),

Gene: Jabith_92 Start: 49212, Stop: 48991, Start Num: 5

Candidate Starts for Jabith_92:

(Start: 5 @49212 has 24 MA's), (15, 49110), (20, 49065), (23, 49041), (27, 48996),

Gene: Joselito_90 Start: 48918, Stop: 48697, Start Num: 5

Candidate Starts for Joselito_90:

(Start: 5 @48918 has 24 MA's), (15, 48816), (20, 48771), (23, 48747), (27, 48702),

Gene: Jsquared_95 Start: 49647, Stop: 49423, Start Num: 4

Candidate Starts for Jsquared_95:

(Start: 4 @49647 has 12 MA's), (12, 49572), (14, 49554), (19, 49506), (22, 49479), (24, 49470),

Gene: Koduck_91 Start: 49028, Stop: 48792, Start Num: 4

Candidate Starts for Koduck_91:

(Start: 4 @49028 has 12 MA's), (16, 48920), (24, 48851),

Gene: L5_83 Start: 48732, Stop: 48514, Start Num: 4

Candidate Starts for L5_83:

(Start: 4 @48732 has 12 MA's), (11, 48660), (17, 48612),

Gene: Lucivia_93 Start: 49197, Stop: 48976, Start Num: 5

Candidate Starts for Lucivia_93:

(Start: 5 @49197 has 24 MA's), (15, 49095), (20, 49050), (23, 49026), (27, 48981),

Gene: MaCh_92 Start: 49161, Stop: 48940, Start Num: 5
Candidate Starts for MaCh_92:
(Start: 5 @49161 has 24 MA's), (15, 49059), (20, 49014), (23, 48990), (27, 48945),

Gene: Mabel_92 Start: 49162, Stop: 48941, Start Num: 5
Candidate Starts for Mabel_92:
(Start: 5 @49162 has 24 MA's), (15, 49060), (20, 49015), (23, 48991), (27, 48946),

Gene: MajorMajor_88 Start: 47696, Stop: 47472, Start Num: 4
Candidate Starts for MajorMajor_88:
(Start: 4 @47696 has 12 MA's), (9, 47636), (16, 47588), (19, 47555), (21, 47546),

Gene: Mulciber_91 Start: 49017, Stop: 48796, Start Num: 5
Candidate Starts for Mulciber_91:
(Start: 5 @49017 has 24 MA's), (15, 48915), (20, 48870), (23, 48846), (27, 48801),

Gene: Munch_91 Start: 49166, Stop: 48945, Start Num: 5
Candidate Starts for Munch_91:
(Start: 5 @49166 has 24 MA's), (15, 49064), (20, 49019), (23, 48995), (27, 48950),

Gene: Odin_89 Start: 49418, Stop: 49188, Start Num: 4
Candidate Starts for Odin_89:
(Start: 4 @49418 has 12 MA's), (15, 49310), (17, 49292),

Gene: Orange_92 Start: 48716, Stop: 48495, Start Num: 5
Candidate Starts for Orange_92:
(Start: 5 @48716 has 24 MA's), (15, 48614), (20, 48569), (23, 48545), (27, 48500),

Gene: Petersenfast_86 Start: 47597, Stop: 47376, Start Num: 5
Candidate Starts for Petersenfast_86:
(Start: 5 @47597 has 24 MA's), (15, 47495), (20, 47450), (23, 47426), (27, 47381),

Gene: Ph8s_92 Start: 49205, Stop: 48981, Start Num: 4
Candidate Starts for Ph8s_92:
(Start: 4 @49205 has 12 MA's), (12, 49130), (15, 49103), (16, 49097), (22, 49037), (24, 49028), (25, 49010),

Gene: Quokka_93 Start: 49405, Stop: 49181, Start Num: 4
Candidate Starts for Quokka_93:
(Start: 4 @49405 has 12 MA's), (9, 49345), (16, 49297), (19, 49264), (21, 49255),

Gene: Salz_88 Start: 47826, Stop: 47605, Start Num: 5
Candidate Starts for Salz_88:
(Start: 5 @47826 has 24 MA's), (15, 47724), (20, 47679), (23, 47655), (27, 47610),

Gene: Sham4_89 Start: 47912, Stop: 47691, Start Num: 5
Candidate Starts for Sham4_89:
(Start: 5 @47912 has 24 MA's), (15, 47810), (20, 47765), (23, 47741), (27, 47696),

Gene: Snape_92 Start: 48705, Stop: 48484, Start Num: 5
Candidate Starts for Snape_92:
(Start: 5 @48705 has 24 MA's), (15, 48603), (20, 48558), (23, 48534), (27, 48489),

Gene: Superchunk_90 Start: 48956, Stop: 48726, Start Num: 4
Candidate Starts for Superchunk_90:
(Start: 4 @48956 has 12 MA's), (9, 48896), (10, 48890), (16, 48848),

Gene: SwirlSquare_93 Start: 48668, Stop: 48450, Start Num: 4
Candidate Starts for SwirlSquare_93:
(Start: 4 @48668 has 12 MA's), (11, 48596), (17, 48548),

Gene: Timothy_92 Start: 48682, Stop: 48461, Start Num: 5
Candidate Starts for Timothy_92:
(Start: 5 @48682 has 24 MA's), (15, 48580), (20, 48535), (23, 48511), (27, 48466),

Gene: TinyTimmy_90 Start: 48411, Stop: 48190, Start Num: 5
Candidate Starts for TinyTimmy_90:
(Start: 5 @48411 has 24 MA's), (15, 48309), (20, 48264), (23, 48240), (27, 48195),

Gene: TipsytheTRex_89 Start: 49327, Stop: 49109, Start Num: 4
Candidate Starts for TipsytheTRex_89:
(Start: 4 @49327 has 12 MA's), (Start: 5 @49318 has 24 MA's), (11, 49255), (17, 49207), (27, 49117),

Gene: VC3_87 Start: 48050, Stop: 47826, Start Num: 4
Candidate Starts for VC3_87:
(1, 48167), (2, 48164), (Start: 4 @48050 has 12 MA's), (6, 48035), (7, 48026), (12, 47975), (13, 47966),
(14, 47957), (22, 47882), (24, 47873),