

Pham 308842



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 308842 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308842 has 42 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Hemma\_39
- Track 2 : ScienceWizSam\_43, Westerlin\_42, AreFloNak\_43, Breylor17\_43, DevitoJr\_41, Trustiboi\_42, Nivinsha\_43
- Track 3 : Brunswick\_42, Issa\_42
- Track 4 : ElephantMan\_40, Niktson\_40
- Track 5 : Gordon\_40
- Track 6 : Tatanka\_40
- Track 7 : Tenno\_43, Teacup\_42, Acai\_43, Dinallo\_42
- Track 8 : CastorTray\_43
- Track 9 : Darby\_40
- Track 10 : LucySwiss\_41
- Track 11 : Nightmare\_43, CapnMurica\_40, MiniBagel\_42
- Track 12 : Synopsis\_40
- Track 13 : Shepard\_46, Bouchard\_42, LilHuddy\_43
- Track 14 : Tipton\_44, Chlochlo\_44, Tokki\_45
- Track 15 : Giantsbane\_44
- Track 16 : Anandi\_45
- Track 17 : Caterpillar\_39
- Track 18 : MediumFry\_40
- Track 19 : Makai\_42
- Track 20 : Truckee\_40, Phaby\_43
- Track 21 : Zippen\_44, Ingrid\_44, Inked\_45, Loretta\_44

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

The start number called the most often in the published annotations is 9, it was called in 32 of the 36 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acai\_43, Anandi\_45, AreFloNak\_43, Bouchard\_42, Breylor17\_43, Brunswick\_42, CastorTray\_43, Caterpillar\_39, Chlochlo\_44, Darby\_40, DevitoJr\_41, Dinallo\_42, ElephantMan\_40, Giantsbane\_44, Gordon\_40, Hemma\_39, Ingrid\_44, Inked\_45, Issa\_42, LilHuddy\_43, Loretta\_44, Makai\_42, MediumFry\_40, Niktson\_40, Nivinsha\_43, Phaby\_43, ScienceWizSam\_43, Shepard\_46, Synopsis\_40,

Tatanka\_40, Teacup\_42, Tenno\_43, Tipton\_44, Tokki\_45, Truckee\_40, Trustiboi\_42, Westerlin\_42, Zippen\_44,

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

- CapnMurica\_40, LucySwiss\_41, MiniBagel\_42, Nightmare\_43,

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

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### Summary by start number:

Start 7:

- Found in 16 of 42 ( 38.1% ) of genes in pham
- Manual Annotations of this start: 4 of 36
- Called 25.0% of time when present
- Phage (with cluster) where this start called: CapnMurica\_40 (AU1), LucySwiss\_41 (AU1), MiniBagel\_42 (AU1), Nightmare\_43 (AU1),

Start 9:

- Found in 42 of 42 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 32 of 36
- Called 90.5% of time when present
- Phage (with cluster) where this start called: Acai\_43 (AU1), Anandi\_45 (AU4), AreFloNak\_43 (AU1), Bouchard\_42 (AU2), Breylor17\_43 (AU1), Brunswick\_42 (AU1), CastorTray\_43 (AU1), Caterpillar\_39 (AU4), Chlochlo\_44 (AU2), Darby\_40 (AU1), DevitoJr\_41 (AU1), Dinallo\_42 (AU1), ElephantMan\_40 (AU1), Giantsbane\_44 (AU2), Gordon\_40 (AU1), Hemma\_39 (AU1), Ingrid\_44 (AU3), Inked\_45 (AU7), Issa\_42 (AU1), LilHuddy\_43 (AU2), Loretta\_44 (AU3), Makai\_42 (AU5), MediumFry\_40 (AU4), Niktson\_40 (AU1), Nivinsha\_43 (AU1), Phaby\_43 (AU2), ScienceWizSam\_43 (AU1), Shepard\_46 (AU2), Synepsis\_40 (AU1), Tatanka\_40 (AU1), Teacup\_42 (AU1), Tenno\_43 (AU1), Tipton\_44 (AU2), Tokki\_45 (AU2), Truckee\_40 (AU5), Trustiboi\_42 (AU1), Westerlin\_42 (AU1), Zippen\_44 (AU7),

### Summary by clusters:

There are 6 clusters represented in this pham: AU1, AU3, AU2, AU5, AU4, AU7,

Info for manual annotations of cluster AU1:

- Start number 7 was manually annotated 4 times for cluster AU1.
- Start number 9 was manually annotated 15 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 9 was manually annotated 8 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 9 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 9 was manually annotated 3 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 9 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU7:

•Start number 9 was manually annotated 2 times for cluster AU7.

**Gene Information:**

Gene: Acai\_43 Start: 32484, Stop: 32693, Start Num: 9

Candidate Starts for Acai\_43:

(Start: 7 @32448 has 4 MA's), (Start: 9 @32484 has 32 MA's), (10, 32550), (11, 32571), (12, 32586), (13, 32616), (14, 32625),

Gene: Anandi\_45 Start: 32950, Stop: 33162, Start Num: 9

Candidate Starts for Anandi\_45:

(8, 32935), (Start: 9 @32950 has 32 MA's), (11, 33037), (12, 33052), (14, 33091),

Gene: AreFloNak\_43 Start: 32435, Stop: 32644, Start Num: 9

Candidate Starts for AreFloNak\_43:

(Start: 9 @32435 has 32 MA's), (10, 32501), (11, 32522), (12, 32537), (13, 32567), (14, 32576),

Gene: Bouchard\_42 Start: 32501, Stop: 32713, Start Num: 9

Candidate Starts for Bouchard\_42:

(8, 32486), (Start: 9 @32501 has 32 MA's), (11, 32588), (12, 32603), (14, 32642), (15, 32657),

Gene: Breylor17\_43 Start: 33215, Stop: 33424, Start Num: 9

Candidate Starts for Breylor17\_43:

(Start: 9 @33215 has 32 MA's), (10, 33281), (11, 33302), (12, 33317), (13, 33347), (14, 33356),

Gene: Brunswick\_42 Start: 32039, Stop: 32248, Start Num: 9

Candidate Starts for Brunswick\_42:

(Start: 7 @32003 has 4 MA's), (Start: 9 @32039 has 32 MA's), (10, 32105), (11, 32126), (12, 32141), (13, 32171), (14, 32180),

Gene: CapnMurica\_40 Start: 33166, Stop: 33411, Start Num: 7

Candidate Starts for CapnMurica\_40:

(Start: 7 @33166 has 4 MA's), (Start: 9 @33202 has 32 MA's), (10, 33268), (11, 33289), (12, 33304), (13, 33334), (14, 33343),

Gene: CastorTray\_43 Start: 32764, Stop: 32973, Start Num: 9

Candidate Starts for CastorTray\_43:

(Start: 7 @32728 has 4 MA's), (Start: 9 @32764 has 32 MA's), (10, 32830), (11, 32851), (12, 32866), (14, 32905),

Gene: Caterpillar\_39 Start: 31584, Stop: 31799, Start Num: 9

Candidate Starts for Caterpillar\_39:

(8, 31569), (Start: 9 @31584 has 32 MA's), (11, 31671), (12, 31686), (14, 31725),

Gene: Chlochlo\_44 Start: 32566, Stop: 32778, Start Num: 9

Candidate Starts for Chlochlo\_44:

(8, 32551), (Start: 9 @32566 has 32 MA's), (11, 32653), (12, 32668), (14, 32707), (15, 32722),

Gene: Darby\_40 Start: 31942, Stop: 32151, Start Num: 9

Candidate Starts for Darby\_40:

(Start: 7 @31906 has 4 MA's), (Start: 9 @31942 has 32 MA's), (10, 32008), (11, 32029), (12, 32044), (13, 32074), (14, 32083),

Gene: DevitoJr\_41 Start: 32385, Stop: 32594, Start Num: 9

Candidate Starts for DevitoJr\_41:

(Start: 9 @32385 has 32 MA's), (10, 32451), (11, 32472), (12, 32487), (13, 32517), (14, 32526),

Gene: Dinallo\_42 Start: 33511, Stop: 33720, Start Num: 9

Candidate Starts for Dinallo\_42:

(Start: 7 @33475 has 4 MA's), (Start: 9 @33511 has 32 MA's), (10, 33577), (11, 33598), (12, 33613), (13, 33643), (14, 33652),

Gene: ElephantMan\_40 Start: 32612, Stop: 32821, Start Num: 9

Candidate Starts for ElephantMan\_40:

(3, 32501), (4, 32525), (6, 32531), (Start: 7 @32576 has 4 MA's), (Start: 9 @32612 has 32 MA's), (10, 32678), (11, 32699), (12, 32714), (13, 32744), (14, 32753),

Gene: Giantsbane\_44 Start: 31755, Stop: 31964, Start Num: 9

Candidate Starts for Giantsbane\_44:

(8, 31740), (Start: 9 @31755 has 32 MA's), (11, 31842), (12, 31857), (14, 31893), (15, 31908),

Gene: Gordon\_40 Start: 33227, Stop: 33436, Start Num: 9

Candidate Starts for Gordon\_40:

(1, 33077), (2, 33101), (5, 33143), (Start: 7 @33191 has 4 MA's), (Start: 9 @33227 has 32 MA's), (10, 33293), (11, 33314), (12, 33329), (13, 33359), (14, 33368),

Gene: Hemma\_39 Start: 29251, Stop: 29463, Start Num: 9

Candidate Starts for Hemma\_39:

(Start: 9 @29251 has 32 MA's), (11, 29338), (12, 29353), (14, 29392),

Gene: Ingrid\_44 Start: 32497, Stop: 32712, Start Num: 9

Candidate Starts for Ingrid\_44:

(8, 32482), (Start: 9 @32497 has 32 MA's), (11, 32584), (12, 32599), (14, 32638),

Gene: Inked\_45 Start: 33465, Stop: 33680, Start Num: 9

Candidate Starts for Inked\_45:

(8, 33450), (Start: 9 @33465 has 32 MA's), (11, 33552), (12, 33567), (14, 33606),

Gene: Issa\_42 Start: 32494, Stop: 32703, Start Num: 9

Candidate Starts for Issa\_42:

(Start: 7 @32458 has 4 MA's), (Start: 9 @32494 has 32 MA's), (10, 32560), (11, 32581), (12, 32596), (13, 32626), (14, 32635),

Gene: LilHuddy\_43 Start: 32486, Stop: 32698, Start Num: 9

Candidate Starts for LilHuddy\_43:

(8, 32471), (Start: 9 @32486 has 32 MA's), (11, 32573), (12, 32588), (14, 32627), (15, 32642),

Gene: Loretta\_44 Start: 32497, Stop: 32712, Start Num: 9

Candidate Starts for Loretta\_44:

(8, 32482), (Start: 9 @32497 has 32 MA's), (11, 32584), (12, 32599), (14, 32638),

Gene: LucySwiss\_41 Start: 31918, Stop: 32163, Start Num: 7

Candidate Starts for LucySwiss\_41:

(Start: 7 @31918 has 4 MA's), (Start: 9 @31954 has 32 MA's), (10, 32020), (11, 32041), (12, 32056), (13, 32086), (14, 32095),

Gene: Makai\_42 Start: 32695, Stop: 32904, Start Num: 9

Candidate Starts for Makai\_42:

(8, 32680), (Start: 9 @32695 has 32 MA's), (11, 32782), (12, 32797), (14, 32836), (15, 32851),

Gene: MediumFry\_40 Start: 31899, Stop: 32114, Start Num: 9

Candidate Starts for MediumFry\_40:

(8, 31884), (Start: 9 @31899 has 32 MA's), (11, 31986), (12, 32001), (14, 32040), (16, 32058),

Gene: MiniBagel\_42 Start: 33148, Stop: 33393, Start Num: 7

Candidate Starts for MiniBagel\_42:

(Start: 7 @33148 has 4 MA's), (Start: 9 @33184 has 32 MA's), (10, 33250), (11, 33271), (12, 33286), (13, 33316), (14, 33325),

Gene: Nightmare\_43 Start: 33078, Stop: 33323, Start Num: 7

Candidate Starts for Nightmare\_43:

(Start: 7 @33078 has 4 MA's), (Start: 9 @33114 has 32 MA's), (10, 33180), (11, 33201), (12, 33216), (13, 33246), (14, 33255),

Gene: Niktson\_40 Start: 32612, Stop: 32821, Start Num: 9

Candidate Starts for Niktson\_40:

(3, 32501), (4, 32525), (6, 32531), (Start: 7 @32576 has 4 MA's), (Start: 9 @32612 has 32 MA's), (10, 32678), (11, 32699), (12, 32714), (13, 32744), (14, 32753),

Gene: Nivinsha\_43 Start: 32435, Stop: 32644, Start Num: 9

Candidate Starts for Nivinsha\_43:

(Start: 9 @32435 has 32 MA's), (10, 32501), (11, 32522), (12, 32537), (13, 32567), (14, 32576),

Gene: Phaby\_43 Start: 32611, Stop: 32823, Start Num: 9

Candidate Starts for Phaby\_43:

(8, 32596), (Start: 9 @32611 has 32 MA's), (11, 32698), (12, 32713), (14, 32752), (15, 32767),

Gene: ScienceWizSam\_43 Start: 32704, Stop: 32913, Start Num: 9

Candidate Starts for ScienceWizSam\_43:

(Start: 9 @32704 has 32 MA's), (10, 32770), (11, 32791), (12, 32806), (13, 32836), (14, 32845),

Gene: Shepard\_46 Start: 32770, Stop: 32982, Start Num: 9

Candidate Starts for Shepard\_46:

(8, 32755), (Start: 9 @32770 has 32 MA's), (11, 32857), (12, 32872), (14, 32911), (15, 32926),

Gene: Synopsis\_40 Start: 32370, Stop: 32579, Start Num: 9

Candidate Starts for Synopsis\_40:

(Start: 9 @32370 has 32 MA's), (10, 32436), (11, 32457), (12, 32472), (14, 32511),

Gene: Tatanka\_40 Start: 32543, Stop: 32752, Start Num: 9

Candidate Starts for Tatanka\_40:

(4, 32456), (6, 32462), (Start: 7 @32507 has 4 MA's), (Start: 9 @32543 has 32 MA's), (10, 32609), (11, 32630), (12, 32645), (14, 32684),

Gene: Teacup\_42 Start: 32559, Stop: 32768, Start Num: 9

Candidate Starts for Teacup\_42:

(Start: 7 @32523 has 4 MA's), (Start: 9 @32559 has 32 MA's), (10, 32625), (11, 32646), (12, 32661), (13, 32691), (14, 32700),

Gene: Tenno\_43 Start: 33192, Stop: 33401, Start Num: 9

Candidate Starts for Tenno\_43:

(Start: 7 @33156 has 4 MA's), (Start: 9 @33192 has 32 MA's), (10, 33258), (11, 33279), (12, 33294), (13, 33324), (14, 33333),

Gene: Tipton\_44 Start: 32904, Stop: 33116, Start Num: 9

Candidate Starts for Tipton\_44:

(8, 32889), (Start: 9 @32904 has 32 MA's), (11, 32991), (12, 33006), (14, 33045), (15, 33060),

Gene: Tokki\_45 Start: 32556, Stop: 32768, Start Num: 9

Candidate Starts for Tokki\_45:

(8, 32541), (Start: 9 @32556 has 32 MA's), (11, 32643), (12, 32658), (14, 32697), (15, 32712),

Gene: Truckee\_40 Start: 32484, Stop: 32693, Start Num: 9

Candidate Starts for Truckee\_40:

(8, 32469), (Start: 9 @32484 has 32 MA's), (11, 32571), (12, 32586), (14, 32625), (15, 32640),

Gene: Trustiboi\_42 Start: 32921, Stop: 33130, Start Num: 9

Candidate Starts for Trustiboi\_42:

(Start: 9 @32921 has 32 MA's), (10, 32987), (11, 33008), (12, 33023), (13, 33053), (14, 33062),

Gene: Westerlin\_42 Start: 34012, Stop: 34221, Start Num: 9

Candidate Starts for Westerlin\_42:

(Start: 9 @34012 has 32 MA's), (10, 34078), (11, 34099), (12, 34114), (13, 34144), (14, 34153),

Gene: Zippen\_44 Start: 33342, Stop: 33557, Start Num: 9

Candidate Starts for Zippen\_44:

(8, 33327), (Start: 9 @33342 has 32 MA's), (11, 33429), (12, 33444), (14, 33483),