

Pham 202925



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 202925 Report

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

Pham number 202925 has 67 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Mikota\_73
- Track 2 : Doddsville\_74, Roy17\_74, OSmaximus\_76, PG1\_76, Vortex\_75, Lulumae\_73, Boehler\_75, Oline\_75, Orion\_76
- Track 3 : Indlovu\_75
- Track 4 : LilMcDreamy\_74
- Track 5 : Xincheng\_72, JaguarMi\_73
- Track 6 : Heath\_73, Apex\_74, Hangman\_74, Austelle\_73, Prince\_72, Zemanar\_73, Mudslide\_73, Hydro\_74
- Track 7 : ChrisnMich\_73, Hally898\_71, GinPorsche\_71, Ahwei\_71, Poster\_71, Lambano\_71
- Track 8 : Stinger\_72
- Track 9 : AlanGrant\_77, Vincenzo\_76
- Track 10 : JAMaL\_72
- Track 11 : Mithril\_72, Waleliano\_72, Lolalove\_74, BrownCNA\_74, RawrgerThat\_73
- Track 12 : Antihero\_71, Epah\_71, Frederick\_75, Nanao\_72
- Track 13 : Magpie\_70
- Track 14 : Cooper\_74
- Track 15 : BobbyK\_74
- Track 16 : Fanaw\_69
- Track 17 : QueenPie\_67
- Track 18 : VioletZ\_75
- Track 19 : Acadian\_76, EastView9101\_75, Donny\_77, Suigeneris\_77, SirJeffery\_74, Rita130\_75
- Track 20 : Nangang\_75, DigitDog\_76, Shenyu\_76
- Track 21 : Nehemiah\_74, Mysterious\_76
- Track 22 : Phelemich\_72
- Track 23 : Rich\_74
- Track 24 : Reprobate\_74
- Track 25 : Serendipitous\_74
- Track 26 : Bae\_75
- Track 27 : Thonko\_85
- Track 28 : PenguinLover67\_76
- Track 29 : CRB2\_76
- Track 30 : Quesadilla\_76

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

The start number called the most often in the published annotations is 16, it was called in 38 of the 48 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acadian\_76, Ahwei\_71, Apex\_74, Austelle\_73, Bae\_75, BobbyK\_74, Boehler\_75, BrownCNA\_74, ChrisnMich\_73, Cooper\_74, DigitDog\_76, Doddsville\_74, Donny\_77, EastView9101\_75, Fanaw\_69, GinPorsche\_71, Hally898\_71, Hangman\_74, Heath\_73, Hydro\_74, JAMaL\_72, JaguarMi\_73, Lambano\_71, Lolalove\_74, Lulumae\_73, Magpie\_70, Mikota\_73, Mithril\_72, Mudslide\_73, Mysterious\_76, Nangang\_75, Nehemiah\_74, OSmaximus\_76, Oline\_75, Orion\_76, PG1\_76, Phelemich\_72, Poster\_71, Prince\_72, QueenPie\_67, RawrgerThat\_73, Rich\_74, Rita130\_75, Roy17\_74, Serendipitous\_74, Shenyu\_76, SirJeffery\_74, Stinger\_72, Suigeneris\_77, VioletZ\_75, Vortex\_75, Waleliano\_72, Xincheng\_72, Zemanar\_73,

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

- Antihero\_71, Epah\_71, Frederick\_75, Nanao\_72, Reprobate\_74,

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

- AlanGrant\_77, CRB2\_76, Indlovu\_75, LilMcDreamy\_74, PenguinLover67\_76, Quesadilla\_76, Thonko\_85, Vincenzo\_76,

### **Summary by start number:**

Start 9:

- Found in 2 of 67 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Reprobate\_74 (B5),

Start 11:

- Found in 10 of 67 ( 14.9% ) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Antihero\_71 (B4), Epah\_71 (B4), Frederick\_75 (B4), Nanao\_72 (B4),

Start 14:

- Found in 5 of 67 ( 7.5% ) of genes in pham
- Manual Annotations of this start: 5 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CRB2\_76 (B9), Indlovu\_75 (B11), PenguinLover67\_76 (B9), Quesadilla\_76 (B9), Thonko\_85 (B8),

Start 15:

- Found in 2 of 67 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 2 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant\_77 (B4), Vincenzo\_76 (B4),

Start 16:

- Found in 59 of 67 ( 88.1% ) of genes in pham
- Manual Annotations of this start: 38 of 48
- Called 91.5% of time when present
- Phage (with cluster) where this start called: Acadian\_76 (B5), Ahwei\_71 (B4), Apex\_74 (B4), Austelle\_73 (B4), Bae\_75 (B5), BobbyK\_74 (B4), Boehler\_75 (B1), BrownCNA\_74 (B4), ChrisnMich\_73 (B4), Cooper\_74 (B4), DigitDog\_76 (B5), Doddsville\_74 (B1), Donny\_77 (B5), EastView9101\_75 (B5), Fanaw\_69 (B4), GinPorsche\_71 (B4), Hally898\_71 (B4), Hangman\_74 (B4), Heath\_73 (B4), Hydro\_74 (B4), JAMaL\_72 (B4), JaguarMi\_73 (B4), Lambano\_71 (B4), Lolalove\_74 (B4), Lulumae\_73 (B1), Magpie\_70 (B4), Mikota\_73 (B1), Mithril\_72 (B4), Mudslide\_73 (B4), Mysterious\_76 (B5), Nangang\_75 (B5), Nehemiah\_74 (B5), OSmaximus\_76 (B1), Oline\_75 (B1), Orion\_76 (B1), PG1\_76 (B1), Phelemich\_72 (B5), Poster\_71 (B4), Prince\_72 (B4), QueenPie\_67 (B4), RawrgerThat\_73 (B4), Rich\_74 (B5), Rita130\_75 (B5), Roy17\_74 (B1), Serendipitous\_74 (B5), Shenyu\_76 (B5), SirJeffery\_74 (B5), Stinger\_72 (B4), Suigeneris\_77 (B5), VioletZ\_75 (B4), Vortex\_75 (B1), Waleliano\_72 (B4), Xincheng\_72 (B4), Zemanar\_73 (B4),

Start 17:

- Found in 1 of 67 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 1 of 48
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilMcDreamy\_74 (B12),

### Summary by clusters:

There are 7 clusters represented in this pham: B4, B5, B12, B1, B11, B8, B9,

Info for manual annotations of cluster B1:

- Start number 16 was manually annotated 10 times for cluster B1.

Info for manual annotations of cluster B11:

- Start number 14 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 17 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B4:

- Start number 11 was manually annotated 1 time for cluster B4.
- Start number 15 was manually annotated 2 times for cluster B4.
- Start number 16 was manually annotated 20 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 9 was manually annotated 1 time for cluster B5.
- Start number 16 was manually annotated 8 times for cluster B5.

Info for manual annotations of cluster B8:

- Start number 14 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 14 was manually annotated 3 times for cluster B9.

### **Gene Information:**

Gene: Acadian\_76 Start: 61455, Stop: 61769, Start Num: 16

Candidate Starts for Acadian\_76:

(6, 61368), (12, 61419), (Start: 16 @61455 has 38 MA's),

Gene: Ahwei\_71 Start: 60893, Stop: 61204, Start Num: 16

Candidate Starts for Ahwei\_71:

(Start: 11 @60857 has 1 MA's), (Start: 16 @60893 has 38 MA's), (18, 60932), (23, 61139),

Gene: AlanGrant\_77 Start: 63336, Stop: 63656, Start Num: 15

Candidate Starts for AlanGrant\_77:

(Start: 15 @63336 has 2 MA's), (23, 63588),

Gene: Antihero\_71 Start: 60858, Stop: 61211, Start Num: 11

Candidate Starts for Antihero\_71:

(Start: 11 @60858 has 1 MA's), (Start: 16 @60894 has 38 MA's), (18, 60933), (23, 61143),

Gene: Apex\_74 Start: 61991, Stop: 62302, Start Num: 16

Candidate Starts for Apex\_74:

(Start: 16 @61991 has 38 MA's), (18, 62030), (23, 62237),

Gene: Austelle\_73 Start: 62508, Stop: 62819, Start Num: 16

Candidate Starts for Austelle\_73:

(Start: 16 @62508 has 38 MA's), (18, 62547), (23, 62754),

Gene: Bae\_75 Start: 62154, Stop: 62468, Start Num: 16

Candidate Starts for Bae\_75:

(6, 62067), (12, 62118), (Start: 16 @62154 has 38 MA's),

Gene: BobbyK\_74 Start: 61762, Stop: 62073, Start Num: 16

Candidate Starts for BobbyK\_74:

(Start: 16 @61762 has 38 MA's), (18, 61801), (21, 61855), (23, 62008),

Gene: Boehler\_75 Start: 60324, Stop: 60653, Start Num: 16

Candidate Starts for Boehler\_75:

(Start: 16 @60324 has 38 MA's), (21, 60417), (22, 60576), (23, 60579),

Gene: BrownCNA\_74 Start: 61930, Stop: 62244, Start Num: 16

Candidate Starts for BrownCNA\_74:

(4, 61759), (7, 61861), (Start: 16 @61930 has 38 MA's), (18, 61969), (23, 62176),

Gene: CRB2\_76 Start: 64139, Stop: 64459, Start Num: 14

Candidate Starts for CRB2\_76:

(Start: 14 @64139 has 5 MA's), (18, 64187), (20, 64232), (21, 64238), (23, 64394),

Gene: ChrisnMich\_73 Start: 60878, Stop: 61189, Start Num: 16

Candidate Starts for ChrisnMich\_73:

(Start: 11 @60842 has 1 MA's), (Start: 16 @60878 has 38 MA's), (18, 60917), (23, 61124),

Gene: Cooper\_74 Start: 61332, Stop: 61646, Start Num: 16

Candidate Starts for Cooper\_74:

(8, 61266), (Start: 16 @61332 has 38 MA's), (20, 61419), (23, 61578),

Gene: DigitDog\_76 Start: 61556, Stop: 61867, Start Num: 16  
Candidate Starts for DigitDog\_76:  
(6, 61469), (12, 61520), (Start: 16 @61556 has 38 MA's),

Gene: Doddsville\_74 Start: 60184, Stop: 60513, Start Num: 16  
Candidate Starts for Doddsville\_74:  
(Start: 16 @60184 has 38 MA's), (21, 60277), (22, 60436), (23, 60439),

Gene: Donny\_77 Start: 61495, Stop: 61809, Start Num: 16  
Candidate Starts for Donny\_77:  
(6, 61408), (12, 61459), (Start: 16 @61495 has 38 MA's),

Gene: EastView9101\_75 Start: 61199, Stop: 61513, Start Num: 16  
Candidate Starts for EastView9101\_75:  
(6, 61112), (12, 61163), (Start: 16 @61199 has 38 MA's),

Gene: Epah\_71 Start: 60858, Stop: 61211, Start Num: 11  
Candidate Starts for Epah\_71:  
(Start: 11 @60858 has 1 MA's), (Start: 16 @60894 has 38 MA's), (18, 60933), (23, 61143),

Gene: Fanaw\_69 Start: 61712, Stop: 62023, Start Num: 16  
Candidate Starts for Fanaw\_69:  
(4, 61541), (8, 61646), (Start: 16 @61712 has 38 MA's), (18, 61751), (23, 61958),

Gene: Frederick\_75 Start: 61979, Stop: 62326, Start Num: 11  
Candidate Starts for Frederick\_75:  
(Start: 11 @61979 has 1 MA's), (Start: 16 @62015 has 38 MA's), (18, 62054), (23, 62261),

Gene: GinPorsche\_71 Start: 60891, Stop: 61208, Start Num: 16  
Candidate Starts for GinPorsche\_71:  
(Start: 11 @60855 has 1 MA's), (Start: 16 @60891 has 38 MA's), (18, 60930), (23, 61140),

Gene: Hally898\_71 Start: 60906, Stop: 61217, Start Num: 16  
Candidate Starts for Hally898\_71:  
(Start: 11 @60870 has 1 MA's), (Start: 16 @60906 has 38 MA's), (18, 60945), (23, 61152),

Gene: Hangman\_74 Start: 62206, Stop: 62517, Start Num: 16  
Candidate Starts for Hangman\_74:  
(Start: 16 @62206 has 38 MA's), (18, 62245), (23, 62452),

Gene: Heath\_73 Start: 61833, Stop: 62144, Start Num: 16  
Candidate Starts for Heath\_73:  
(Start: 16 @61833 has 38 MA's), (18, 61872), (23, 62079),

Gene: Hydro\_74 Start: 62144, Stop: 62455, Start Num: 16  
Candidate Starts for Hydro\_74:  
(Start: 16 @62144 has 38 MA's), (18, 62183), (23, 62390),

Gene: Indlovu\_75 Start: 62474, Stop: 62809, Start Num: 14  
Candidate Starts for Indlovu\_75:  
(13, 62468), (Start: 14 @62474 has 5 MA's),

Gene: JAMaL\_72 Start: 61620, Stop: 61910, Start Num: 16  
Candidate Starts for JAMaL\_72:  
(7, 61551), (Start: 16 @61620 has 38 MA's), (18, 61659), (23, 61866),

Gene: JaguarMi\_73 Start: 62960, Stop: 63271, Start Num: 16  
Candidate Starts for JaguarMi\_73:  
(3, 62711), (4, 62789), (7, 62891), (Start: 16 @62960 has 38 MA's), (18, 62999), (23, 63206),

Gene: Lambano\_71 Start: 60906, Stop: 61217, Start Num: 16  
Candidate Starts for Lambano\_71:  
(Start: 11 @60870 has 1 MA's), (Start: 16 @60906 has 38 MA's), (18, 60945), (23, 61152),

Gene: LilMcDreamy\_74 Start: 61526, Stop: 61819, Start Num: 17  
Candidate Starts for LilMcDreamy\_74:  
(Start: 17 @61526 has 1 MA's),

Gene: Lolalove\_74 Start: 61861, Stop: 62175, Start Num: 16  
Candidate Starts for Lolalove\_74:  
(4, 61690), (7, 61792), (Start: 16 @61861 has 38 MA's), (18, 61900), (23, 62107),

Gene: Lulumae\_73 Start: 59863, Stop: 60192, Start Num: 16  
Candidate Starts for Lulumae\_73:  
(Start: 16 @59863 has 38 MA's), (21, 59956), (22, 60115), (23, 60118),

Gene: Magpie\_70 Start: 61485, Stop: 61796, Start Num: 16  
Candidate Starts for Magpie\_70:  
(2, 61221), (3, 61236), (4, 61314), (7, 61416), (Start: 16 @61485 has 38 MA's), (18, 61524), (23, 61731),

Gene: Mikota\_73 Start: 59676, Stop: 60005, Start Num: 16  
Candidate Starts for Mikota\_73:  
(Start: 16 @59676 has 38 MA's), (21, 59769),

Gene: Mithril\_72 Start: 61860, Stop: 62174, Start Num: 16  
Candidate Starts for Mithril\_72:  
(4, 61689), (7, 61791), (Start: 16 @61860 has 38 MA's), (18, 61899), (23, 62106),

Gene: Mudslide\_73 Start: 62093, Stop: 62404, Start Num: 16  
Candidate Starts for Mudslide\_73:  
(Start: 16 @62093 has 38 MA's), (18, 62132), (23, 62339),

Gene: Mysterious\_76 Start: 61457, Stop: 61762, Start Num: 16  
Candidate Starts for Mysterious\_76:  
(Start: 16 @61457 has 38 MA's),

Gene: Nanao\_72 Start: 60860, Stop: 61207, Start Num: 11  
Candidate Starts for Nanao\_72:  
(Start: 11 @60860 has 1 MA's), (Start: 16 @60896 has 38 MA's), (18, 60935), (23, 61142),

Gene: Nangang\_75 Start: 61582, Stop: 61881, Start Num: 16  
Candidate Starts for Nangang\_75:  
(6, 61495), (12, 61546), (Start: 16 @61582 has 38 MA's),

Gene: Nehemiah\_74 Start: 61260, Stop: 61565, Start Num: 16

Candidate Starts for Nehemiah\_74:

(Start: 16 @61260 has 38 MA's),

Gene: OSmaximus\_76 Start: 61108, Stop: 61437, Start Num: 16

Candidate Starts for OSmaximus\_76:

(Start: 16 @61108 has 38 MA's), (21, 61201), (22, 61360), (23, 61363),

Gene: Oline\_75 Start: 60304, Stop: 60633, Start Num: 16

Candidate Starts for Oline\_75:

(Start: 16 @60304 has 38 MA's), (21, 60397), (22, 60556), (23, 60559),

Gene: Orion\_76 Start: 60252, Stop: 60581, Start Num: 16

Candidate Starts for Orion\_76:

(Start: 16 @60252 has 38 MA's), (21, 60345), (22, 60504), (23, 60507),

Gene: PG1\_76 Start: 60823, Stop: 61152, Start Num: 16

Candidate Starts for PG1\_76:

(Start: 16 @60823 has 38 MA's), (21, 60916), (22, 61075), (23, 61078),

Gene: PenguinLover67\_76 Start: 61882, Stop: 62211, Start Num: 14

Candidate Starts for PenguinLover67\_76:

(Start: 14 @61882 has 5 MA's), (18, 61939), (20, 61984), (21, 61990), (23, 62146),

Gene: Phelemich\_72 Start: 61326, Stop: 61631, Start Num: 16

Candidate Starts for Phelemich\_72:

(Start: 9 @61269 has 1 MA's), (Start: 16 @61326 has 38 MA's),

Gene: Poster\_71 Start: 60897, Stop: 61208, Start Num: 16

Candidate Starts for Poster\_71:

(Start: 11 @60861 has 1 MA's), (Start: 16 @60897 has 38 MA's), (18, 60936), (23, 61143),

Gene: Prince\_72 Start: 61991, Stop: 62302, Start Num: 16

Candidate Starts for Prince\_72:

(Start: 16 @61991 has 38 MA's), (18, 62030), (23, 62234),

Gene: QueenPie\_67 Start: 60754, Stop: 61062, Start Num: 16

Candidate Starts for QueenPie\_67:

(Start: 16 @60754 has 38 MA's), (18, 60793), (23, 61000), (24, 61012),

Gene: Quesadilla\_76 Start: 62243, Stop: 62560, Start Num: 14

Candidate Starts for Quesadilla\_76:

(Start: 14 @62243 has 5 MA's), (20, 62336), (21, 62342),

Gene: RawrgerThat\_73 Start: 61689, Stop: 62000, Start Num: 16

Candidate Starts for RawrgerThat\_73:

(4, 61518), (7, 61620), (Start: 16 @61689 has 38 MA's), (18, 61728), (23, 61935),

Gene: Reprobate\_74 Start: 61274, Stop: 61636, Start Num: 9

Candidate Starts for Reprobate\_74:

(Start: 9 @61274 has 1 MA's), (Start: 16 @61331 has 38 MA's),

Gene: Rich\_74 Start: 62199, Stop: 62513, Start Num: 16



Candidate Starts for Rich\_74:  
(12, 62163), (Start: 16 @62199 has 38 MA's),

Gene: Rita130\_75 Start: 61429, Stop: 61743, Start Num: 16  
Candidate Starts for Rita130\_75:  
(6, 61342), (12, 61393), (Start: 16 @61429 has 38 MA's),

Gene: Roy17\_74 Start: 59863, Stop: 60192, Start Num: 16  
Candidate Starts for Roy17\_74:  
(Start: 16 @59863 has 38 MA's), (21, 59956), (22, 60115), (23, 60118),

Gene: Serendipitous\_74 Start: 60885, Stop: 61214, Start Num: 16  
Candidate Starts for Serendipitous\_74:  
(1, 60588), (5, 60726), (6, 60798), (12, 60849), (Start: 16 @60885 has 38 MA's), (19, 60948), (23, 61146),

Gene: Shenyu\_76 Start: 61921, Stop: 62232, Start Num: 16  
Candidate Starts for Shenyu\_76:  
(6, 61834), (12, 61885), (Start: 16 @61921 has 38 MA's),

Gene: SirJeffery\_74 Start: 61239, Stop: 61553, Start Num: 16  
Candidate Starts for SirJeffery\_74:  
(6, 61152), (12, 61203), (Start: 16 @61239 has 38 MA's),

Gene: Stinger\_72 Start: 60638, Stop: 60928, Start Num: 16  
Candidate Starts for Stinger\_72:  
(4, 60455), (10, 60590), (Start: 16 @60638 has 38 MA's), (18, 60677), (23, 60884),

Gene: Suigeneris\_77 Start: 61677, Stop: 61991, Start Num: 16  
Candidate Starts for Suigeneris\_77:  
(6, 61590), (12, 61641), (Start: 16 @61677 has 38 MA's),

Gene: Thonko\_85 Start: 62711, Stop: 62379, Start Num: 14  
Candidate Starts for Thonko\_85:  
(Start: 14 @62711 has 5 MA's), (23, 62444),

Gene: Vincenzo\_76 Start: 63366, Stop: 63686, Start Num: 15  
Candidate Starts for Vincenzo\_76:  
(Start: 15 @63366 has 2 MA's), (23, 63618),

Gene: VioletZ\_75 Start: 61985, Stop: 62299, Start Num: 16  
Candidate Starts for VioletZ\_75:  
(Start: 16 @61985 has 38 MA's), (23, 62234),

Gene: Vortex\_75 Start: 60408, Stop: 60737, Start Num: 16  
Candidate Starts for Vortex\_75:  
(Start: 16 @60408 has 38 MA's), (21, 60501), (22, 60660), (23, 60663),

Gene: Waleliano\_72 Start: 61683, Stop: 61997, Start Num: 16  
Candidate Starts for Waleliano\_72:  
(4, 61512), (7, 61614), (Start: 16 @61683 has 38 MA's), (18, 61722), (23, 61929),

Gene: Xincheng\_72 Start: 62911, Stop: 63222, Start Num: 16

Candidate Starts for Xincheng\_72:

(3, 62662), (4, 62740), (7, 62842), (Start: 16 @62911 has 38 MA's), (18, 62950), (23, 63157),

Gene: Zemanar\_73 Start: 61935, Stop: 62246, Start Num: 16

Candidate Starts for Zemanar\_73:

(Start: 16 @61935 has 38 MA's), (18, 61974), (23, 62181),