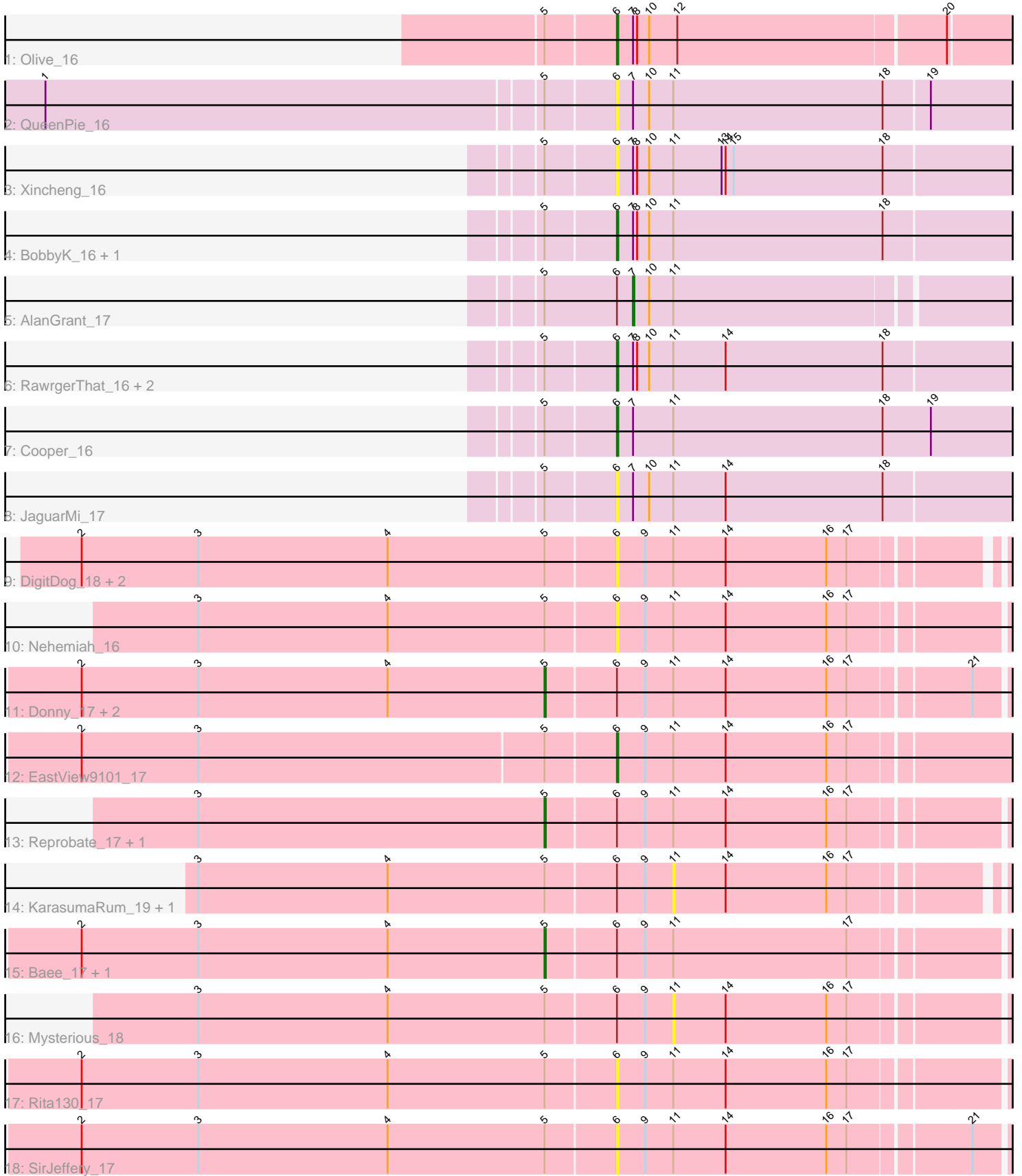


Pham 203210



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 203210 Report

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

Pham number 203210 has 28 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Olive\_16
- Track 2 : QueenPie\_16
- Track 3 : Xincheng\_16
- Track 4 : BobbyK\_16, Apex\_16
- Track 5 : AlanGrant\_17
- Track 6 : RawrgerThat\_16, Zemanar\_17, Fanaw\_16
- Track 7 : Cooper\_16
- Track 8 : JaguarMi\_17
- Track 9 : DigitDog\_18, Nangang\_17, Shenyu\_17
- Track 10 : Nehemiah\_16
- Track 11 : Donny\_17, Suigeneris\_17, Acadian\_17
- Track 12 : EastView9101\_17
- Track 13 : Reprobate\_17, Phelemich\_17
- Track 14 : KarasumaRum\_19, StinkyVeggy\_19
- Track 15 : Bae\_17, Rich\_17
- Track 16 : Mysterious\_18
- Track 17 : Rita130\_17
- Track 18 : SirJeffery\_17

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

The start number called the most often in the published annotations is 6, it was called in 7 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Apex\_16, BobbyK\_16, Cooper\_16, DigitDog\_18, EastView9101\_17, Fanaw\_16, JaguarMi\_17, Nangang\_17, Nehemiah\_16, Olive\_16, QueenPie\_16, RawrgerThat\_16, Rita130\_17, Shenyu\_17, SirJeffery\_17, Xincheng\_16, Zemanar\_17,

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

- Acadian\_17, AlanGrant\_17, Bae\_17, Donny\_17, KarasumaRum\_19, Mysterious\_18, Phelemich\_17, Reprobate\_17, Rich\_17, StinkyVeggy\_19, Suigeneris\_17,

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

- 

### Summary by start number:

Start 5:

- Found in 28 of 28 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 7 of 15
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Acadian\_17 (B5), Bae\_17 (B5), Donny\_17 (B5), Phelemich\_17 (B5), Reprobate\_17 (B5), Rich\_17 (B5), Suigeneris\_17 (B5),

Start 6:

- Found in 28 of 28 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 7 of 15
- Called 60.7% of time when present
- Phage (with cluster) where this start called: Apex\_16 (B4), BobbyK\_16 (B4), Cooper\_16 (B4), DigitDog\_18 (B5), EastView9101\_17 (B5), Fanaw\_16 (B4), JaguarMi\_17 (B4), Nangang\_17 (B5), Nehemiah\_16 (B5), Olive\_16 (B1), QueenPie\_16 (B4), RawrgerThat\_16 (B4), Rita130\_17 (B5), Shenyu\_17 (B5), SirJeffery\_17 (B5), Xincheng\_16 (B4), Zemanar\_17 (B4),

Start 7:

- Found in 11 of 28 ( 39.3% ) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 9.1% of time when present
- Phage (with cluster) where this start called: AlanGrant\_17 (B4),

Start 11:

- Found in 27 of 28 ( 96.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: KarasumaRum\_19 (B5), Mysterious\_18 (B5), StinkyVeggy\_19 (B5),

### Summary by clusters:

There are 3 clusters represented in this pham: B4, B5, B1,

Info for manual annotations of cluster B1:

- Start number 6 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster B4:

- Start number 6 was manually annotated 5 times for cluster B4.
- Start number 7 was manually annotated 1 time for cluster B4.

Info for manual annotations of cluster B5:

- Start number 5 was manually annotated 7 times for cluster B5.
- Start number 6 was manually annotated 1 time for cluster B5.

**Gene Information:**

Gene: Acadian\_17 Start: 15257, Stop: 15601, Start Num: 5

Candidate Starts for Acadian\_17:

(2, 14912), (3, 14999), (4, 15140), (Start: 5 @15257 has 7 MA's), (Start: 6 @15308 has 7 MA's), (9, 15329), (11, 15350), (14, 15389), (16, 15464), (17, 15479), (21, 15563),

Gene: AlanGrant\_17 Start: 16219, Stop: 16518, Start Num: 7

Candidate Starts for AlanGrant\_17:

(Start: 5 @16153 has 7 MA's), (Start: 6 @16207 has 7 MA's), (Start: 7 @16219 has 1 MA's), (10, 16231), (11, 16249),

Gene: Apex\_16 Start: 15606, Stop: 15926, Start Num: 6

Candidate Starts for Apex\_16:

(Start: 5 @15555 has 7 MA's), (Start: 6 @15606 has 7 MA's), (Start: 7 @15618 has 1 MA's), (8, 15621), (10, 15630), (11, 15648), (18, 15804),

Gene: Bae\_17 Start: 15403, Stop: 15747, Start Num: 5

Candidate Starts for Bae\_17:

(2, 15058), (3, 15145), (4, 15286), (Start: 5 @15403 has 7 MA's), (Start: 6 @15454 has 7 MA's), (9, 15475), (11, 15496), (17, 15625),

Gene: BobbyK\_16 Start: 15425, Stop: 15745, Start Num: 6

Candidate Starts for BobbyK\_16:

(Start: 5 @15374 has 7 MA's), (Start: 6 @15425 has 7 MA's), (Start: 7 @15437 has 1 MA's), (8, 15440), (10, 15449), (11, 15467), (18, 15623),

Gene: Cooper\_16 Start: 14469, Stop: 14792, Start Num: 6

Candidate Starts for Cooper\_16:

(Start: 5 @14418 has 7 MA's), (Start: 6 @14469 has 7 MA's), (Start: 7 @14481 has 1 MA's), (11, 14511), (18, 14667), (19, 14703),

Gene: DigitDog\_18 Start: 15284, Stop: 15568, Start Num: 6

Candidate Starts for DigitDog\_18:

(2, 14888), (3, 14975), (4, 15116), (Start: 5 @15233 has 7 MA's), (Start: 6 @15284 has 7 MA's), (9, 15305), (11, 15326), (14, 15365), (16, 15440), (17, 15455),

Gene: Donny\_17 Start: 15259, Stop: 15603, Start Num: 5

Candidate Starts for Donny\_17:

(2, 14914), (3, 15001), (4, 15142), (Start: 5 @15259 has 7 MA's), (Start: 6 @15310 has 7 MA's), (9, 15331), (11, 15352), (14, 15391), (16, 15466), (17, 15481), (21, 15565),

Gene: EastView9101\_17 Start: 15313, Stop: 15612, Start Num: 6

Candidate Starts for EastView9101\_17:

(2, 14920), (3, 15007), (Start: 5 @15262 has 7 MA's), (Start: 6 @15313 has 7 MA's), (9, 15334), (11, 15355), (14, 15394), (16, 15469), (17, 15484),

Gene: Fanaw\_16 Start: 15455, Stop: 15775, Start Num: 6

Candidate Starts for Fanaw\_16:

(Start: 5 @15404 has 7 MA's), (Start: 6 @15455 has 7 MA's), (Start: 7 @15467 has 1 MA's), (8, 15470), (10, 15479), (11, 15497), (14, 15536), (18, 15653),

Gene: JaguarMi\_17 Start: 15255, Stop: 15575, Start Num: 6

Candidate Starts for JaguarMi\_17:

(Start: 5 @15204 has 7 MA's), (Start: 6 @15255 has 7 MA's), (Start: 7 @15267 has 1 MA's), (10, 15279), (11, 15297), (14, 15336), (18, 15453),

Gene: KarasumaRum\_19 Start: 15482, Stop: 15724, Start Num: 11

Candidate Starts for KarasumaRum\_19:

(3, 15131), (4, 15272), (Start: 5 @15389 has 7 MA's), (Start: 6 @15440 has 7 MA's), (9, 15461), (11, 15482), (14, 15521), (16, 15596), (17, 15611),

Gene: Mysterious\_18 Start: 15593, Stop: 15844, Start Num: 11

Candidate Starts for Mysterious\_18:

(3, 15242), (4, 15383), (Start: 5 @15500 has 7 MA's), (Start: 6 @15551 has 7 MA's), (9, 15572), (11, 15593), (14, 15632), (16, 15707), (17, 15722),

Gene: Nangang\_17 Start: 15284, Stop: 15568, Start Num: 6

Candidate Starts for Nangang\_17:

(2, 14888), (3, 14975), (4, 15116), (Start: 5 @15233 has 7 MA's), (Start: 6 @15284 has 7 MA's), (9, 15305), (11, 15326), (14, 15365), (16, 15440), (17, 15455),

Gene: Nehemiah\_16 Start: 15551, Stop: 15844, Start Num: 6

Candidate Starts for Nehemiah\_16:

(3, 15242), (4, 15383), (Start: 5 @15500 has 7 MA's), (Start: 6 @15551 has 7 MA's), (9, 15572), (11, 15593), (14, 15632), (16, 15707), (17, 15722),

Gene: Olive\_16 Start: 13692, Stop: 13991, Start Num: 6

Candidate Starts for Olive\_16:

(Start: 5 @13641 has 7 MA's), (Start: 6 @13692 has 7 MA's), (Start: 7 @13704 has 1 MA's), (8, 13707), (10, 13716), (12, 13737), (20, 13932),

Gene: Phelemich\_17 Start: 15504, Stop: 15848, Start Num: 5

Candidate Starts for Phelemich\_17:

(3, 15246), (Start: 5 @15504 has 7 MA's), (Start: 6 @15555 has 7 MA's), (9, 15576), (11, 15597), (14, 15636), (16, 15711), (17, 15726),

Gene: QueenPie\_16 Start: 15959, Stop: 16279, Start Num: 6

Candidate Starts for QueenPie\_16:

(1, 15545), (Start: 5 @15908 has 7 MA's), (Start: 6 @15959 has 7 MA's), (Start: 7 @15971 has 1 MA's), (10, 15983), (11, 16001), (18, 16157), (19, 16190),

Gene: RawrgerThat\_16 Start: 15422, Stop: 15742, Start Num: 6

Candidate Starts for RawrgerThat\_16:

(Start: 5 @15371 has 7 MA's), (Start: 6 @15422 has 7 MA's), (Start: 7 @15434 has 1 MA's), (8, 15437), (10, 15446), (11, 15464), (14, 15503), (18, 15620),

Gene: Reprobate\_17 Start: 15501, Stop: 15845, Start Num: 5

Candidate Starts for Reprobate\_17:

(3, 15243), (Start: 5 @15501 has 7 MA's), (Start: 6 @15552 has 7 MA's), (9, 15573), (11, 15594), (14, 15633), (16, 15708), (17, 15723),

Gene: Rich\_17 Start: 15400, Stop: 15744, Start Num: 5

Candidate Starts for Rich\_17:

(2, 15055), (3, 15142), (4, 15283), (Start: 5 @15400 has 7 MA's), (Start: 6 @15451 has 7 MA's), (9, 15472), (11, 15493), (17, 15622),

Gene: Rita130\_17 Start: 15309, Stop: 15602, Start Num: 6

Candidate Starts for Rita130\_17:

(2, 14913), (3, 15000), (4, 15141), (Start: 5 @15258 has 7 MA's), (Start: 6 @15309 has 7 MA's), (9, 15330), (11, 15351), (14, 15390), (16, 15465), (17, 15480),

Gene: Shenyu\_17 Start: 15284, Stop: 15568, Start Num: 6

Candidate Starts for Shenyu\_17:

(2, 14888), (3, 14975), (4, 15116), (Start: 5 @15233 has 7 MA's), (Start: 6 @15284 has 7 MA's), (9, 15305), (11, 15326), (14, 15365), (16, 15440), (17, 15455),

Gene: SirJeffery\_17 Start: 15310, Stop: 15603, Start Num: 6

Candidate Starts for SirJeffery\_17:

(2, 14914), (3, 15001), (4, 15142), (Start: 5 @15259 has 7 MA's), (Start: 6 @15310 has 7 MA's), (9, 15331), (11, 15352), (14, 15391), (16, 15466), (17, 15481), (21, 15565),

Gene: StinkyVeggy\_19 Start: 15482, Stop: 15724, Start Num: 11

Candidate Starts for StinkyVeggy\_19:

(3, 15131), (4, 15272), (Start: 5 @15389 has 7 MA's), (Start: 6 @15440 has 7 MA's), (9, 15461), (11, 15482), (14, 15521), (16, 15596), (17, 15611),

Gene: Suigeneris\_17 Start: 15259, Stop: 15603, Start Num: 5

Candidate Starts for Suigeneris\_17:

(2, 14914), (3, 15001), (4, 15142), (Start: 5 @15259 has 7 MA's), (Start: 6 @15310 has 7 MA's), (9, 15331), (11, 15352), (14, 15391), (16, 15466), (17, 15481), (21, 15565),

Gene: Xincheng\_16 Start: 15249, Stop: 15569, Start Num: 6

Candidate Starts for Xincheng\_16:

(Start: 5 @15198 has 7 MA's), (Start: 6 @15249 has 7 MA's), (Start: 7 @15261 has 1 MA's), (8, 15264), (10, 15273), (11, 15291), (13, 15327), (14, 15330), (15, 15336), (18, 15447),

Gene: Zemanar\_17 Start: 15428, Stop: 15748, Start Num: 6

Candidate Starts for Zemanar\_17:

(Start: 5 @15377 has 7 MA's), (Start: 6 @15428 has 7 MA's), (Start: 7 @15440 has 1 MA's), (8, 15443), (10, 15452), (11, 15470), (14, 15509), (18, 15626),