

Pham 196549



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 196549 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196549 has 62 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Albedo\_66
- Track 2 : SansAfet\_66, Phisb\_66, Albright\_64, Abigail\_64
- Track 3 : Sharkboy\_64
- Track 4 : SanaSana\_64, Stoor\_62, Loviatar\_107
- Track 5 : Bernstein\_65, Clayda5\_67, Rollins\_65, Armstrong\_65, Coltrane\_65, Brahms\_65, Skylord\_65
- Track 6 : Arroyo\_65
- Track 7 : Didgeridoo\_70, IndyLu\_67, BabyDaisy\_67
- Track 8 : Lahqtemish\_65
- Track 9 : TukTuk\_66
- Track 10 : Dismas\_63, Rona\_62
- Track 11 : Doobus\_63
- Track 12 : Cashington\_64
- Track 13 : DickRichards\_63
- Track 14 : DirtyBubble\_62, Stromboli\_62
- Track 15 : LimaBean\_64
- Track 16 : Icarian\_65
- Track 17 : BubbaBear\_64
- Track 18 : Finalfrontier\_65, Slay\_66
- Track 19 : SarBear\_65
- Track 20 : Avocadoman\_64
- Track 21 : BelmontSKP\_64, AnnaLie\_64
- Track 22 : Elva\_67
- Track 23 : Burritobowl\_66
- Track 24 : BabyYoda\_62, WalkingDead\_65
- Track 25 : Kate33\_67
- Track 26 : CroZenni\_65
- Track 27 : Eden\_66
- Track 28 : Gack\_65
- Track 29 : Swervy\_65, Jovita\_63
- Track 30 : Quenya\_65
- Track 31 : Franklin22\_68
- Track 32 : Eula\_64, Nicky22\_64
- Track 33 : Kenzers\_64
- Track 34 : Kieran\_61, ChiliPepper\_61
- Track 35 : QMacho\_66, Johnathan\_64
- Track 36 : AvGardian\_65

- Track 37 : Vitas\_65
- Track 38 : Lynlen\_65
- Track 39 : Phorgeous\_63, CrazyRich\_62

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

The start number called the most often in the published annotations is 10, it was called in 41 of the 58 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abigail\_64, Albedo\_66, Albright\_64, AnnaLie\_64, Arroyo\_65, AvGardian\_65, Avocadoman\_64, BabyDaisy\_67, BabyYoda\_62, BelmontSKP\_64, BubbaBear\_64, Burritobowl\_66, Cashington\_64, CroZenni\_65, DickRichards\_63, Didgeridoo\_70, DirtyBubble\_62, Doobus\_63, Eden\_66, Elva\_67, Eula\_64, Finalfrontier\_65, Franklin22\_68, Icarian\_65, IndyLu\_67, Johnathan\_64, Jovita\_63, Kate33\_67, Kenzers\_64, Lahqtemish\_65, LimaBean\_64, Loviatar\_107, Lynlen\_65, Nicky22\_64, Phisb\_66, QMacho\_66, SanaSana\_64, SansAfet\_66, SarBear\_65, Slay\_66, Stoor\_62, Stromboli\_62, Swervy\_65, TukTuk\_66, WalkingDead\_65,

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

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

- Armstrong\_65, Bernstein\_65, Brahms\_65, ChiliPepper\_61, Clayda5\_67, Coltrane\_65, CrazyRich\_62, Dismas\_63, Gack\_65, Kieran\_61, Phorgeous\_63, Quenya\_65, Rollins\_65, Rona\_62, Sharkboy\_64, Skylord\_65, Vitas\_65,

**Summary by start number:**

Start 10:

- Found in 45 of 62 ( 72.6% ) of genes in pham
- Manual Annotations of this start: 41 of 58
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abigail\_64 (EB), Albedo\_66 (EB), Albright\_64 (EB), AnnaLie\_64 (EB), Arroyo\_65 (EB), AvGardian\_65 (EB), Avocadoman\_64 (EB), BabyDaisy\_67 (EB), BabyYoda\_62 (EB), BelmontSKP\_64 (EB), BubbaBear\_64 (EB), Burritobowl\_66 (EB), Cashington\_64 (EB), CroZenni\_65 (EB), DickRichards\_63 (EB), Didgeridoo\_70 (EB), DirtyBubble\_62 (EB), Doobus\_63 (EB), Eden\_66 (EB), Elva\_67 (EB), Eula\_64 (EB), Finalfrontier\_65 (EB), Franklin22\_68 (EB), Icarian\_65 (EB), IndyLu\_67 (EB), Johnathan\_64 (EB), Jovita\_63 (EB), Kate33\_67 (EB), Kenzers\_64 (EB), Lahqtemish\_65 (EB), LimaBean\_64 (EB), Loviatar\_107 (EB), Lynlen\_65 (EB), Nicky22\_64 (EB), Phisb\_66 (EB), QMacho\_66 (EB), SanaSana\_64 (EB), SansAfet\_66 (EB), SarBear\_65 (EB), Slay\_66 (EB), Stoor\_62 (EB), Stromboli\_62 (EB), Swervy\_65 (EB), TukTuk\_66 (EB), WalkingDead\_65 (EB),

Start 11:

- Found in 15 of 62 ( 24.2% ) of genes in pham
- Manual Annotations of this start: 15 of 58
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Armstrong\_65 (EB), Bernstein\_65 (EB), Brahms\_65 (EB), ChiliPepper\_61 (EB), Clayda5\_67 (EB), Coltrane\_65 (EB), Dismas\_63 (EB), Gack\_65 (EB), Kieran\_61 (EB), Quenya\_65 (EB), Rollins\_65 (EB), Rona\_62 (EB), Sharkboy\_64 (EB), Skylord\_65 (EB), Vitas\_65 (EB),

Start 12:

- Found in 2 of 62 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 2 of 58
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CrazyRich\_62 (EC), Phorgeous\_63 (EC),

### **Summary by clusters:**

There are 2 clusters represented in this pham: EC, EB,

Info for manual annotations of cluster EB:

- Start number 10 was manually annotated 41 times for cluster EB.
- Start number 11 was manually annotated 15 times for cluster EB.

Info for manual annotations of cluster EC:

- Start number 12 was manually annotated 2 times for cluster EC.

### **Gene Information:**

Gene: Abigail\_64 Start: 39315, Stop: 39497, Start Num: 10

Candidate Starts for Abigail\_64:

(Start: 10 @39315 has 41 MA's), (16, 39360), (23, 39450),

Gene: Albedo\_66 Start: 40235, Stop: 40417, Start Num: 10

Candidate Starts for Albedo\_66:

(Start: 10 @40235 has 41 MA's), (16, 40280), (23, 40370),

Gene: Albright\_64 Start: 39297, Stop: 39479, Start Num: 10

Candidate Starts for Albright\_64:

(Start: 10 @39297 has 41 MA's), (16, 39342), (23, 39432),

Gene: AnnaLie\_64 Start: 39976, Stop: 40158, Start Num: 10

Candidate Starts for AnnaLie\_64:

(Start: 10 @39976 has 41 MA's), (23, 40111),

Gene: Armstrong\_65 Start: 38306, Stop: 38512, Start Num: 11

Candidate Starts for Armstrong\_65:

(Start: 11 @38306 has 15 MA's), (20, 38414), (22, 38435), (24, 38456), (26, 38498),

Gene: Arroyo\_65 Start: 40440, Stop: 40622, Start Num: 10

Candidate Starts for Arroyo\_65:

(Start: 10 @40440 has 41 MA's), (15, 40470), (16, 40485), (23, 40575),

Gene: AvGardian\_65 Start: 40037, Stop: 40219, Start Num: 10

Candidate Starts for AvGardian\_65:

(Start: 10 @40037 has 41 MA's), (20, 40145), (21, 40148),

Gene: Avocadoman\_64 Start: 39447, Stop: 39629, Start Num: 10

Candidate Starts for Avocadoman\_64:

(9, 39441), (Start: 10 @39447 has 41 MA's), (15, 39477), (23, 39582),

Gene: BabyDaisy\_67 Start: 40786, Stop: 40968, Start Num: 10

Candidate Starts for BabyDaisy\_67:

(Start: 10 @40786 has 41 MA's), (15, 40816), (16, 40831),

Gene: BabyYoda\_62 Start: 39683, Stop: 39868, Start Num: 10

Candidate Starts for BabyYoda\_62:

(Start: 10 @39683 has 41 MA's), (14, 39701), (20, 39791), (23, 39818),

Gene: BelmontSKP\_64 Start: 39976, Stop: 40158, Start Num: 10

Candidate Starts for BelmontSKP\_64:

(Start: 10 @39976 has 41 MA's), (23, 40111),

Gene: Bernstein\_65 Start: 38304, Stop: 38510, Start Num: 11

Candidate Starts for Bernstein\_65:

(Start: 11 @38304 has 15 MA's), (20, 38412), (22, 38433), (24, 38454), (26, 38496),

Gene: Brahms\_65 Start: 38206, Stop: 38412, Start Num: 11

Candidate Starts for Brahms\_65:

(Start: 11 @38206 has 15 MA's), (20, 38314), (22, 38335), (24, 38356), (26, 38398),

Gene: BubbaBear\_64 Start: 40228, Stop: 40410, Start Num: 10

Candidate Starts for BubbaBear\_64:

(6, 40021), (Start: 10 @40228 has 41 MA's), (16, 40273), (23, 40363),

Gene: Burritobowl\_66 Start: 39798, Stop: 39980, Start Num: 10

Candidate Starts for Burritobowl\_66:

(Start: 10 @39798 has 41 MA's), (15, 39828), (16, 39843), (23, 39933),

Gene: Cashington\_64 Start: 39539, Stop: 39721, Start Num: 10

Candidate Starts for Cashington\_64:

(Start: 10 @39539 has 41 MA's), (16, 39584), (23, 39674),

Gene: ChiliPepper\_61 Start: 40043, Stop: 40222, Start Num: 11

Candidate Starts for ChiliPepper\_61:

(1, 39632), (Start: 11 @40043 has 15 MA's), (14, 40058), (19, 40136), (20, 40148),

Gene: Clayda5\_67 Start: 38272, Stop: 38478, Start Num: 11

Candidate Starts for Clayda5\_67:

(Start: 11 @38272 has 15 MA's), (20, 38380), (22, 38401), (24, 38422), (26, 38464),

Gene: Coltrane\_65 Start: 38206, Stop: 38412, Start Num: 11

Candidate Starts for Coltrane\_65:

(Start: 11 @38206 has 15 MA's), (20, 38314), (22, 38335), (24, 38356), (26, 38398),

Gene: CrazyRich\_62 Start: 40408, Stop: 40566, Start Num: 12

Candidate Starts for CrazyRich\_62:

(Start: 12 @40408 has 2 MA's), (13, 40411), (18, 40483),

Gene: CroZenni\_65 Start: 39783, Stop: 39965, Start Num: 10  
Candidate Starts for CroZenni\_65:  
(5, 39564), (7, 39594), (Start: 10 @39783 has 41 MA's), (16, 39828), (23, 39918),

Gene: DickRichards\_63 Start: 39754, Stop: 39936, Start Num: 10  
Candidate Starts for DickRichards\_63:  
(Start: 10 @39754 has 41 MA's), (15, 39784), (16, 39799), (23, 39889),

Gene: Didgeridoo\_70 Start: 40896, Stop: 41078, Start Num: 10  
Candidate Starts for Didgeridoo\_70:  
(Start: 10 @40896 has 41 MA's), (15, 40926), (16, 40941),

Gene: DirtyBubble\_62 Start: 39722, Stop: 39907, Start Num: 10  
Candidate Starts for DirtyBubble\_62:  
(Start: 10 @39722 has 41 MA's), (14, 39740), (20, 39830), (23, 39857),

Gene: Dismas\_63 Start: 40180, Stop: 40359, Start Num: 11  
Candidate Starts for Dismas\_63:  
(Start: 11 @40180 has 15 MA's), (14, 40195), (19, 40273), (20, 40285),

Gene: Doobus\_63 Start: 39609, Stop: 39791, Start Num: 10  
Candidate Starts for Doobus\_63:  
(Start: 10 @39609 has 41 MA's), (15, 39639), (23, 39744),

Gene: Eden\_66 Start: 39118, Stop: 39339, Start Num: 10  
Candidate Starts for Eden\_66:  
(Start: 10 @39118 has 41 MA's), (24, 39271),

Gene: Elva\_67 Start: 40561, Stop: 40749, Start Num: 10  
Candidate Starts for Elva\_67:  
(Start: 10 @40561 has 41 MA's), (20, 40672), (23, 40699),

Gene: Eula\_64 Start: 39518, Stop: 39700, Start Num: 10  
Candidate Starts for Eula\_64:  
(Start: 10 @39518 has 41 MA's), (16, 39563), (23, 39653),

Gene: Finalfrontier\_65 Start: 40502, Stop: 40684, Start Num: 10  
Candidate Starts for Finalfrontier\_65:  
(Start: 10 @40502 has 41 MA's), (16, 40547), (23, 40637),

Gene: Franklin22\_68 Start: 38842, Stop: 39054, Start Num: 10  
Candidate Starts for Franklin22\_68:  
(Start: 10 @38842 has 41 MA's), (20, 38950), (24, 38995),

Gene: Gack\_65 Start: 38747, Stop: 38944, Start Num: 11  
Candidate Starts for Gack\_65:  
(2, 38459), (Start: 11 @38747 has 15 MA's), (24, 38897),

Gene: Icarian\_65 Start: 40372, Stop: 40557, Start Num: 10  
Candidate Starts for Icarian\_65:  
(Start: 10 @40372 has 41 MA's), (17, 40423), (20, 40483),

Gene: IndyLu\_67 Start: 40517, Stop: 40699, Start Num: 10  
Candidate Starts for IndyLu\_67:  
(Start: 10 @40517 has 41 MA's), (15, 40547), (16, 40562),

Gene: Johnathan\_64 Start: 39298, Stop: 39480, Start Num: 10  
Candidate Starts for Johnathan\_64:  
(Start: 10 @39298 has 41 MA's), (23, 39433),

Gene: Jovita\_63 Start: 39286, Stop: 39468, Start Num: 10  
Candidate Starts for Jovita\_63:  
(Start: 10 @39286 has 41 MA's), (16, 39331), (23, 39421),

Gene: Kate33\_67 Start: 40247, Stop: 40429, Start Num: 10  
Candidate Starts for Kate33\_67:  
(Start: 10 @40247 has 41 MA's), (15, 40277), (16, 40292),

Gene: Kenzers\_64 Start: 39369, Stop: 39551, Start Num: 10  
Candidate Starts for Kenzers\_64:  
(4, 39138), (8, 39357), (Start: 10 @39369 has 41 MA's), (16, 39414), (23, 39504),

Gene: Kieran\_61 Start: 40005, Stop: 40184, Start Num: 11  
Candidate Starts for Kieran\_61:  
(1, 39594), (Start: 11 @40005 has 15 MA's), (14, 40020), (19, 40098), (20, 40110),

Gene: Lahqtemish\_65 Start: 40719, Stop: 40901, Start Num: 10  
Candidate Starts for Lahqtemish\_65:  
(Start: 10 @40719 has 41 MA's), (15, 40749), (16, 40764), (23, 40854),

Gene: LimaBean\_64 Start: 39192, Stop: 39374, Start Num: 10  
Candidate Starts for LimaBean\_64:  
(Start: 10 @39192 has 41 MA's), (15, 39222), (23, 39327),

Gene: Loviatar\_107 Start: 40790, Stop: 40975, Start Num: 10  
Candidate Starts for Loviatar\_107:  
(Start: 10 @40790 has 41 MA's), (17, 40841), (20, 40901),

Gene: Lynlen\_65 Start: 39522, Stop: 39704, Start Num: 10  
Candidate Starts for Lynlen\_65:  
(8, 39510), (Start: 10 @39522 has 41 MA's), (16, 39567), (23, 39657),

Gene: Nicky22\_64 Start: 39961, Stop: 40143, Start Num: 10  
Candidate Starts for Nicky22\_64:  
(Start: 10 @39961 has 41 MA's), (16, 40006), (23, 40096),

Gene: Phisb\_66 Start: 39867, Stop: 40049, Start Num: 10  
Candidate Starts for Phisb\_66:  
(Start: 10 @39867 has 41 MA's), (16, 39912), (23, 40002),

Gene: Phorgeous\_63 Start: 40218, Stop: 40376, Start Num: 12  
Candidate Starts for Phorgeous\_63:  
(Start: 12 @40218 has 2 MA's), (13, 40221), (18, 40293),

Gene: QMacho\_66 Start: 39998, Stop: 40180, Start Num: 10

Candidate Starts for QMacho\_66:  
(Start: 10 @39998 has 41 MA's), (23, 40133),

Gene: Quenya\_65 Start: 40431, Stop: 40655, Start Num: 11  
Candidate Starts for Quenya\_65:  
(Start: 11 @40431 has 15 MA's), (20, 40539), (25, 40614),

Gene: Rollins\_65 Start: 38304, Stop: 38510, Start Num: 11  
Candidate Starts for Rollins\_65:  
(Start: 11 @38304 has 15 MA's), (20, 38412), (22, 38433), (24, 38454), (26, 38496),

Gene: Rona\_62 Start: 40171, Stop: 40350, Start Num: 11  
Candidate Starts for Rona\_62:  
(Start: 11 @40171 has 15 MA's), (14, 40186), (19, 40264), (20, 40276),

Gene: SanaSana\_64 Start: 40133, Stop: 40318, Start Num: 10  
Candidate Starts for SanaSana\_64:  
(Start: 10 @40133 has 41 MA's), (17, 40184), (20, 40244),

Gene: SansAfet\_66 Start: 39843, Stop: 40025, Start Num: 10  
Candidate Starts for SansAfet\_66:  
(Start: 10 @39843 has 41 MA's), (16, 39888), (23, 39978),

Gene: SarBear\_65 Start: 39611, Stop: 39793, Start Num: 10  
Candidate Starts for SarBear\_65:  
(3, 39398), (Start: 10 @39611 has 41 MA's), (16, 39656), (23, 39746),

Gene: Sharkboy\_64 Start: 40536, Stop: 40715, Start Num: 11  
Candidate Starts for Sharkboy\_64:  
(Start: 11 @40536 has 15 MA's), (14, 40551), (19, 40629), (20, 40641),

Gene: Skylord\_65 Start: 38221, Stop: 38427, Start Num: 11  
Candidate Starts for Skylord\_65:  
(Start: 11 @38221 has 15 MA's), (20, 38329), (22, 38350), (24, 38371), (26, 38413),

Gene: Slay\_66 Start: 40377, Stop: 40559, Start Num: 10  
Candidate Starts for Slay\_66:  
(Start: 10 @40377 has 41 MA's), (16, 40422), (23, 40512),

Gene: Stoor\_62 Start: 39920, Stop: 40105, Start Num: 10  
Candidate Starts for Stoor\_62:  
(Start: 10 @39920 has 41 MA's), (17, 39971), (20, 40031),

Gene: Stromboli\_62 Start: 39721, Stop: 39906, Start Num: 10  
Candidate Starts for Stromboli\_62:  
(Start: 10 @39721 has 41 MA's), (14, 39739), (20, 39829), (23, 39856),

Gene: Swervy\_65 Start: 39648, Stop: 39830, Start Num: 10  
Candidate Starts for Swervy\_65:  
(Start: 10 @39648 has 41 MA's), (16, 39693), (23, 39783),

Gene: TukTuk\_66 Start: 40156, Stop: 40338, Start Num: 10  
Candidate Starts for TukTuk\_66:



(8, 40144), (Start: 10 @40156 has 41 MA's), (16, 40201), (23, 40291),

Gene: Vitas\_65 Start: 38277, Stop: 38483, Start Num: 11

Candidate Starts for Vitas\_65:

(Start: 11 @38277 has 15 MA's), (20, 38385), (22, 38406), (24, 38427), (26, 38469),

Gene: WalkingDead\_65 Start: 40899, Stop: 41084, Start Num: 10

Candidate Starts for WalkingDead\_65:

(Start: 10 @40899 has 41 MA's), (14, 40917), (20, 41007), (23, 41034),