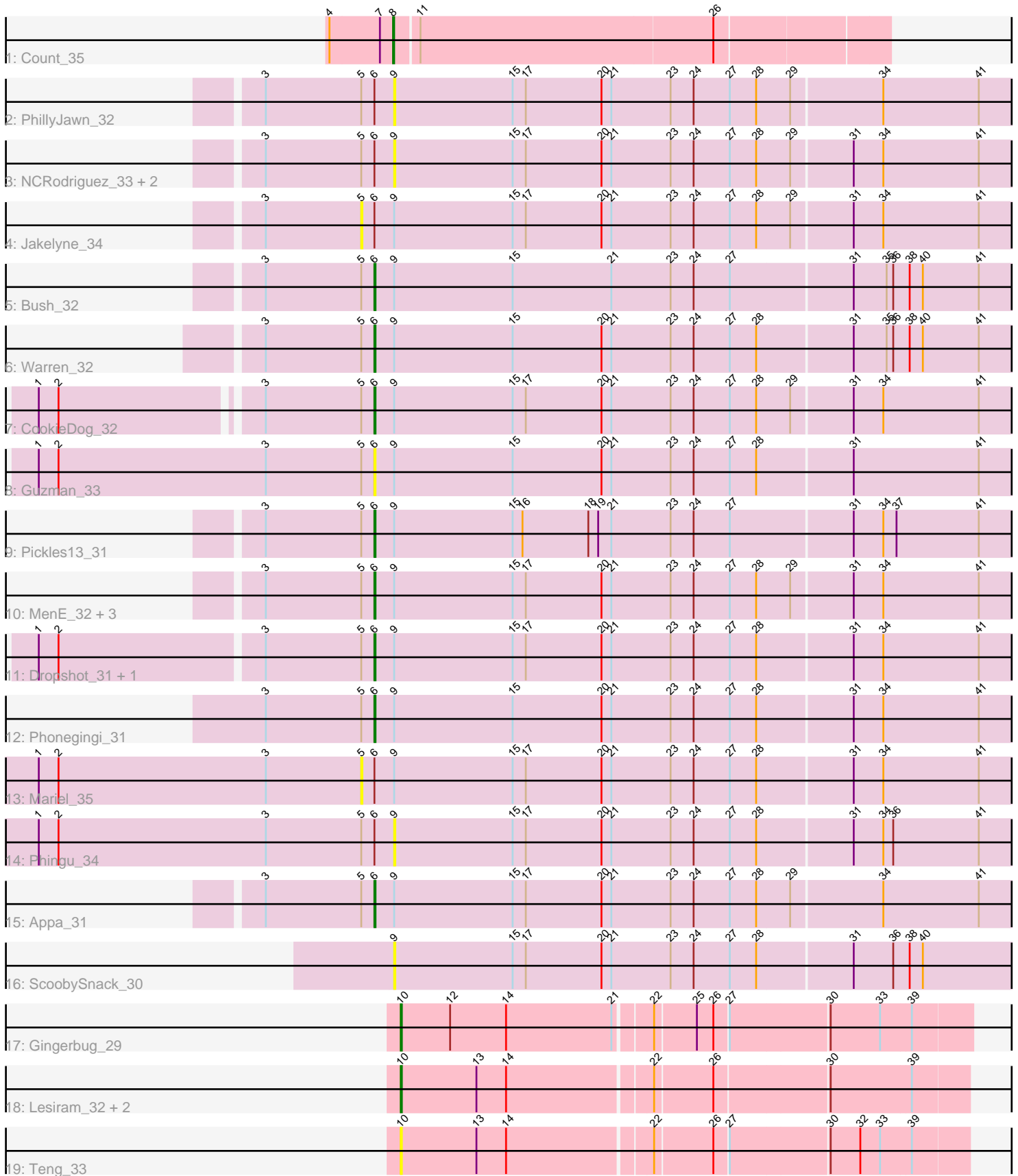


# Pham 309087



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 309087 Report

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

Pham number 309087 has 27 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Count\_35
- Track 2 : PhillyJawn\_32
- Track 3 : NCRodriguez\_33, Winchester007\_47, Violeta\_33
- Track 4 : Jakelyne\_34
- Track 5 : Bush\_32
- Track 6 : Warren\_32
- Track 7 : CookieDog\_32
- Track 8 : Guzman\_33
- Track 9 : Pickles13\_31
- Track 10 : MenE\_32, Antuna\_32, Carrillo\_33, Losacky\_33
- Track 11 : Dropshot\_31, Blett\_32
- Track 12 : Phonegingi\_31
- Track 13 : Mariel\_35
- Track 14 : Phingu\_34
- Track 15 : Appa\_31
- Track 16 : ScoobySnack\_30
- Track 17 : Gingerbug\_29
- Track 18 : Lesiram\_32, Sweetums\_33, DelaGarza\_31
- Track 19 : Teng\_33

### ***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 11 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antuna\_32, Appa\_31, Blett\_32, Bush\_32, Carrillo\_33, CookieDog\_32, Dropshot\_31, Guzman\_33, Losacky\_33, MenE\_32, Phonegingi\_31, Pickles13\_31, Warren\_32,

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

- Jakelyne\_34, Mariel\_35, NCRodriguez\_33, PhillyJawn\_32, Phingu\_34, Violeta\_33, Winchester007\_47,

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

- Count\_35, DelaGarza\_31, Gingerbug\_29, Lesiram\_32, ScoobySnack\_30, Sweetums\_33, Teng\_33,

### Summary by start number:

#### Start 5:

- Found in 20 of 27 ( 74.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Jakelyne\_34 (GA), Mariel\_35 (GA),

#### Start 6:

- Found in 20 of 27 ( 74.1% ) of genes in pham
- Manual Annotations of this start: 11 of 16
- Called 65.0% of time when present
- Phage (with cluster) where this start called: Antuna\_32 (GA), Appa\_31 (GA), Blett\_32 (GA), Bush\_32 (GA), Carrillo\_33 (GA), CookieDog\_32 (GA), Dropshot\_31 (GA), Guzman\_33 (GA), Losacky\_33 (GA), MenE\_32 (GA), Phonegingi\_31 (GA), Pickles13\_31 (GA), Warren\_32 (GA),

#### Start 8:

- Found in 1 of 27 ( 3.7% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Count\_35 (EL),

#### Start 9:

- Found in 21 of 27 ( 77.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 28.6% of time when present
- Phage (with cluster) where this start called: NCRodriguez\_33 (GA), PhillyJawn\_32 (GA), Phingu\_34 (GA), ScoobySnack\_30 (GA), Violeta\_33 (GA), Winchester007\_47 (GA),

#### Start 10:

- Found in 5 of 27 ( 18.5% ) of genes in pham
- Manual Annotations of this start: 4 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DelaGarza\_31 (GF), Gingerbug\_29 (GF), Lesiram\_32 (GF), Sweetums\_33 (GF), Teng\_33 (GF),

### Summary by clusters:

There are 3 clusters represented in this pham: GF, GA, EL,

Info for manual annotations of cluster EL:

- Start number 8 was manually annotated 1 time for cluster EL.

Info for manual annotations of cluster GA:

- Start number 6 was manually annotated 11 times for cluster GA.

Info for manual annotations of cluster GF:

- Start number 10 was manually annotated 4 times for cluster GF.

**Gene Information:**

Gene: Antuna\_32 Start: 20537, Stop: 21118, Start Num: 6

Candidate Starts for Antuna\_32:

(3, 20438), (5, 20525), (Start: 6 @20537 has 11 MA's), (9, 20555), (15, 20663), (17, 20675), (20, 20744), (21, 20753), (23, 20807), (24, 20828), (27, 20861), (28, 20885), (29, 20915), (31, 20969), (34, 20996), (41, 21083),

Gene: Appa\_31 Start: 20411, Stop: 20992, Start Num: 6

Candidate Starts for Appa\_31:

(3, 20312), (5, 20399), (Start: 6 @20411 has 11 MA's), (9, 20429), (15, 20537), (17, 20549), (20, 20618), (21, 20627), (23, 20681), (24, 20702), (27, 20735), (28, 20759), (29, 20789), (34, 20870), (41, 20957),

Gene: Blett\_32 Start: 20558, Stop: 21139, Start Num: 6

Candidate Starts for Blett\_32:

(1, 20261), (2, 20279), (3, 20459), (5, 20546), (Start: 6 @20558 has 11 MA's), (9, 20576), (15, 20684), (17, 20696), (20, 20765), (21, 20774), (23, 20828), (24, 20849), (27, 20882), (28, 20906), (31, 20990), (34, 21017), (41, 21104),

Gene: Bush\_32 Start: 20536, Stop: 21117, Start Num: 6

Candidate Starts for Bush\_32:

(3, 20437), (5, 20524), (Start: 6 @20536 has 11 MA's), (9, 20554), (15, 20662), (21, 20752), (23, 20806), (24, 20827), (27, 20860), (31, 20968), (35, 20998), (36, 21004), (38, 21019), (40, 21031), (41, 21082),

Gene: Carrillo\_33 Start: 20515, Stop: 21096, Start Num: 6

Candidate Starts for Carrillo\_33:

(3, 20416), (5, 20503), (Start: 6 @20515 has 11 MA's), (9, 20533), (15, 20641), (17, 20653), (20, 20722), (21, 20731), (23, 20785), (24, 20806), (27, 20839), (28, 20863), (29, 20893), (31, 20947), (34, 20974), (41, 21061),

Gene: CookieDog\_32 Start: 20524, Stop: 21105, Start Num: 6

Candidate Starts for CookieDog\_32:

(1, 20236), (2, 20254), (3, 20425), (5, 20512), (Start: 6 @20524 has 11 MA's), (9, 20542), (15, 20650), (17, 20662), (20, 20731), (21, 20740), (23, 20794), (24, 20815), (27, 20848), (28, 20872), (29, 20902), (31, 20956), (34, 20983), (41, 21070),

Gene: Count\_35 Start: 30851, Stop: 31288, Start Num: 8

Candidate Starts for Count\_35:

(4, 30794), (7, 30839), (Start: 8 @30851 has 1 MA's), (11, 30872), (26, 31136),

Gene: DelaGarza\_31 Start: 21132, Stop: 21626, Start Num: 10

Candidate Starts for DelaGarza\_31:

(Start: 10 @21132 has 4 MA's), (13, 21201), (14, 21228), (22, 21354), (26, 21405), (30, 21504), (39, 21576),

Gene: Dropshot\_31 Start: 20408, Stop: 20989, Start Num: 6

Candidate Starts for Dropshot\_31:

(1, 20111), (2, 20129), (3, 20309), (5, 20396), (Start: 6 @20408 has 11 MA's), (9, 20426), (15, 20534), (17, 20546), (20, 20615), (21, 20624), (23, 20678), (24, 20699), (27, 20732), (28, 20756), (31, 20840), (34, 20867), (41, 20954),

Gene: Gingerbug\_29 Start: 21256, Stop: 21753, Start Num: 10

Candidate Starts for Gingerbug\_29:

(Start: 10 @21256 has 4 MA's), (12, 21301), (14, 21352), (21, 21448), (22, 21478), (25, 21514), (26, 21529), (27, 21541), (30, 21628), (33, 21673), (39, 21700),

Gene: Guzman\_33 Start: 20826, Stop: 21407, Start Num: 6

Candidate Starts for Guzman\_33:

(1, 20520), (2, 20538), (3, 20727), (5, 20814), (Start: 6 @20826 has 11 MA's), (9, 20844), (15, 20952), (20, 21033), (21, 21042), (23, 21096), (24, 21117), (27, 21150), (28, 21174), (31, 21258), (41, 21372),

Gene: Jakelyne\_34 Start: 20612, Stop: 21205, Start Num: 5

Candidate Starts for Jakelyne\_34:

(3, 20525), (5, 20612), (Start: 6 @20624 has 11 MA's), (9, 20642), (15, 20750), (17, 20762), (20, 20831), (21, 20840), (23, 20894), (24, 20915), (27, 20948), (28, 20972), (29, 21002), (31, 21056), (34, 21083), (41, 21170),

Gene: Lesiram\_32 Start: 21104, Stop: 21598, Start Num: 10

Candidate Starts for Lesiram\_32:

(Start: 10 @21104 has 4 MA's), (13, 21173), (14, 21200), (22, 21326), (26, 21377), (30, 21476), (39, 21548),

Gene: Losacky\_33 Start: 20688, Stop: 21269, Start Num: 6

Candidate Starts for Losacky\_33:

(3, 20589), (5, 20676), (Start: 6 @20688 has 11 MA's), (9, 20706), (15, 20814), (17, 20826), (20, 20895), (21, 20904), (23, 20958), (24, 20979), (27, 21012), (28, 21036), (29, 21066), (31, 21120), (34, 21147), (41, 21234),

Gene: Mariel\_35 Start: 20962, Stop: 21555, Start Num: 5

Candidate Starts for Mariel\_35:

(1, 20668), (2, 20686), (3, 20875), (5, 20962), (Start: 6 @20974 has 11 MA's), (9, 20992), (15, 21100), (17, 21112), (20, 21181), (21, 21190), (23, 21244), (24, 21265), (27, 21298), (28, 21322), (31, 21406), (34, 21433), (41, 21520),

Gene: MenE\_32 Start: 20676, Stop: 21257, Start Num: 6

Candidate Starts for MenE\_32:

(3, 20577), (5, 20664), (Start: 6 @20676 has 11 MA's), (9, 20694), (15, 20802), (17, 20814), (20, 20883), (21, 20892), (23, 20946), (24, 20967), (27, 21000), (28, 21024), (29, 21054), (31, 21108), (34, 21135), (41, 21222),

Gene: NCRodriguez\_33 Start: 20743, Stop: 21306, Start Num: 9

Candidate Starts for NCRodriguez\_33:

(3, 20626), (5, 20713), (Start: 6 @20725 has 11 MA's), (9, 20743), (15, 20851), (17, 20863), (20, 20932), (21, 20941), (23, 20995), (24, 21016), (27, 21049), (28, 21073), (29, 21103), (31, 21157), (34, 21184), (41, 21271),

Gene: PhillyJawn\_32 Start: 20426, Stop: 20989, Start Num: 9

Candidate Starts for PhillyJawn\_32:

(3, 20309), (5, 20396), (Start: 6 @20408 has 11 MA's), (9, 20426), (15, 20534), (17, 20546), (20, 20615), (21, 20624), (23, 20678), (24, 20699), (27, 20732), (28, 20756), (29, 20786), (34, 20867), (41,

20954),

Gene: Phingu\_34 Start: 20636, Stop: 21199, Start Num: 9

Candidate Starts for Phingu\_34:

(1, 20312), (2, 20330), (3, 20519), (5, 20606), (Start: 6 @20618 has 11 MA's), (9, 20636), (15, 20744), (17, 20756), (20, 20825), (21, 20834), (23, 20888), (24, 20909), (27, 20942), (28, 20966), (31, 21050), (34, 21077), (36, 21086), (41, 21164),

Gene: Phonegingi\_31 Start: 20430, Stop: 21011, Start Num: 6

Candidate Starts for Phonegingi\_31:

(3, 20331), (5, 20418), (Start: 6 @20430 has 11 MA's), (9, 20448), (15, 20556), (20, 20637), (21, 20646), (23, 20700), (24, 20721), (27, 20754), (28, 20778), (31, 20862), (34, 20889), (41, 20976),

Gene: Pickles13\_31 Start: 20838, Stop: 21419, Start Num: 6

Candidate Starts for Pickles13\_31:

(3, 20739), (5, 20826), (Start: 6 @20838 has 11 MA's), (9, 20856), (15, 20964), (16, 20973), (18, 21033), (19, 21042), (21, 21054), (23, 21108), (24, 21129), (27, 21162), (31, 21270), (34, 21297), (37, 21309), (41, 21384),

Gene: ScoobySnack\_30 Start: 20561, Stop: 21124, Start Num: 9

Candidate Starts for ScoobySnack\_30:

(9, 20561), (15, 20669), (17, 20681), (20, 20750), (21, 20759), (23, 20813), (24, 20834), (27, 20867), (28, 20891), (31, 20975), (36, 21011), (38, 21026), (40, 21038),

Gene: Sweetums\_33 Start: 21225, Stop: 21719, Start Num: 10

Candidate Starts for Sweetums\_33:

(Start: 10 @21225 has 4 MA's), (13, 21294), (14, 21321), (22, 21447), (26, 21498), (30, 21597), (39, 21669),

Gene: Teng\_33 Start: 21142, Stop: 21636, Start Num: 10

Candidate Starts for Teng\_33:

(Start: 10 @21142 has 4 MA's), (13, 21211), (14, 21238), (22, 21364), (26, 21415), (27, 21427), (30, 21514), (32, 21541), (33, 21559), (39, 21586),

Gene: Violeta\_33 Start: 20524, Stop: 21087, Start Num: 9

Candidate Starts for Violeta\_33:

(3, 20407), (5, 20494), (Start: 6 @20506 has 11 MA's), (9, 20524), (15, 20632), (17, 20644), (20, 20713), (21, 20722), (23, 20776), (24, 20797), (27, 20830), (28, 20854), (29, 20884), (31, 20938), (34, 20965), (41, 21052),

Gene: Warren\_32 Start: 20606, Stop: 21187, Start Num: 6

Candidate Starts for Warren\_32:

(3, 20507), (5, 20594), (Start: 6 @20606 has 11 MA's), (9, 20624), (15, 20732), (20, 20813), (21, 20822), (23, 20876), (24, 20897), (27, 20930), (28, 20954), (31, 21038), (35, 21068), (36, 21074), (38, 21089), (40, 21101), (41, 21152),

Gene: Winchester007\_47 Start: 26544, Stop: 27107, Start Num: 9

Candidate Starts for Winchester007\_47:

(3, 26427), (5, 26514), (Start: 6 @26526 has 11 MA's), (9, 26544), (15, 26652), (17, 26664), (20, 26733), (21, 26742), (23, 26796), (24, 26817), (27, 26850), (28, 26874), (29, 26904), (31, 26958), (34, 26985), (41, 27072),