



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 289834 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289834 has 16 members, 2 are drafts.

Phages represented in each track:

- Track 1 : BaconJack\_55
- Track 2 : QTRlifeCrisis\_52
- Track 3 : Nerujay\_56
- Track 4 : Puppet\_54
- Track 5 : PattyP\_53
- Track 6 : Nhonho\_53, Hope4ever\_55
- Track 7 : BillKnuckles\_53
- Track 8 : Doom\_52
- Track 9 : Bexan\_51, KBG\_54, StrongArm\_52
- Track 10 : PowerRanger\_53
- Track 11 : Jorgensen\_54
- Track 12 : Lopton\_53
- Track 13 : CactusRose\_50

### ***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 12 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BaconJack\_55, Bexan\_51, BillKnuckles\_53, Doom\_52, Hope4ever\_55, Jorgensen\_54, KBG\_54, Lopton\_53, Nerujay\_56, Nhonho\_53, PattyP\_53, PowerRanger\_53, Puppet\_54, StrongArm\_52,

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:

- CactusRose\_50, QTRlifeCrisis\_52,

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

Start 5:

- Found in 2 of 16 ( 12.5% ) of genes in pham

- Manual Annotations of this start: 2 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CactusRose\_50 (A1), QTRlifeCrisis\_52 (A1),

Start 6:

- Found in 14 of 16 ( 87.5% ) of genes in pham
- Manual Annotations of this start: 12 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BaconJack\_55 (A1), Bexan\_51 (A1), BillKnuckles\_53 (A1), Doom\_52 (A1), Hope4ever\_55 (A1), Jorgensen\_54 (A1), KBG\_54 (A1), Lopton\_53 (A1), Nerujay\_56 (A1), Nhonho\_53 (A1), PattyP\_53 (A1), PowerRanger\_53 (A1), Puppet\_54 (A1), StrongArm\_52 (A1),

### Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:

- Start number 5 was manually annotated 2 times for cluster A1.
- Start number 6 was manually annotated 12 times for cluster A1.

### Gene Information:

Gene: BaconJack\_55 Start: 39964, Stop: 39221, Start Num: 6

Candidate Starts for BaconJack\_55:

(4, 39976), (Start: 6 @39964 has 12 MA's), (7, 39865), (8, 39811), (9, 39796), (10, 39787), (12, 39652), (13, 39616), (14, 39562), (16, 39538), (17, 39451), (18, 39445), (19, 39439), (20, 39430), (21, 39400), (22, 39349),

Gene: Bexan\_51 Start: 39240, Stop: 38497, Start Num: 6

Candidate Starts for Bexan\_51:

(Start: 6 @39240 has 12 MA's), (7, 39141), (8, 39087), (9, 39072), (10, 39063), (12, 38928), (13, 38892), (14, 38838), (16, 38814), (17, 38727), (18, 38721), (19, 38715), (20, 38706), (21, 38676), (22, 38625),

Gene: BillKnuckles\_53 Start: 39161, Stop: 38388, Start Num: 6

Candidate Starts for BillKnuckles\_53:

(Start: 6 @39161 has 12 MA's), (7, 39062), (8, 39008), (9, 38993), (10, 38984), (12, 38849), (13, 38813), (15, 38753), (21, 38567), (22, 38516), (23, 38453),

Gene: CactusRose\_50 Start: 37728, Stop: 36982, Start Num: 5

Candidate Starts for CactusRose\_50:

(2, 37779), (Start: 5 @37728 has 2 MA's), (7, 37626), (8, 37572), (9, 37557), (10, 37548), (12, 37413), (13, 37377), (14, 37323), (16, 37299), (17, 37212), (18, 37206), (19, 37200), (20, 37191), (21, 37161), (22, 37110), (23, 37047),

Gene: Doom\_52 Start: 38537, Stop: 37764, Start Num: 6

Candidate Starts for Doom\_52:

(Start: 6 @38537 has 12 MA's), (7, 38438), (8, 38384), (9, 38369), (10, 38360), (12, 38225), (13, 38189), (15, 38129), (21, 37943), (22, 37892),

Gene: Hope4ever\_55 Start: 39237, Stop: 38413, Start Num: 6

Candidate Starts for Hope4ever\_55:

(Start: 6 @39237 has 12 MA's), (7, 39138), (8, 39084), (9, 39069), (10, 39060), (11, 38940), (12, 38844), (13, 38808), (14, 38754), (16, 38730), (17, 38643), (18, 38637), (19, 38631), (20, 38622), (21, 38592), (22, 38541),

Gene: Jorgensen\_54 Start: 38562, Stop: 37738, Start Num: 6

Candidate Starts for Jorgensen\_54:

(Start: 6 @38562 has 12 MA's), (7, 38463), (8, 38409), (9, 38394), (10, 38385), (11, 38265), (12, 38169), (13, 38133), (14, 38079), (16, 38055), (17, 37968), (18, 37962), (19, 37956), (20, 37947), (21, 37917), (22, 37866),

Gene: KBG\_54 Start: 40472, Stop: 39729, Start Num: 6

Candidate Starts for KBG\_54:

(Start: 6 @40472 has 12 MA's), (7, 40373), (8, 40319), (9, 40304), (10, 40295), (12, 40160), (13, 40124), (14, 40070), (16, 40046), (17, 39959), (18, 39953), (19, 39947), (20, 39938), (21, 39908), (22, 39857),

Gene: Lopton\_53 Start: 40447, Stop: 39704, Start Num: 6

Candidate Starts for Lopton\_53:

(3, 40489), (4, 40459), (Start: 6 @40447 has 12 MA's), (7, 40348), (8, 40294), (9, 40279), (10, 40270), (12, 40135), (13, 40099), (14, 40045), (16, 40021), (17, 39934), (18, 39928), (19, 39922), (20, 39913), (21, 39883), (22, 39832), (23, 39769),

Gene: Nerujay\_56 Start: 39287, Stop: 38544, Start Num: 6

Candidate Starts for Nerujay\_56:

(Start: 6 @39287 has 12 MA's), (7, 39188), (8, 39134), (9, 39119), (10, 39110), (12, 38975), (13, 38939), (14, 38885), (16, 38861), (17, 38774), (18, 38768), (19, 38762), (20, 38753), (21, 38723), (22, 38672),

Gene: Nhonho\_53 Start: 39633, Stop: 38809, Start Num: 6

Candidate Starts for Nhonho\_53:

(Start: 6 @39633 has 12 MA's), (7, 39534), (8, 39480), (9, 39465), (10, 39456), (11, 39336), (12, 39240), (13, 39204), (14, 39150), (16, 39126), (17, 39039), (18, 39033), (19, 39027), (20, 39018), (21, 38988), (22, 38937),

Gene: PattyP\_53 Start: 38837, Stop: 38064, Start Num: 6

Candidate Starts for PattyP\_53:

(1, 38921), (3, 38879), (4, 38849), (Start: 6 @38837 has 12 MA's), (7, 38738), (8, 38684), (9, 38669), (10, 38660), (12, 38525), (13, 38489), (15, 38429), (21, 38243), (22, 38192),

Gene: PowerRanger\_53 Start: 39835, Stop: 39092, Start Num: 6

Candidate Starts for PowerRanger\_53:

(Start: 6 @39835 has 12 MA's), (7, 39736), (8, 39682), (9, 39667), (10, 39658), (12, 39523), (13, 39487), (14, 39433), (16, 39409), (17, 39322), (18, 39316), (19, 39310), (20, 39301), (21, 39271), (22, 39220),

Gene: Puppet\_54 Start: 39041, Stop: 38298, Start Num: 6

Candidate Starts for Puppet\_54:

(Start: 6 @39041 has 12 MA's), (7, 38942), (8, 38888), (9, 38873), (10, 38864), (12, 38729), (13, 38693), (14, 38639), (16, 38615), (17, 38528), (18, 38522), (19, 38516), (20, 38507), (21, 38477), (22, 38426), (23, 38363),

Gene: QTRlifeCrisis\_52 Start: 38670, Stop: 37924, Start Num: 5

Candidate Starts for QTRlifeCrisis\_52:

(2, 38721), (Start: 5 @38670 has 2 MA's), (7, 38568), (8, 38514), (9, 38499), (10, 38490), (12, 38355), (13, 38319), (14, 38265), (16, 38241), (17, 38154), (18, 38148), (19, 38142), (20, 38133), (21, 38103), (22, 38052),

Gene: StrongArm\_52 Start: 39368, Stop: 38625, Start Num: 6

Candidate Starts for StrongArm\_52:

(Start: 6 @39368 has 12 MA's), (7, 39269), (8, 39215), (9, 39200), (10, 39191), (12, 39056), (13, 39020), (14, 38966), (16, 38942), (17, 38855), (18, 38849), (19, 38843), (20, 38834), (21, 38804), (22, 38753),