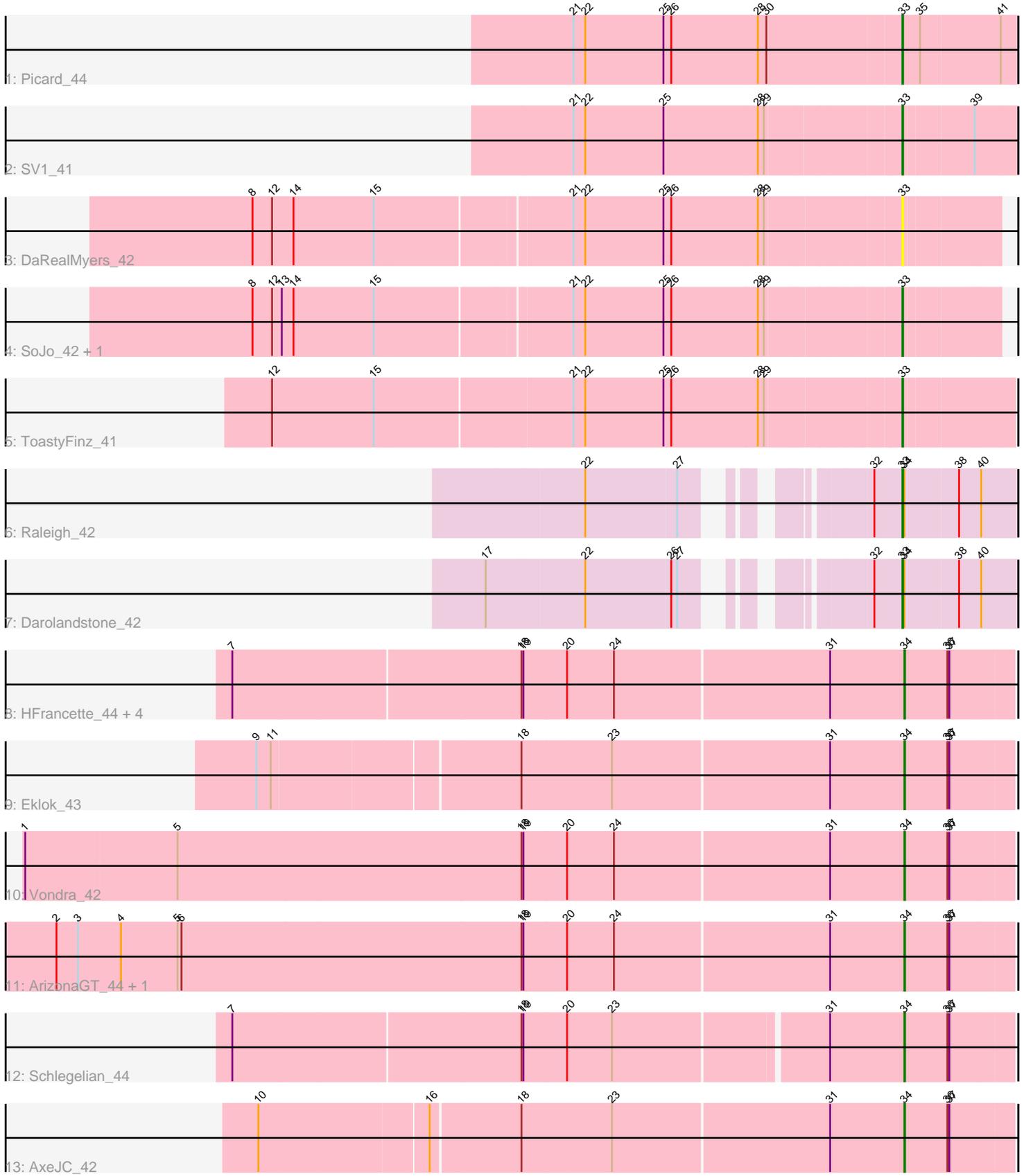


Pham 291567



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 291567 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 291567 has 19 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Picard\_44
- Track 2 : SV1\_41
- Track 3 : DaRealMyers\_42
- Track 4 : SoJo\_42, Tubberson\_42
- Track 5 : ToastyFinz\_41
- Track 6 : Raleigh\_42
- Track 7 : Darolandstone\_42
- Track 8 : HFrancette\_44, Piccadilly\_43, FrumpyGal\_44, Eastland\_43, Ignacio\_43
- Track 9 : Eklok\_43
- Track 10 : Vondra\_42
- Track 11 : ArizonaGT\_44, Cumberbatch\_44
- Track 12 : Schlegelian\_44
- Track 13 : AxeJC\_42

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

The start number called the most often in the published annotations is 34, it was called in 11 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArizonaGT\_44, AxeJC\_42, Cumberbatch\_44, Eastland\_43, Eklok\_43, FrumpyGal\_44, HFrancette\_44, Ignacio\_43, Piccadilly\_43, Schlegelian\_44, Vondra\_42,

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

- Darolandstone\_42, Raleigh\_42,

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

- DaRealMyers\_42, Picard\_44, SV1\_41, SoJo\_42, ToastyFinz\_41, Tubberson\_42,

## Summary by start number:

### Start 33:

- Found in 8 of 19 ( 42.1% ) of genes in pham
- Manual Annotations of this start: 7 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DaRealMyers\_42 (BC1), Darolandstone\_42 (BC2), Picard\_44 (BC1), Raleigh\_42 (BC2), SV1\_41 (BC1), SoJo\_42 (BC1), ToastyFinz\_41 (BC1), Tubberson\_42 (BC1),

### Start 34:

- Found in 13 of 19 ( 68.4% ) of genes in pham
- Manual Annotations of this start: 11 of 18
- Called 84.6% of time when present
- Phage (with cluster) where this start called: ArizonaGT\_44 (BP), AxeJC\_42 (BP), Cumberbatch\_44 (BP), Eastland\_43 (BP), Eklok\_43 (BP), FrumpyGal\_44 (BP), HFrancette\_44 (BP), Ignacio\_43 (BP), Piccadilly\_43 (BP), Schlegelian\_44 (BP), Vondra\_42 (BP),

## Summary by clusters:

There are 3 clusters represented in this pham: BP, BC1, BC2,

Info for manual annotations of cluster BC1:

- Start number 33 was manually annotated 5 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 33 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BP:

- Start number 34 was manually annotated 11 times for cluster BP.

## Gene Information:

Gene: ArizonaGT\_44 Start: 29964, Stop: 30128, Start Num: 34

Candidate Starts for ArizonaGT\_44:

(2, 28677), (3, 28710), (4, 28776), (5, 28863), (6, 28869), (18, 29388), (19, 29391), (20, 29457), (24, 29526), (31, 29850), (Start: 34 @29964 has 11 MA's), (36, 30030), (37, 30033),

Gene: AxeJC\_42 Start: 29666, Stop: 29830, Start Num: 34

Candidate Starts for AxeJC\_42:

(10, 28706), (16, 28958), (18, 29090), (23, 29225), (31, 29552), (Start: 34 @29666 has 11 MA's), (36, 29732), (37, 29735),

Gene: Cumberbatch\_44 Start: 29964, Stop: 30128, Start Num: 34

Candidate Starts for Cumberbatch\_44:

(2, 28677), (3, 28710), (4, 28776), (5, 28863), (6, 28869), (18, 29388), (19, 29391), (20, 29457), (24, 29526), (31, 29850), (Start: 34 @29964 has 11 MA's), (36, 30030), (37, 30033),

Gene: DaRealMyers\_42 Start: 31200, Stop: 31340, Start Num: 33

Candidate Starts for DaRealMyers\_42:

(8, 30249), (12, 30279), (14, 30312), (15, 30435), (21, 30720), (22, 30738), (25, 30858), (26, 30867), (28, 30999), (29, 31008), (Start: 33 @31200 has 7 MA's),

Gene: Darolandstone\_42 Start: 32791, Stop: 32961, Start Num: 33

Candidate Starts for Darolandstone\_42:

(17, 32269), (22, 32416), (26, 32545), (27, 32554), (32, 32749), (Start: 33 @32791 has 7 MA's), (Start: 34 @32794 has 11 MA's), (38, 32872), (40, 32905),

Gene: Eastland\_43 Start: 29924, Stop: 30088, Start Num: 34

Candidate Starts for Eastland\_43:

(7, 28913), (18, 29348), (19, 29351), (20, 29417), (24, 29486), (31, 29810), (Start: 34 @29924 has 11 MA's), (36, 29990), (37, 29993),

Gene: Eklok\_43 Start: 29723, Stop: 29887, Start Num: 34

Candidate Starts for Eklok\_43:

(9, 28763), (11, 28784), (18, 29147), (23, 29282), (31, 29609), (Start: 34 @29723 has 11 MA's), (36, 29789), (37, 29792),

Gene: FrumpyGal\_44 Start: 29924, Stop: 30088, Start Num: 34

Candidate Starts for FrumpyGal\_44:

(7, 28913), (18, 29348), (19, 29351), (20, 29417), (24, 29486), (31, 29810), (Start: 34 @29924 has 11 MA's), (36, 29990), (37, 29993),

Gene: HFrancette\_44 Start: 30702, Stop: 30866, Start Num: 34

Candidate Starts for HFrancette\_44:

(7, 29691), (18, 30126), (19, 30129), (20, 30195), (24, 30264), (31, 30588), (Start: 34 @30702 has 11 MA's), (36, 30768), (37, 30771),

Gene: Ignacio\_43 Start: 30605, Stop: 30769, Start Num: 34

Candidate Starts for Ignacio\_43:

(7, 29594), (18, 30029), (19, 30032), (20, 30098), (24, 30167), (31, 30491), (Start: 34 @30605 has 11 MA's), (36, 30671), (37, 30674),

Gene: Picard\_44 Start: 30655, Stop: 30828, Start Num: 33

Candidate Starts for Picard\_44:

(21, 30175), (22, 30193), (25, 30313), (26, 30322), (28, 30454), (30, 30466), (Start: 33 @30655 has 7 MA's), (35, 30682), (41, 30802),

Gene: Piccadilly\_43 Start: 29923, Stop: 30087, Start Num: 34

Candidate Starts for Piccadilly\_43:

(7, 28912), (18, 29347), (19, 29350), (20, 29416), (24, 29485), (31, 29809), (Start: 34 @29923 has 11 MA's), (36, 29989), (37, 29992),

Gene: Raleigh\_42 Start: 33159, Stop: 33329, Start Num: 33

Candidate Starts for Raleigh\_42:

(22, 32784), (27, 32922), (32, 33117), (Start: 33 @33159 has 7 MA's), (Start: 34 @33162 has 11 MA's), (38, 33240), (40, 33273),

Gene: SV1\_41 Start: 29360, Stop: 29527, Start Num: 33

Candidate Starts for SV1\_41:

(21, 28880), (22, 28898), (25, 29018), (28, 29159), (29, 29168), (Start: 33 @29360 has 7 MA's), (39, 29462),

Gene: Schlegelian\_44 Start: 30473, Stop: 30637, Start Num: 34

Candidate Starts for Schlegelian\_44:

(7, 29477), (18, 29912), (19, 29915), (20, 29981), (23, 30047), (31, 30359), (Start: 34 @30473 has 11 MA's), (36, 30539), (37, 30542),

Gene: SoJo\_42 Start: 31195, Stop: 31335, Start Num: 33

Candidate Starts for SoJo\_42:

(8, 30244), (12, 30274), (13, 30289), (14, 30307), (15, 30430), (21, 30715), (22, 30733), (25, 30853), (26, 30862), (28, 30994), (29, 31003), (Start: 33 @31195 has 7 MA's),

Gene: ToastyFinz\_41 Start: 31997, Stop: 32158, Start Num: 33

Candidate Starts for ToastyFinz\_41:

(12, 31067), (15, 31223), (21, 31517), (22, 31535), (25, 31655), (26, 31664), (28, 31796), (29, 31805), (Start: 33 @31997 has 7 MA's),

Gene: Tubberson\_42 Start: 31197, Stop: 31337, Start Num: 33

Candidate Starts for Tubberson\_42:

(8, 30246), (12, 30276), (13, 30291), (14, 30309), (15, 30432), (21, 30717), (22, 30735), (25, 30855), (26, 30864), (28, 30996), (29, 31005), (Start: 33 @31197 has 7 MA's),

Gene: Vondra\_42 Start: 29775, Stop: 29939, Start Num: 34

Candidate Starts for Vondra\_42:

(1, 28443), (5, 28674), (18, 29199), (19, 29202), (20, 29268), (24, 29337), (31, 29661), (Start: 34 @29775 has 11 MA's), (36, 29841), (37, 29844),