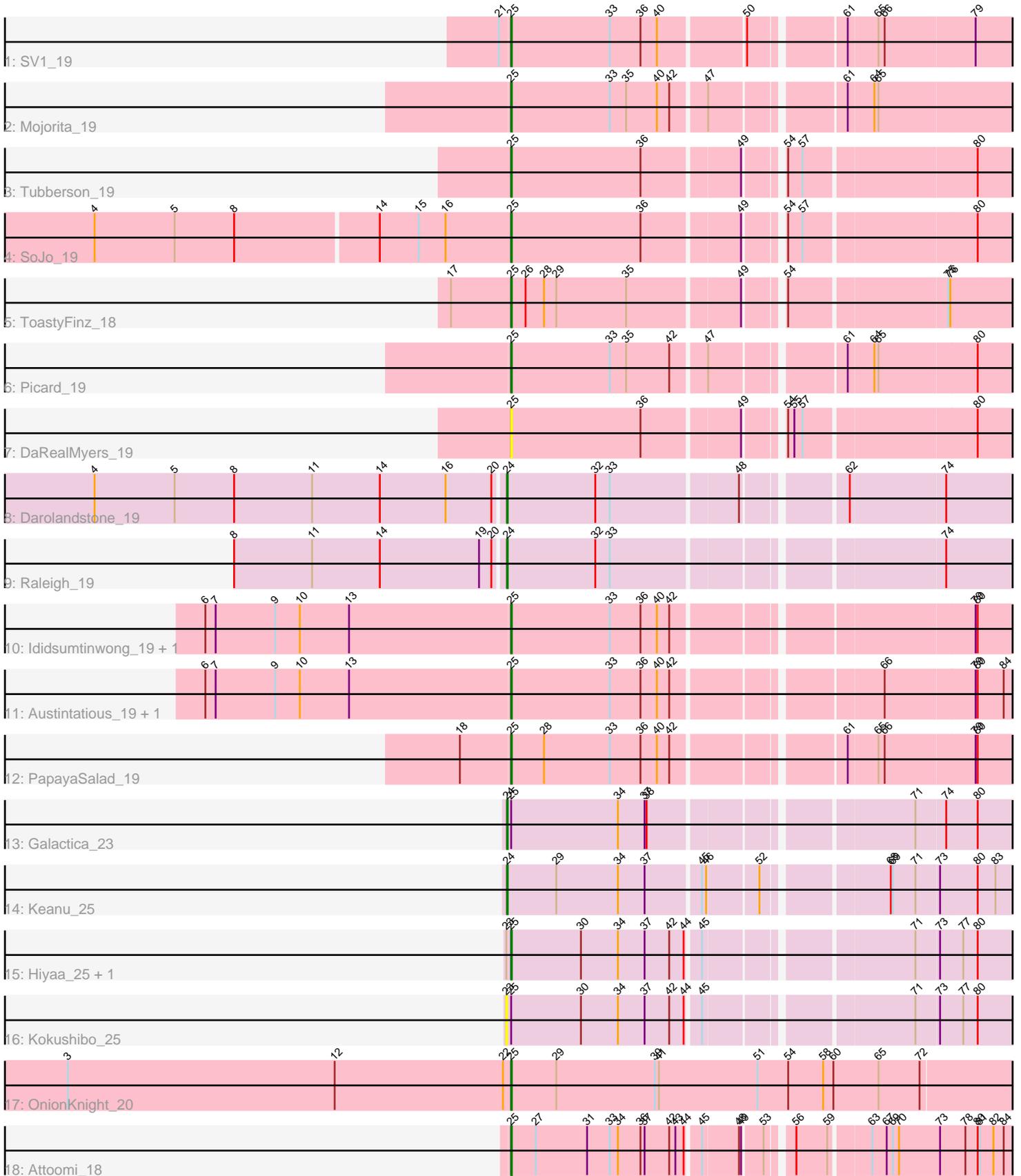


# Zoomed Pham 287108



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 287108 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 287108 has 21 members, 2 are drafts.

Phages represented in each track:

- Track 1 : SV1\_19
- Track 2 : Mojorita\_19
- Track 3 : Tubberson\_19
- Track 4 : SoJo\_19
- Track 5 : ToastyFinz\_18
- Track 6 : Picard\_19
- Track 7 : DaRealMyers\_19
- Track 8 : Darolandstone\_19
- Track 9 : Raleigh\_19
- Track 10 : Ididsumtinwong\_19, Bioscum\_19
- Track 11 : Austintatious\_19, Lishka\_19
- Track 12 : PapayaSalad\_19
- Track 13 : Galactica\_23
- Track 14 : Keanu\_25
- Track 15 : Hiyaa\_25, Spocter\_25
- Track 16 : Kokushibo\_25
- Track 17 : OnionKnight\_20
- Track 18 : Attoomi\_18

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

The start number called the most often in the published annotations is 25, it was called in 15 of the 19 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Attoomi\_18, Austintatious\_19, Bioscum\_19, DaRealMyers\_19, Hiyaa\_25, Ididsumtinwong\_19, Lishka\_19, Mojorita\_19, OnionKnight\_20, PapayaSalad\_19, Picard\_19, SV1\_19, SoJo\_19, Spocter\_25, ToastyFinz\_18, Tubberson\_19,

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

- Galactica\_23, Kokushibo\_25,

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

- Darolandstone\_19, Keanu\_25, Raleigh\_19,

### Summary by start number:

Start 23:

- Found in 3 of 21 ( 14.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Kokushibo\_25 (BQ),

Start 24:

- Found in 4 of 21 ( 19.0% ) of genes in pham
- Manual Annotations of this start: 4 of 19
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darolandstone\_19 (BC2), Galactica\_23 (BQ), Keanu\_25 (BQ), Raleigh\_19 (BC2),

Start 25:

- Found in 18 of 21 ( 85.7% ) of genes in pham
- Manual Annotations of this start: 15 of 19
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Attoomi\_18 (singleton), Austintatious\_19 (BC3), Bioscum\_19 (BC3), DaRealMyers\_19 (BC1), Hiyaa\_25 (BQ), Ididsumtinwong\_19 (BC3), Lishka\_19 (BC3), Mojourita\_19 (BC1), OnionKnight\_20 (singleton), PapayaSalad\_19 (BC3), Picard\_19 (BC1), SV1\_19 (BC1), SoJo\_19 (BC1), Spocter\_25 (BQ), ToastyFinz\_18 (BC1), Tubberson\_19 (BC1),

### Summary by clusters:

There are 5 clusters represented in this pham: singleton, BC3, BC1, BC2, BQ,

Info for manual annotations of cluster BC1:

- Start number 25 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 24 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 25 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BQ:

- Start number 24 was manually annotated 2 times for cluster BQ.
- Start number 25 was manually annotated 2 times for cluster BQ.

### Gene Information:

Gene: Attoomi\_18 Start: 15464, Stop: 16561, Start Num: 25

Candidate Starts for Attoomi\_18:

(Start: 25 @15464 has 15 MA's), (27, 15500), (31, 15575), (33, 15608), (34, 15620), (36, 15653), (37, 15659), (42, 15695), (43, 15704), (44, 15716), (45, 15734), (48, 15785), (49, 15788), (53, 15815), (56, 15845), (59, 15890), (63, 15944), (67, 15965), (69, 15974), (70, 15983), (73, 16043), (78, 16079), (80, 16097), (81, 16100), (82, 16118), (84, 16133), (86, 16154), (87, 16163), (88, 16187), (90, 16199), (98, 16301), (100, 16307), (107, 16379), (114, 16487), (115, 16490), (118, 16502),

Gene: Austintatious\_19 Start: 14189, Stop: 15319, Start Num: 25

Candidate Starts for Austintatious\_19:

(6, 13745), (7, 13760), (9, 13847), (10, 13883), (13, 13955), (Start: 25 @14189 has 15 MA's), (33, 14333), (36, 14378), (40, 14402), (42, 14420), (66, 14693), (79, 14822), (80, 14825), (84, 14861), (93, 14951), (95, 14963), (98, 15032), (107, 15110), (114, 15221),

Gene: Bioscum\_19 Start: 14225, Stop: 15355, Start Num: 25

Candidate Starts for Bioscum\_19:

(6, 13781), (7, 13796), (9, 13883), (10, 13919), (13, 13991), (Start: 25 @14225 has 15 MA's), (33, 14369), (36, 14414), (40, 14438), (42, 14456), (79, 14858), (80, 14861), (93, 14987), (95, 14999), (98, 15068), (107, 15146),

Gene: DaRealMyers\_19 Start: 14650, Stop: 15747, Start Num: 25

Candidate Starts for DaRealMyers\_19:

(Start: 25 @14650 has 15 MA's), (36, 14839), (49, 14974), (54, 15019), (55, 15028), (57, 15040), (80, 15280), (93, 15406), (98, 15484), (109, 15568), (110, 15571), (116, 15679), (120, 15730),

Gene: Darolandstone\_19 Start: 14810, Stop: 15910, Start Num: 24

Candidate Starts for Darolandstone\_19:

(4, 14216), (5, 14333), (8, 14420), (11, 14534), (14, 14633), (16, 14729), (20, 14795), (Start: 24 @14810 has 4 MA's), (32, 14939), (33, 14960), (48, 15137), (62, 15266), (74, 15401), (105, 15713), (114, 15836), (118, 15851), (120, 15896),

Gene: Galactica\_23 Start: 20117, Stop: 21220, Start Num: 24

Candidate Starts for Galactica\_23:

(Start: 24 @20117 has 4 MA's), (Start: 25 @20123 has 15 MA's), (34, 20279), (37, 20318), (38, 20321), (71, 20666), (74, 20708), (80, 20753), (93, 20879), (103, 20990), (108, 21038), (113, 21128),

Gene: Hiyaa\_25 Start: 21164, Stop: 22261, Start Num: 25

Candidate Starts for Hiyaa\_25:

(23, 21158), (Start: 25 @21164 has 15 MA's), (30, 21266), (34, 21320), (37, 21359), (42, 21395), (44, 21416), (45, 21434), (71, 21707), (73, 21740), (77, 21773), (80, 21794), (93, 21920), (103, 22031), (110, 22085),

Gene: Ididsumtinwong\_19 Start: 14225, Stop: 15355, Start Num: 25

Candidate Starts for Ididsumtinwong\_19:

(6, 13781), (7, 13796), (9, 13883), (10, 13919), (13, 13991), (Start: 25 @14225 has 15 MA's), (33, 14369), (36, 14414), (40, 14438), (42, 14456), (79, 14858), (80, 14861), (93, 14987), (95, 14999), (98, 15068), (107, 15146),

Gene: Keanu\_25 Start: 21193, Stop: 22296, Start Num: 24

Candidate Starts for Keanu\_25:

(Start: 24 @21193 has 4 MA's), (29, 21265), (34, 21355), (37, 21394), (45, 21469), (46, 21475), (52, 21544), (68, 21706), (69, 21709), (71, 21742), (73, 21775), (80, 21829), (83, 21853), (92, 21952), (93, 21955), (98, 22033), (113, 22204),

Gene: Kokushibo\_25 Start: 21173, Stop: 22276, Start Num: 23

Candidate Starts for Kokushibo\_25:

(23, 21173), (Start: 25 @21179 has 15 MA's), (30, 21281), (34, 21335), (37, 21374), (42, 21410), (44, 21431), (45, 21449), (71, 21722), (73, 21755), (77, 21788), (80, 21809), (93, 21935), (103, 22046), (110, 22100),

Gene: Lishka\_19 Start: 14189, Stop: 15319, Start Num: 25

Candidate Starts for Lishka\_19:

(6, 13745), (7, 13760), (9, 13847), (10, 13883), (13, 13955), (Start: 25 @14189 has 15 MA's), (33, 14333), (36, 14378), (40, 14402), (42, 14420), (66, 14693), (79, 14822), (80, 14825), (84, 14861), (93, 14951), (95, 14963), (98, 15032), (107, 15110), (114, 15221),

Gene: Mojorita\_19 Start: 14327, Stop: 15457, Start Num: 25

Candidate Starts for Mojorita\_19:

(Start: 25 @14327 has 15 MA's), (33, 14471), (35, 14495), (40, 14540), (42, 14558), (47, 14606), (61, 14780), (64, 14816), (65, 14822), (93, 15089), (95, 15101), (107, 15248),

Gene: OnionKnight\_20 Start: 16035, Stop: 17189, Start Num: 25

Candidate Starts for OnionKnight\_20:

(3, 15387), (12, 15777), (22, 16023), (Start: 25 @16035 has 15 MA's), (29, 16101), (39, 16245), (41, 16251), (51, 16395), (54, 16440), (58, 16491), (60, 16506), (65, 16572), (72, 16632), (88, 16800), (89, 16803), (90, 16812), (94, 16851), (97, 16908), (98, 16926), (99, 16929), (101, 16944), (102, 16953), (104, 16971), (106, 16992), (109, 17010), (112, 17049), (114, 17112), (117, 17124), (121, 17178), (122, 17184),

Gene: PapayaSalad\_19 Start: 14200, Stop: 15330, Start Num: 25

Candidate Starts for PapayaSalad\_19:

(18, 14128), (Start: 25 @14200 has 15 MA's), (28, 14248), (33, 14344), (36, 14389), (40, 14413), (42, 14431), (61, 14653), (65, 14695), (66, 14704), (79, 14833), (80, 14836), (93, 14962), (95, 14974), (98, 15043), (107, 15121),

Gene: Picard\_19 Start: 14321, Stop: 15451, Start Num: 25

Candidate Starts for Picard\_19:

(Start: 25 @14321 has 15 MA's), (33, 14465), (35, 14489), (42, 14552), (47, 14600), (61, 14774), (64, 14810), (65, 14816), (80, 14957), (93, 15083), (95, 15095), (107, 15242),

Gene: Raleigh\_19 Start: 14995, Stop: 16095, Start Num: 24

Candidate Starts for Raleigh\_19:

(8, 14605), (11, 14719), (14, 14818), (19, 14962), (20, 14980), (Start: 24 @14995 has 4 MA's), (32, 15124), (33, 15145), (74, 15586), (105, 15898), (118, 16036), (119, 16075), (120, 16081),

Gene: SV1\_19 Start: 14433, Stop: 15563, Start Num: 25

Candidate Starts for SV1\_19:

(21, 14418), (Start: 25 @14433 has 15 MA's), (33, 14577), (36, 14622), (40, 14646), (50, 14763), (61, 14886), (65, 14928), (66, 14937), (79, 15066), (85, 15123), (93, 15195), (95, 15207), (96, 15225), (98, 15276), (107, 15354),

Gene: SoJo\_19 Start: 14651, Stop: 15748, Start Num: 25

Candidate Starts for SoJo\_19:

(1, 13649), (2, 13706), (4, 14051), (5, 14168), (8, 14255), (14, 14459), (15, 14516), (16, 14555), (Start: 25 @14651 has 15 MA's), (36, 14840), (49, 14975), (54, 15020), (57, 15041), (80, 15281), (93, 15407), (98, 15485), (109, 15569), (110, 15572), (116, 15680), (120, 15731),

Gene: Spocter\_25 Start: 21152, Stop: 22249, Start Num: 25

Candidate Starts for Spocter\_25:

(23, 21146), (Start: 25 @21152 has 15 MA's), (30, 21254), (34, 21308), (37, 21347), (42, 21383), (44, 21404), (45, 21422), (71, 21695), (73, 21728), (77, 21761), (80, 21782), (93, 21908), (103, 22019), (110, 22073),

Gene: ToastyFinz\_18 Start: 14328, Stop: 15425, Start Num: 25

Candidate Starts for ToastyFinz\_18:

(17, 14241), (Start: 25 @14328 has 15 MA's), (26, 14349), (28, 14376), (29, 14394), (35, 14496), (49, 14652), (54, 14697), (75, 14916), (76, 14919), (91, 15075), (93, 15084), (109, 15246), (110, 15249), (111, 15264), (120, 15408),

Gene: Tubberson\_19 Start: 14650, Stop: 15747, Start Num: 25

Candidate Starts for Tubberson\_19:

(Start: 25 @14650 has 15 MA's), (36, 14839), (49, 14974), (54, 15019), (57, 15040), (80, 15280), (93, 15406), (98, 15484), (105, 15547), (109, 15568), (110, 15571), (116, 15679), (120, 15730),