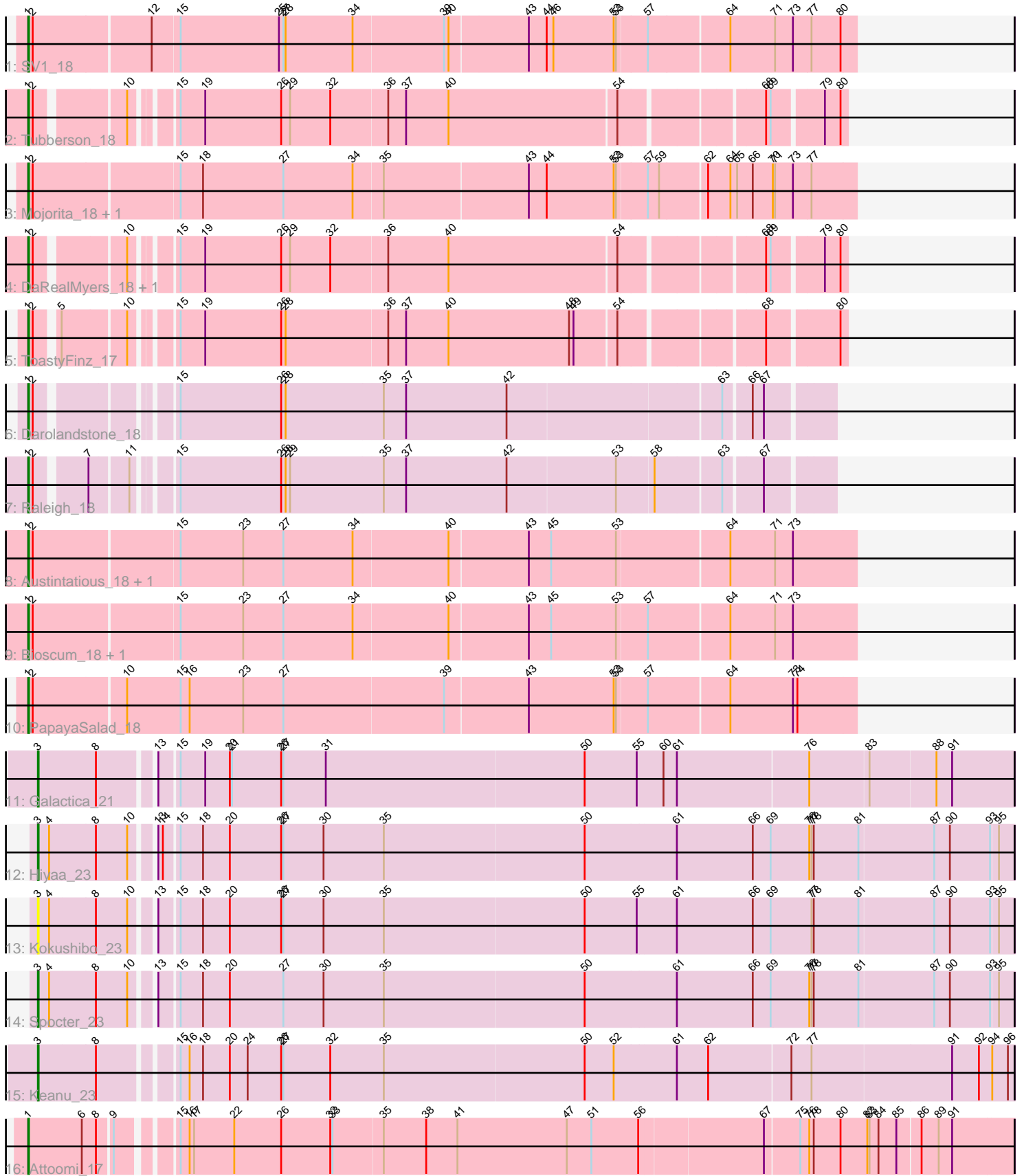


Pham 296945



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 296945 Report

This analysis was run 04/25/26 on database version 644.

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 296945 has 20 members, 2 are drafts.

Phages represented in each track:

- Track 1 : SV1\_18
- Track 2 : Tubberson\_18
- Track 3 : Mojorita\_18, Picard\_18
- Track 4 : DaRealMyers\_18, SoJo\_18
- Track 5 : ToastyFinz\_17
- Track 6 : Darolandstone\_18
- Track 7 : Raleigh\_18
- Track 8 : Austintatious\_18, Lishka\_18
- Track 9 : Bioscum\_18, Ididsumtinwong\_18
- Track 10 : PapayaSalad\_18
- Track 11 : Galactica\_21
- Track 12 : Hiyaa\_23
- Track 13 : Kokushibo\_23
- Track 14 : Spocter\_23
- Track 15 : Keanu\_23
- Track 16 : Attoomi\_17

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

The start number called the most often in the published annotations is 1, it was called in 14 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Attoomi\_17, Austintatious\_18, Bioscum\_18, DaRealMyers\_18, Darolandstone\_18, Ididsumtinwong\_18, Lishka\_18, Mojorita\_18, PapayaSalad\_18, Picard\_18, Raleigh\_18, SV1\_18, SoJo\_18, ToastyFinz\_17, Tubberson\_18,

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

-

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

- Galactica\_21, Hiyaa\_23, Keanu\_23, Kokushibo\_23, Spocter\_23,

### Summary by start number:

Start 1:

- Found in 15 of 20 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 14 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attoomi\_17 (singleton), Austintatious\_18 (BC3), Bioscum\_18 (BC3), DaRealMyers\_18 (BC1), Darolandstone\_18 (BC2), Ididsumtinwong\_18 (BC3), Lishka\_18 (BC3), Moajorita\_18 (BC1), PapayaSalad\_18 (BC3), Picard\_18 (BC1), Raleigh\_18 (BC2), SV1\_18 (BC1), SoJo\_18 (BC1), ToastyFinz\_17 (BC1), Tubberson\_18 (BC1),

Start 3:

- Found in 5 of 20 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 4 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Galactica\_21 (BQ), Hiyaa\_23 (BQ), Keanu\_23 (BQ), Kokushibo\_23 (BQ), Spocter\_23 (BQ),

### Summary by clusters:

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

Info for manual annotations of cluster BC1:

- Start number 1 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 1 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 1 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BQ:

- Start number 3 was manually annotated 4 times for cluster BQ.

### Gene Information:

Gene: Attoomi\_17 Start: 14186, Stop: 15451, Start Num: 1

Candidate Starts for Attoomi\_17:

(Start: 1 @14186 has 14 MA's), (6, 14258), (8, 14276), (9, 14294), (15, 14357), (16, 14369), (17, 14375), (22, 14429), (26, 14492), (32, 14558), (33, 14561), (35, 14627), (38, 14684), (41, 14726), (47, 14873), (51, 14906), (56, 14969), (67, 15128), (75, 15173), (76, 15185), (78, 15191), (80, 15227), (82, 15263), (83, 15266), (84, 15278), (85, 15302), (86, 15332), (89, 15353), (91, 15371),

Gene: Austintatious\_18 Start: 13110, Stop: 14192, Start Num: 1

Candidate Starts for Austintatious\_18:

(Start: 1 @13110 has 14 MA's), (2, 13116), (15, 13305), (23, 13389), (27, 13443), (34, 13536), (40, 13662), (43, 13764), (45, 13794), (53, 13881), (64, 14025), (71, 14085), (73, 14109),

Gene: Bioscum\_18 Start: 13146, Stop: 14228, Start Num: 1

Candidate Starts for Bioscum\_18:

(Start: 1 @13146 has 14 MA's), (2, 13152), (15, 13341), (23, 13425), (27, 13479), (34, 13572), (40, 13698), (43, 13800), (45, 13830), (53, 13917), (57, 13956), (64, 14061), (71, 14121), (73, 14145),

Gene: DaRealMyers\_18 Start: 13632, Stop: 14639, Start Num: 1

Candidate Starts for DaRealMyers\_18:

(Start: 1 @13632 has 14 MA's), (2, 13638), (10, 13743), (15, 13788), (19, 13821), (26, 13923), (29, 13935), (32, 13989), (36, 14064), (40, 14145), (54, 14367), (68, 14541), (69, 14547), (79, 14610), (80, 14631),

Gene: Darolandstone\_18 Start: 13797, Stop: 14798, Start Num: 1

Candidate Starts for Darolandstone\_18:

(Start: 1 @13797 has 14 MA's), (2, 13803), (15, 13953), (26, 14088), (28, 14094), (35, 14223), (37, 14253), (42, 14388), (63, 14664), (66, 14697), (67, 14712),

Gene: Galactica\_21 Start: 18569, Stop: 19837, Start Num: 3

Candidate Starts for Galactica\_21:

(Start: 3 @18569 has 4 MA's), (8, 18644), (13, 18710), (15, 18734), (19, 18767), (20, 18800), (21, 18803), (26, 18869), (27, 18872), (31, 18929), (50, 19274), (55, 19343), (60, 19379), (61, 19397), (76, 19568), (83, 19646), (88, 19733), (91, 19754),

Gene: Hiyaa\_23 Start: 19604, Stop: 20875, Start Num: 3

Candidate Starts for Hiyaa\_23:

(Start: 3 @19604 has 4 MA's), (4, 19619), (8, 19679), (10, 19721), (13, 19745), (14, 19751), (15, 19769), (18, 19799), (20, 19835), (26, 19904), (27, 19907), (30, 19961), (35, 20042), (50, 20309), (61, 20429), (66, 20531), (69, 20555), (76, 20606), (77, 20609), (78, 20612), (81, 20672), (87, 20771), (90, 20792), (93, 20846), (95, 20855),

Gene: Ididsumtinwong\_18 Start: 13146, Stop: 14228, Start Num: 1

Candidate Starts for Ididsumtinwong\_18:

(Start: 1 @13146 has 14 MA's), (2, 13152), (15, 13341), (23, 13425), (27, 13479), (34, 13572), (40, 13698), (43, 13800), (45, 13830), (53, 13917), (57, 13956), (64, 14061), (71, 14121), (73, 14145),

Gene: Keanu\_23 Start: 19646, Stop: 20911, Start Num: 3

Candidate Starts for Keanu\_23:

(Start: 3 @19646 has 4 MA's), (8, 19721), (15, 19811), (16, 19823), (18, 19841), (20, 19877), (24, 19901), (26, 19946), (27, 19949), (32, 20012), (35, 20084), (50, 20351), (52, 20390), (61, 20471), (62, 20513), (72, 20621), (77, 20645), (91, 20828), (92, 20864), (94, 20882), (96, 20903),

Gene: Kokushibo\_23 Start: 19619, Stop: 20890, Start Num: 3

Candidate Starts for Kokushibo\_23:

(Start: 3 @19619 has 4 MA's), (4, 19634), (8, 19694), (10, 19736), (13, 19760), (15, 19784), (18, 19814), (20, 19850), (26, 19919), (27, 19922), (30, 19976), (35, 20057), (50, 20324), (55, 20393), (61, 20444), (66, 20546), (69, 20570), (77, 20624), (78, 20627), (81, 20687), (87, 20786), (90, 20807), (93, 20861), (95, 20870),

Gene: Lishka\_18 Start: 13110, Stop: 14192, Start Num: 1

Candidate Starts for Lishka\_18:

(Start: 1 @13110 has 14 MA's), (2, 13116), (15, 13305), (23, 13389), (27, 13443), (34, 13536), (40, 13662), (43, 13764), (45, 13794), (53, 13881), (64, 14025), (71, 14085), (73, 14109),

Gene: Mojorita\_18 Start: 13248, Stop: 14330, Start Num: 1

Candidate Starts for Mojorita\_18:

(Start: 1 @13248 has 14 MA's), (2, 13254), (15, 13443), (18, 13473), (27, 13581), (34, 13674), (35, 13713), (43, 13902), (44, 13926), (52, 14016), (53, 14019), (57, 14058), (59, 14073), (62, 14133), (64, 14163), (65, 14172), (66, 14193), (70, 14220), (71, 14223), (73, 14247), (77, 14271),

Gene: PapayaSalad\_18 Start: 13118, Stop: 14203, Start Num: 1

Candidate Starts for PapayaSalad\_18:

(Start: 1 @13118 has 14 MA's), (2, 13124), (10, 13244), (15, 13316), (16, 13328), (23, 13400), (27, 13454), (39, 13667), (43, 13775), (52, 13889), (53, 13892), (57, 13931), (64, 14036), (73, 14120), (74, 14126),

Gene: Picard\_18 Start: 13242, Stop: 14324, Start Num: 1

Candidate Starts for Picard\_18:

(Start: 1 @13242 has 14 MA's), (2, 13248), (15, 13437), (18, 13467), (27, 13575), (34, 13668), (35, 13707), (43, 13896), (44, 13920), (52, 14010), (53, 14013), (57, 14052), (59, 14067), (62, 14127), (64, 14157), (65, 14166), (66, 14187), (70, 14214), (71, 14217), (73, 14241), (77, 14265),

Gene: Raleigh\_18 Start: 13982, Stop: 14983, Start Num: 1

Candidate Starts for Raleigh\_18:

(Start: 1 @13982 has 14 MA's), (2, 13988), (7, 14048), (11, 14096), (15, 14138), (26, 14273), (28, 14279), (29, 14285), (35, 14408), (37, 14438), (42, 14573), (53, 14717), (58, 14765), (63, 14849), (67, 14897),

Gene: SV1\_18 Start: 13354, Stop: 14436, Start Num: 1

Candidate Starts for SV1\_18:

(Start: 1 @13354 has 14 MA's), (2, 13360), (12, 13513), (15, 13549), (25, 13681), (27, 13687), (28, 13690), (34, 13780), (39, 13900), (40, 13906), (43, 14008), (44, 14032), (46, 14041), (52, 14122), (53, 14125), (57, 14164), (64, 14269), (71, 14329), (73, 14353), (77, 14377), (80, 14416),

Gene: SoJo\_18 Start: 13632, Stop: 14639, Start Num: 1

Candidate Starts for SoJo\_18:

(Start: 1 @13632 has 14 MA's), (2, 13638), (10, 13743), (15, 13788), (19, 13821), (26, 13923), (29, 13935), (32, 13989), (36, 14064), (40, 14145), (54, 14367), (68, 14541), (69, 14547), (79, 14610), (80, 14631),

Gene: Spocter\_23 Start: 19592, Stop: 20863, Start Num: 3

Candidate Starts for Spocter\_23:

(Start: 3 @19592 has 4 MA's), (4, 19607), (8, 19667), (10, 19709), (13, 19733), (15, 19757), (18, 19787), (20, 19823), (27, 19895), (30, 19949), (35, 20030), (50, 20297), (61, 20417), (66, 20519), (69, 20543), (76, 20594), (77, 20597), (78, 20600), (81, 20660), (87, 20759), (90, 20780), (93, 20834), (95, 20843),

Gene: ToastyFinz\_17 Start: 13310, Stop: 14317, Start Num: 1

Candidate Starts for ToastyFinz\_17:

(Start: 1 @13310 has 14 MA's), (2, 13316), (5, 13340), (10, 13421), (15, 13466), (19, 13499), (26, 13601), (28, 13607), (36, 13742), (37, 13766), (40, 13823), (48, 13985), (49, 13991), (54, 14045), (68, 14219), (80, 14309),

Gene: Tubberson\_18 Start: 13632, Stop: 14639, Start Num: 1

Candidate Starts for Tubberson\_18:

(Start: 1 @13632 has 14 MA's), (2, 13638), (10, 13743), (15, 13788), (19, 13821), (26, 13923), (29, 13935), (32, 13989), (36, 14064), (37, 14088), (40, 14145), (54, 14367), (68, 14541), (69, 14547), (79,

14610), (80, 14631),