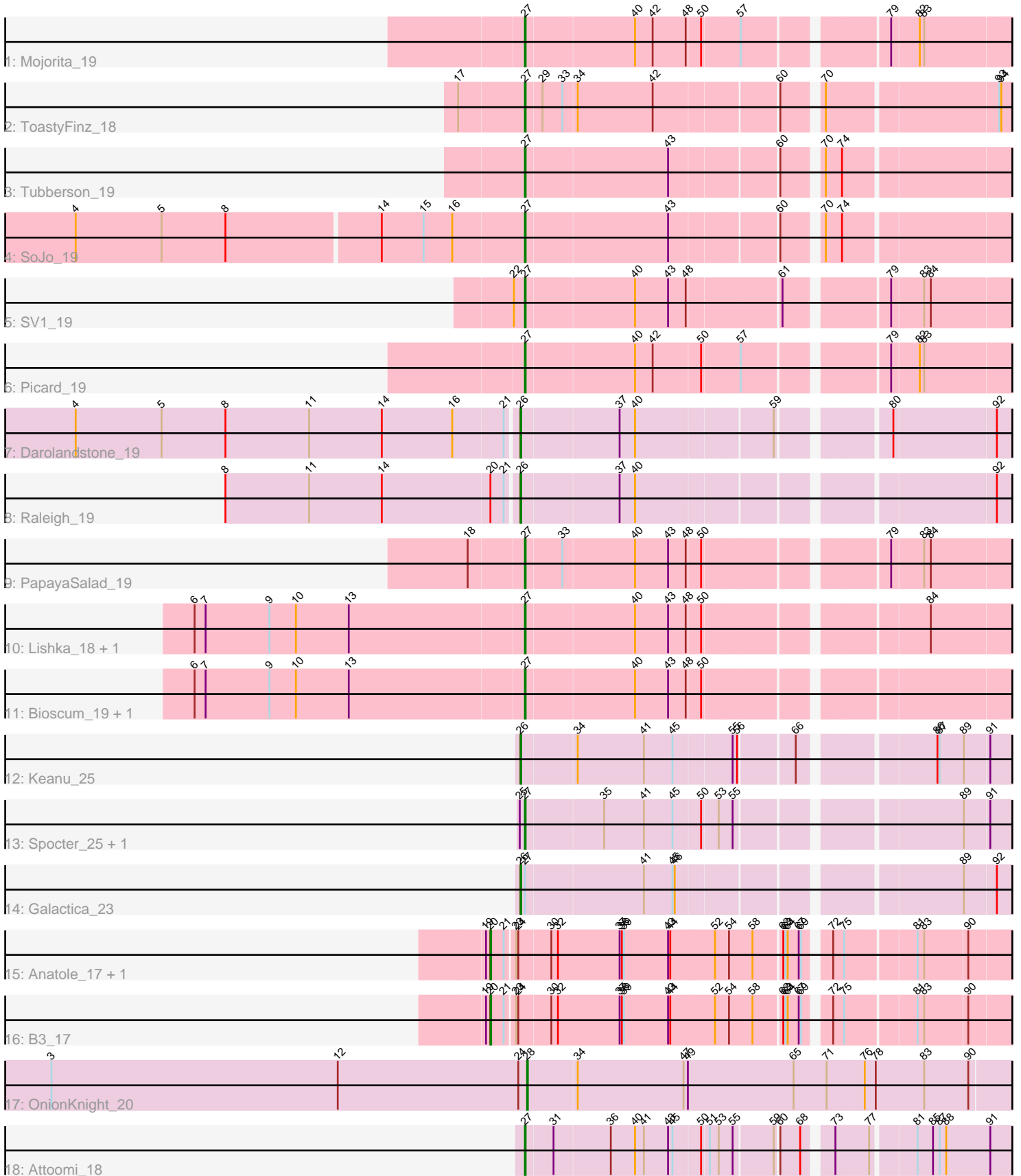


Zoomed Pham 224858



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 224858 Report

This analysis was run 03/28/25 on database version 593.

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 224858 has 22 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Mojorita_19
- Track 2 : ToastyFinz_18
- Track 3 : Tubberson_19
- Track 4 : SoJo_19
- Track 5 : SV1_19
- Track 6 : Picard_19
- Track 7 : Darolandstone_19
- Track 8 : Raleigh_19
- Track 9 : PapayaSalad_19
- Track 10 : Lishka_18, Austintatious_19
- Track 11 : Bioscum_19, Ididsumtinwong_19
- Track 12 : Keanu_25
- Track 13 : Spocter_25, Hiyaa_25
- Track 14 : Galactica_23
- Track 15 : Anatole_17, E1_17
- Track 16 : B3_17
- 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 27, it was called in 13 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Attoomi_18, Austintatious_19, Bioscum_19, Hiyaa_25, Ididsumtinwong_19, Lishka_18, Mojorita_19, 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,

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

- Anatole_17, B3_17, Darolandstone_19, E1_17, Keanu_25, OnionKnight_20, Raleigh_19,

Summary by start number:

Start 20:

- Found in 4 of 22 (18.2%) of genes in pham
- Manual Annotations of this start: 3 of 21
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Anatole_17 (BV), B3_17 (BV), E1_17 (BV),

Start 26:

- Found in 4 of 22 (18.2%) of genes in pham
- Manual Annotations of this start: 4 of 21
- 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 27:

- Found in 15 of 22 (68.2%) of genes in pham
- Manual Annotations of this start: 13 of 21
- Called 93.3% of time when present
- Phage (with cluster) where this start called: Attoomi_18 (singleton), Austintatious_19 (BC3), Bioscum_19 (BC3), Hiyaa_25 (BQ), Ididsumtinwong_19 (BC3), Lishka_18 (BC3), Moajorita_19 (BC1), PapayaSalad_19 (BC3), Picard_19 (BC1), SV1_19 (BC1), SoJo_19 (BC1), Spocter_25 (BQ), ToastyFinz_18 (BC1), Tubberson_19 (BC1),

Start 28:

- Found in 1 of 22 (4.5%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: OnionKnight_20 (singleton),

Summary by clusters:

There are 6 clusters represented in this pham: singleton, BV, BQ, BC1, BC2, BC3,

Info for manual annotations of cluster BC1:

- Start number 27 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 26 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 27 was manually annotated 4 times for cluster BC3.

Info for manual annotations of cluster BQ:

- Start number 26 was manually annotated 2 times for cluster BQ.
- Start number 27 was manually annotated 2 times for cluster BQ.

Info for manual annotations of cluster BV:

•Start number 20 was manually annotated 3 times for cluster BV.

Gene Information:

Gene: Anatole_17 Start: 13815, Stop: 14933, Start Num: 20

Candidate Starts for Anatole_17:

(19, 13809), (Start: 20 @13815 has 3 MA's), (21, 13833), (23, 13845), (24, 13848), (30, 13890), (32, 13899), (37, 13983), (38, 13986), (39, 13989), (43, 14049), (44, 14052), (52, 14112), (54, 14130), (58, 14160), (62, 14196), (63, 14199), (64, 14202), (67, 14217), (69, 14220), (72, 14247), (75, 14262), (81, 14352), (83, 14361), (90, 14418), (95, 14478), (100, 14517), (102, 14532), (105, 14559), (107, 14571), (118, 14661), (121, 14688), (130, 14772), (134, 14838), (137, 14868), (140, 14877), (144, 14901),

Gene: Attoomi_18 Start: 15464, Stop: 16561, Start Num: 27

Candidate Starts for Attoomi_18:

(Start: 27 @15464 has 13 MA's), (31, 15500), (36, 15575), (40, 15608), (41, 15620), (43, 15653), (45, 15659), (50, 15695), (51, 15704), (53, 15716), (55, 15734), (59, 15785), (60, 15788), (68, 15815), (73, 15845), (77, 15890), (81, 15944), (85, 15965), (87, 15974), (88, 15983), (91, 16043), (96, 16079), (98, 16097), (99, 16100), (100, 16118), (102, 16133), (104, 16154), (106, 16163), (108, 16187), (111, 16199), (121, 16301), (122, 16307), (128, 16379), (138, 16487), (139, 16490), (143, 16502),

Gene: Austintatious_19 Start: 14189, Stop: 15319, Start Num: 27

Candidate Starts for Austintatious_19:

(6, 13745), (7, 13760), (9, 13847), (10, 13883), (13, 13955), (Start: 27 @14189 has 13 MA's), (40, 14333), (43, 14378), (48, 14402), (50, 14420), (84, 14693), (97, 14822), (98, 14825), (102, 14861), (114, 14951), (116, 14963), (121, 15032), (128, 15110), (138, 15221),

Gene: B3_17 Start: 13818, Stop: 14936, Start Num: 20

Candidate Starts for B3_17:

(19, 13812), (Start: 20 @13818 has 3 MA's), (21, 13836), (23, 13848), (24, 13851), (30, 13893), (32, 13902), (37, 13986), (38, 13989), (39, 13992), (43, 14052), (44, 14055), (52, 14115), (54, 14133), (58, 14163), (62, 14199), (63, 14202), (64, 14205), (67, 14220), (69, 14223), (72, 14250), (75, 14265), (81, 14355), (83, 14364), (90, 14421), (95, 14481), (102, 14535), (105, 14562), (107, 14574), (118, 14664), (121, 14691), (130, 14775), (134, 14841), (137, 14871), (140, 14880), (144, 14904),

Gene: Bioscum_19 Start: 14225, Stop: 15355, Start Num: 27

Candidate Starts for Bioscum_19:

(6, 13781), (7, 13796), (9, 13883), (10, 13919), (13, 13991), (Start: 27 @14225 has 13 MA's), (40, 14369), (43, 14414), (48, 14438), (50, 14456), (97, 14858), (98, 14861), (114, 14987), (116, 14999), (121, 15068), (128, 15146),

Gene: Darolandstone_19 Start: 14810, Stop: 15910, Start Num: 26

Candidate Starts for Darolandstone_19:

(4, 14216), (5, 14333), (8, 14420), (11, 14534), (14, 14633), (16, 14729), (21, 14795), (Start: 26 @14810 has 4 MA's), (37, 14939), (40, 14960), (59, 15137), (80, 15266), (92, 15401), (127, 15713), (138, 15836), (143, 15851), (146, 15896),

Gene: E1_17 Start: 13815, Stop: 14933, Start Num: 20

Candidate Starts for E1_17:

(19, 13809), (Start: 20 @13815 has 3 MA's), (21, 13833), (23, 13845), (24, 13848), (30, 13890), (32, 13899), (37, 13983), (38, 13986), (39, 13989), (43, 14049), (44, 14052), (52, 14112), (54, 14130), (58, 14160), (62, 14196), (63, 14199), (64, 14202), (67, 14217), (69, 14220), (72, 14247), (75, 14262), (81, 14352), (83, 14361), (90, 14418), (95, 14478), (100, 14517), (102, 14532), (105, 14559), (107, 14571), (118, 14661), (121, 14688), (130, 14772), (134, 14838), (137, 14868), (140, 14877), (144, 14901),

Gene: Galactica_23 Start: 20117, Stop: 21220, Start Num: 26

Candidate Starts for Galactica_23:

(Start: 26 @20117 has 4 MA's), (Start: 27 @20123 has 13 MA's), (41, 20279), (45, 20318), (46, 20321), (89, 20666), (92, 20708), (98, 20753), (114, 20879), (125, 20990), (129, 21038), (135, 21128),

Gene: Hiyaa_25 Start: 21164, Stop: 22261, Start Num: 27

Candidate Starts for Hiyaa_25:

(25, 21158), (Start: 27 @21164 has 13 MA's), (35, 21266), (41, 21320), (45, 21359), (50, 21395), (53, 21416), (55, 21434), (89, 21707), (91, 21740), (95, 21773), (98, 21794), (114, 21920), (125, 22031), (131, 22085),

Gene: Ididsumtinwong_19 Start: 14225, Stop: 15355, Start Num: 27

Candidate Starts for Ididsumtinwong_19:

(6, 13781), (7, 13796), (9, 13883), (10, 13919), (13, 13991), (Start: 27 @14225 has 13 MA's), (40, 14369), (43, 14414), (48, 14438), (50, 14456), (97, 14858), (98, 14861), (114, 14987), (116, 14999), (121, 15068), (128, 15146),

Gene: Keanu_25 Start: 21193, Stop: 22296, Start Num: 26

Candidate Starts for Keanu_25:

(Start: 26 @21193 has 4 MA's), (34, 21265), (41, 21355), (45, 21394), (55, 21469), (56, 21475), (66, 21544), (86, 21706), (87, 21709), (89, 21742), (91, 21775), (98, 21829), (101, 21853), (113, 21952), (114, 21955), (121, 22033), (135, 22204),

Gene: Lishka_18 Start: 14189, Stop: 15319, Start Num: 27

Candidate Starts for Lishka_18:

(6, 13745), (7, 13760), (9, 13847), (10, 13883), (13, 13955), (Start: 27 @14189 has 13 MA's), (40, 14333), (43, 14378), (48, 14402), (50, 14420), (84, 14693), (97, 14822), (98, 14825), (102, 14861), (114, 14951), (116, 14963), (121, 15032), (128, 15110), (138, 15221),

Gene: Mojerita_19 Start: 14327, Stop: 15457, Start Num: 27

Candidate Starts for Mojerita_19:

(Start: 27 @14327 has 13 MA's), (40, 14471), (42, 14495), (48, 14540), (50, 14558), (57, 14606), (79, 14780), (82, 14816), (83, 14822), (114, 15089), (116, 15101), (128, 15248),

Gene: OnionKnight_20 Start: 16035, Stop: 17189, Start Num: 28

Candidate Starts for OnionKnight_20:

(3, 15387), (12, 15777), (24, 16023), (Start: 28 @16035 has 1 MA's), (34, 16101), (47, 16245), (49, 16251), (65, 16395), (71, 16440), (76, 16491), (78, 16506), (83, 16572), (90, 16632), (108, 16800), (109, 16803), (110, 16812), (115, 16851), (119, 16908), (120, 16926), (121, 16929), (123, 16944), (124, 16953), (126, 16971), (127, 16992), (129, 17010), (133, 17049), (136, 17112), (141, 17124), (147, 17178), (148, 17184),

Gene: PapayaSalad_19 Start: 14200, Stop: 15330, Start Num: 27

Candidate Starts for PapayaSalad_19:

(18, 14128), (Start: 27 @14200 has 13 MA's), (33, 14248), (40, 14344), (43, 14389), (48, 14413), (50, 14431), (79, 14653), (83, 14695), (84, 14704), (97, 14833), (98, 14836), (114, 14962), (116, 14974), (121, 15043), (128, 15121),

Gene: Picard_19 Start: 14321, Stop: 15451, Start Num: 27

Candidate Starts for Picard_19:

(Start: 27 @14321 has 13 MA's), (40, 14465), (42, 14489), (50, 14552), (57, 14600), (79, 14774), (82, 14810), (83, 14816), (98, 14957), (114, 15083), (116, 15095), (128, 15242),

Gene: Raleigh_19 Start: 14995, Stop: 16095, Start Num: 26

Candidate Starts for Raleigh_19:

(8, 14605), (11, 14719), (14, 14818), (Start: 20 @14962 has 3 MA's), (21, 14980), (Start: 26 @14995 has 4 MA's), (37, 15124), (40, 15145), (92, 15586), (127, 15898), (143, 16036), (145, 16075), (146, 16081),

Gene: SV1_19 Start: 14433, Stop: 15563, Start Num: 27

Candidate Starts for SV1_19:

(22, 14418), (Start: 27 @14433 has 13 MA's), (40, 14577), (43, 14622), (48, 14646), (61, 14763), (79, 14886), (83, 14928), (84, 14937), (97, 15066), (103, 15123), (114, 15195), (116, 15207), (117, 15225), (121, 15276), (128, 15354),

Gene: SoJo_19 Start: 14651, Stop: 15748, Start Num: 27

Candidate Starts for SoJo_19:

(1, 13649), (2, 13706), (4, 14051), (5, 14168), (8, 14255), (14, 14459), (15, 14516), (16, 14555), (Start: 27 @14651 has 13 MA's), (43, 14840), (60, 14975), (70, 15020), (74, 15041), (98, 15281), (114, 15407), (121, 15485), (130, 15569), (131, 15572), (142, 15680), (146, 15731),

Gene: Spocter_25 Start: 21152, Stop: 22249, Start Num: 27

Candidate Starts for Spocter_25:

(25, 21146), (Start: 27 @21152 has 13 MA's), (35, 21254), (41, 21308), (45, 21347), (50, 21383), (53, 21404), (55, 21422), (89, 21695), (91, 21728), (95, 21761), (98, 21782), (114, 21908), (125, 22019), (131, 22073),

Gene: ToastyFinz_18 Start: 14328, Stop: 15425, Start Num: 27

Candidate Starts for ToastyFinz_18:

(17, 14241), (Start: 27 @14328 has 13 MA's), (29, 14349), (33, 14376), (34, 14394), (42, 14496), (60, 14652), (70, 14697), (93, 14916), (94, 14919), (112, 15075), (114, 15084), (130, 15246), (131, 15249), (132, 15264), (146, 15408),

Gene: Tubberson_19 Start: 14650, Stop: 15747, Start Num: 27

Candidate Starts for Tubberson_19:

(Start: 27 @14650 has 13 MA's), (43, 14839), (60, 14974), (70, 15019), (74, 15040), (98, 15280), (114, 15406), (121, 15484), (127, 15547), (130, 15568), (131, 15571), (142, 15679), (146, 15730),