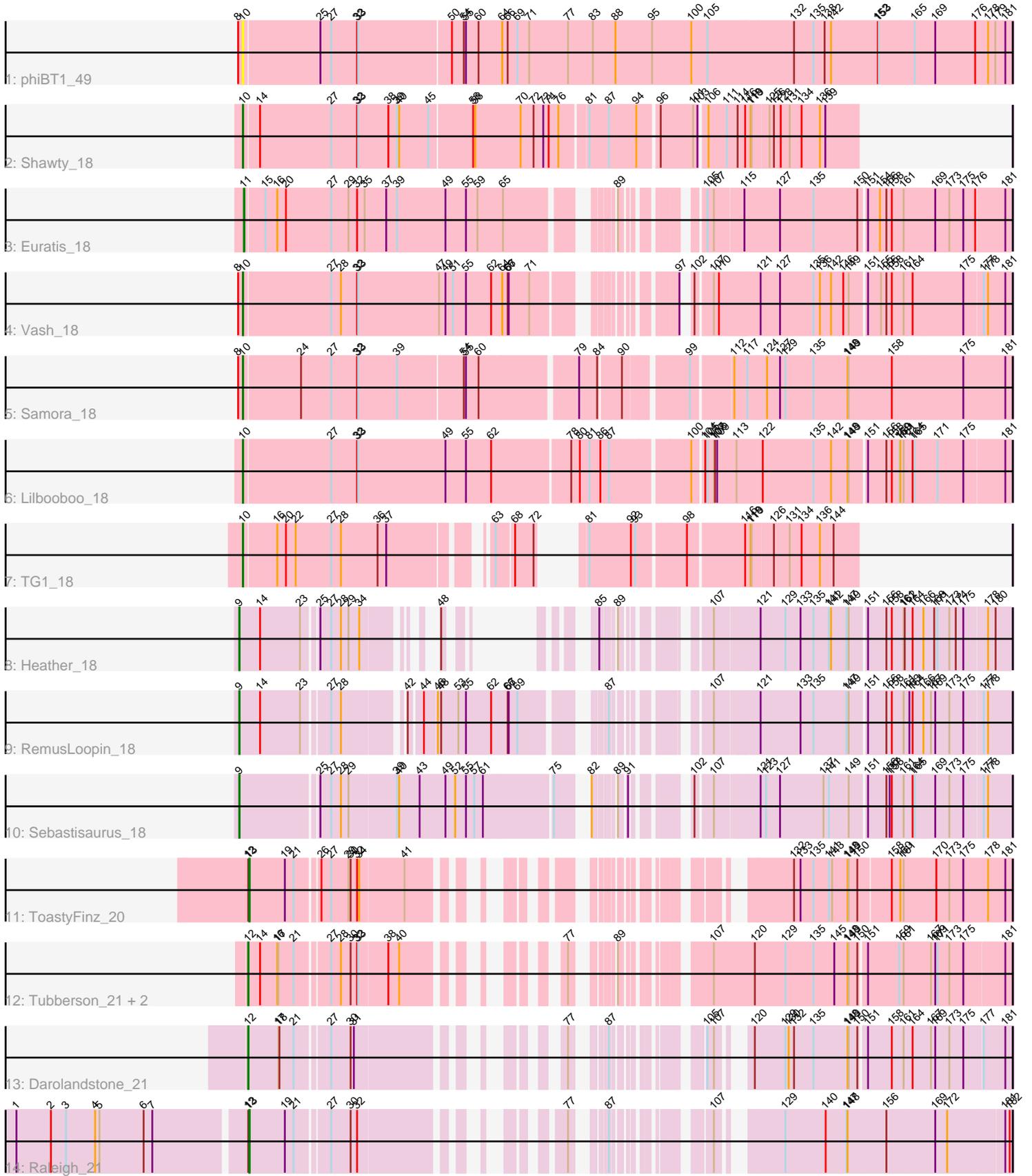


# Pham 284248



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 284248 Report

This analysis was run 02/23/26 on database version 636.

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 284248 has 16 members, 2 are drafts.

Phages represented in each track:

- Track 1 : phiBT1\_49
- Track 2 : Shawty\_18
- Track 3 : Euratis\_18
- Track 4 : Vash\_18
- Track 5 : Samora\_18
- Track 6 : Lilbooboo\_18
- Track 7 : TG1\_18
- Track 8 : Heather\_18
- Track 9 : RemusLoopin\_18
- Track 10 : Sebastisaurus\_18
- Track 11 : ToastyFinz\_20
- Track 12 : Tubberson\_21, SoJo\_21, DaRealMyers\_21
- Track 13 : Darolandstone\_21
- Track 14 : Raleigh\_21

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

The start number called the most often in the published annotations is 10, it was called in 5 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Lilbooboo\_18, Samora\_18, Shawty\_18, TG1\_18, Vash\_18, phiBT1\_49,

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

- 

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

- DaRealMyers\_21, Darolandstone\_21, Euratis\_18, Heather\_18, Raleigh\_21, RemusLoopin\_18, Sebastisaurus\_18, SoJo\_21, ToastyFinz\_20, Tubberson\_21,

## Summary by start number:

### Start 9:

- Found in 3 of 16 ( 18.8% ) of genes in pham
- Manual Annotations of this start: 3 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Heather\_18 (BB2), RemusLoopin\_18 (BB2), Sebastisaurus\_18 (BB2),

### Start 10:

- Found in 6 of 16 ( 37.5% ) of genes in pham
- Manual Annotations of this start: 5 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lilbooboo\_18 (BB1), Samora\_18 (BB1), Shawty\_18 (BB1), TG1\_18 (BB1), Vash\_18 (BB1), phiBT1\_49 (BB1),

### Start 11:

- Found in 1 of 16 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Euratis\_18 (BB1),

### Start 12:

- Found in 6 of 16 ( 37.5% ) of genes in pham
- Manual Annotations of this start: 3 of 14
- Called 66.7% of time when present
- Phage (with cluster) where this start called: DaRealMyers\_21 (BC1), Darolandstone\_21 (BC2), SoJo\_21 (BC1), Tubberson\_21 (BC1),

### Start 13:

- 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: Raleigh\_21 (BC2), ToastyFinz\_20 (BC1),

## Summary by clusters:

There are 4 clusters represented in this pham: BC2, BC1, BB1, BB2,

### Info for manual annotations of cluster BB1:

- Start number 10 was manually annotated 5 times for cluster BB1.
- Start number 11 was manually annotated 1 time for cluster BB1.

### Info for manual annotations of cluster BB2:

- Start number 9 was manually annotated 3 times for cluster BB2.

### Info for manual annotations of cluster BC1:

- Start number 12 was manually annotated 2 times for cluster BC1.
- Start number 13 was manually annotated 1 time for cluster BC1.

### Info for manual annotations of cluster BC2:

- Start number 12 was manually annotated 1 time for cluster BC2.

- Start number 13 was manually annotated 1 time for cluster BC2.

### **Gene Information:**

Gene: DaRealMyers\_21 Start: 16587, Stop: 18239, Start Num: 12

Candidate Starts for DaRealMyers\_21:

(Start: 12 @16587 has 3 MA's), (14, 16620), (16, 16668), (17, 16671), (21, 16713), (27, 16797), (28, 16824), (30, 16851), (32, 16869), (33, 16872), (38, 16950), (40, 16980), (77, 17220), (89, 17283), (107, 17448), (120, 17556), (129, 17640), (135, 17718), (145, 17772), (148, 17808), (149, 17811), (150, 17835), (151, 17853), (159, 17937), (161, 17949), (167, 18021), (169, 18033), (171, 18039), (173, 18072), (175, 18111), (181, 18222),

Gene: Darolandstone\_21 Start: 16738, Stop: 18312, Start Num: 12

Candidate Starts for Darolandstone\_21:

(Start: 12 @16738 has 3 MA's), (17, 16822), (18, 16825), (21, 16864), (27, 16948), (30, 17002), (31, 17011), (77, 17371), (87, 17425), (105, 17569), (107, 17587), (120, 17629), (129, 17713), (130, 17722), (132, 17737), (135, 17791), (148, 17881), (149, 17884), (150, 17908), (151, 17926), (158, 17989), (161, 18022), (164, 18046), (167, 18094), (169, 18106), (173, 18145), (175, 18184), (177, 18235), (181, 18295),

Gene: Euratis\_18 Start: 14331, Stop: 16187, Start Num: 11

Candidate Starts for Euratis\_18:

(Start: 11 @14331 has 1 MA's), (15, 14379), (16, 14412), (20, 14436), (27, 14562), (29, 14610), (32, 14634), (35, 14655), (37, 14715), (39, 14745), (49, 14880), (55, 14937), (59, 14967), (65, 15036), (89, 15258), (105, 15393), (107, 15411), (115, 15480), (127, 15579), (135, 15669), (150, 15786), (151, 15804), (154, 15837), (156, 15855), (158, 15867), (161, 15900), (169, 15984), (173, 16023), (175, 16062), (176, 16095), (181, 16173),

Gene: Heather\_18 Start: 14244, Stop: 15737, Start Num: 9

Candidate Starts for Heather\_18:

(Start: 9 @14244 has 3 MA's), (14, 14298), (23, 14409), (25, 14445), (27, 14475), (28, 14502), (29, 14523), (34, 14553), (48, 14664), (85, 14781), (89, 14811), (107, 14958), (121, 15072), (129, 15141), (133, 15183), (135, 15219), (141, 15258), (142, 15264), (147, 15306), (149, 15312), (151, 15354), (156, 15405), (158, 15417), (161, 15450), (162, 15453), (164, 15474), (166, 15501), (168, 15531), (171, 15540), (173, 15573), (174, 15591), (175, 15612), (178, 15675), (180, 15696),

Gene: Lilbooboo\_18 Start: 14344, Stop: 16377, Start Num: 10

Candidate Starts for Lilbooboo\_18:

(Start: 10 @14344 has 5 MA's), (27, 14578), (32, 14650), (33, 14653), (49, 14893), (55, 14950), (62, 15016), (78, 15226), (80, 15250), (81, 15274), (86, 15304), (87, 15328), (100, 15535), (104, 15562), (105, 15568), (107, 15586), (108, 15589), (109, 15595), (113, 15649), (122, 15721), (135, 15859), (142, 15904), (148, 15949), (149, 15952), (151, 15994), (156, 16045), (158, 16057), (159, 16078), (160, 16081), (161, 16090), (164, 16114), (165, 16120), (171, 16180), (175, 16252), (181, 16363),

Gene: Raleigh\_21 Start: 16919, Stop: 18523, Start Num: 13

Candidate Starts for Raleigh\_21:

(1, 16298), (2, 16394), (3, 16436), (4, 16517), (5, 16529), (6, 16652), (7, 16676), (Start: 12 @16916 has 3 MA's), (Start: 13 @16919 has 2 MA's), (19, 17018), (21, 17042), (27, 17126), (30, 17180), (32, 17198), (77, 17567), (87, 17621), (107, 17783), (129, 17909), (140, 18017), (147, 18074), (148, 18077), (156, 18182), (169, 18317), (172, 18350), (181, 18503), (182, 18515),

Gene: RemusLoopin\_18 Start: 14319, Stop: 16106, Start Num: 9

Candidate Starts for RemusLoopin\_18:

(Start: 9 @14319 has 3 MA's), (14, 14373), (23, 14484), (27, 14550), (28, 14577), (42, 14721), (44, 14754), (46, 14787), (48, 14793), (53, 14841), (55, 14862), (62, 14928), (66, 14973), (67, 14976), (69, 15000), (87, 15171), (107, 15327), (121, 15441), (133, 15552), (135, 15588), (147, 15675), (149, 15681), (151, 15723), (156, 15774), (158, 15786), (161, 15819), (163, 15834), (164, 15843), (166, 15870), (167, 15891), (169, 15903), (173, 15942), (175, 15981), (177, 16032), (178, 16044),

Gene: Samora\_18 Start: 14521, Stop: 16503, Start Num: 10

Candidate Starts for Samora\_18:

(8, 14509), (Start: 10 @14521 has 5 MA's), (24, 14671), (27, 14755), (32, 14827), (33, 14830), (39, 14938), (54, 15112), (55, 15118), (60, 15151), (79, 15397), (84, 15442), (90, 15496), (99, 15646), (112, 15748), (117, 15781), (124, 15835), (127, 15871), (129, 15886), (135, 15961), (148, 16051), (149, 16054), (158, 16171), (175, 16366), (181, 16483),

Gene: Sebastisaurus\_18 Start: 14267, Stop: 16123, Start Num: 9

Candidate Starts for Sebastisaurus\_18:

(Start: 9 @14267 has 3 MA's), (25, 14468), (27, 14498), (28, 14525), (29, 14546), (39, 14675), (40, 14681), (43, 14738), (49, 14807), (52, 14834), (55, 14864), (57, 14885), (61, 14909), (75, 15092), (82, 15149), (89, 15194), (91, 15209), (102, 15305), (107, 15347), (121, 15461), (123, 15476), (127, 15515), (137, 15629), (141, 15644), (149, 15698), (151, 15740), (156, 15791), (157, 15797), (158, 15803), (161, 15836), (164, 15860), (165, 15866), (169, 15920), (173, 15959), (175, 15998), (177, 16049), (178, 16061),

Gene: Shawty\_18 Start: 14444, Stop: 16054, Start Num: 10

Candidate Starts for Shawty\_18:

(Start: 10 @14444 has 5 MA's), (14, 14480), (27, 14678), (32, 14750), (33, 14753), (38, 14837), (39, 14861), (40, 14867), (45, 14948), (56, 15062), (58, 15068), (70, 15191), (72, 15224), (73, 15251), (74, 15266), (76, 15293), (81, 15362), (87, 15416), (94, 15485), (96, 15536), (101, 15623), (103, 15635), (106, 15653), (111, 15704), (114, 15734), (116, 15752), (118, 15767), (119, 15770), (125, 15815), (126, 15827), (128, 15845), (131, 15869), (134, 15902), (136, 15950), (139, 15965),

Gene: SoJo\_21 Start: 16588, Stop: 18240, Start Num: 12

Candidate Starts for SoJo\_21:

(Start: 12 @16588 has 3 MA's), (14, 16621), (16, 16669), (17, 16672), (21, 16714), (27, 16798), (28, 16825), (30, 16852), (32, 16870), (33, 16873), (38, 16951), (40, 16981), (77, 17221), (89, 17284), (107, 17449), (120, 17557), (129, 17641), (135, 17719), (145, 17773), (148, 17809), (149, 17812), (150, 17836), (151, 17854), (159, 17938), (161, 17950), (167, 18022), (169, 18034), (171, 18040), (173, 18073), (175, 18112), (181, 18223),

Gene: TG1\_18 Start: 14295, Stop: 15701, Start Num: 10

Candidate Starts for TG1\_18:

(Start: 10 @14295 has 5 MA's), (16, 14376), (20, 14400), (22, 14427), (27, 14526), (28, 14553), (36, 14655), (37, 14679), (63, 14898), (68, 14940), (72, 14982), (81, 15012), (92, 15120), (93, 15132), (98, 15255), (116, 15399), (118, 15414), (119, 15417), (126, 15474), (131, 15516), (134, 15549), (136, 15597), (144, 15633),

Gene: ToastyFinz\_20 Start: 16273, Stop: 17871, Start Num: 13

Candidate Starts for ToastyFinz\_20:

(Start: 12 @16270 has 3 MA's), (Start: 13 @16273 has 2 MA's), (19, 16372), (21, 16396), (26, 16453), (27, 16480), (29, 16528), (30, 16534), (32, 16552), (34, 16558), (41, 16678), (132, 17287), (133, 17305), (135, 17341), (141, 17380), (143, 17389), (148, 17431), (149, 17434), (150, 17458), (158, 17539), (160, 17563), (161, 17572), (170, 17659), (173, 17695), (175, 17734), (178, 17803), (181,

17851),

Gene: Tubberson\_21 Start: 16587, Stop: 18239, Start Num: 12

Candidate Starts for Tubberson\_21:

(Start: 12 @16587 has 3 MA's), (14, 16620), (16, 16668), (17, 16671), (21, 16713), (27, 16797), (28, 16824), (30, 16851), (32, 16869), (33, 16872), (38, 16950), (40, 16980), (77, 17220), (89, 17283), (107, 17448), (120, 17556), (129, 17640), (135, 17718), (145, 17772), (148, 17808), (149, 17811), (150, 17835), (151, 17853), (159, 17937), (161, 17949), (167, 18021), (169, 18033), (171, 18039), (173, 18072), (175, 18111), (181, 18222),

Gene: Vash\_18 Start: 14304, Stop: 16169, Start Num: 10

Candidate Starts for Vash\_18:

(8, 14292), (Start: 10 @14304 has 5 MA's), (27, 14538), (28, 14565), (32, 14610), (33, 14613), (47, 14838), (49, 14856), (51, 14877), (55, 14913), (62, 14979), (64, 15009), (66, 15024), (67, 15027), (71, 15081), (97, 15342), (102, 15351), (107, 15393), (110, 15402), (121, 15507), (127, 15561), (135, 15651), (136, 15666), (142, 15696), (146, 15729), (149, 15744), (151, 15786), (155, 15822), (156, 15837), (158, 15849), (161, 15882), (164, 15906), (175, 16044), (177, 16095), (178, 16107), (181, 16155),

Gene: phiBT1\_49 Start: 14512, Stop: 16590, Start Num: 10

Candidate Starts for phiBT1\_49:

(8, 14500), (Start: 10 @14512 has 5 MA's), (25, 14716), (27, 14746), (32, 14818), (33, 14821), (50, 15070), (54, 15103), (55, 15109), (60, 15142), (64, 15205), (66, 15220), (69, 15247), (71, 15277), (77, 15385), (83, 15454), (88, 15517), (95, 15616), (100, 15724), (105, 15769), (132, 16003), (135, 16057), (138, 16087), (142, 16105), (152, 16231), (153, 16234), (165, 16333), (169, 16390), (176, 16498), (178, 16528), (179, 16546), (181, 16570),