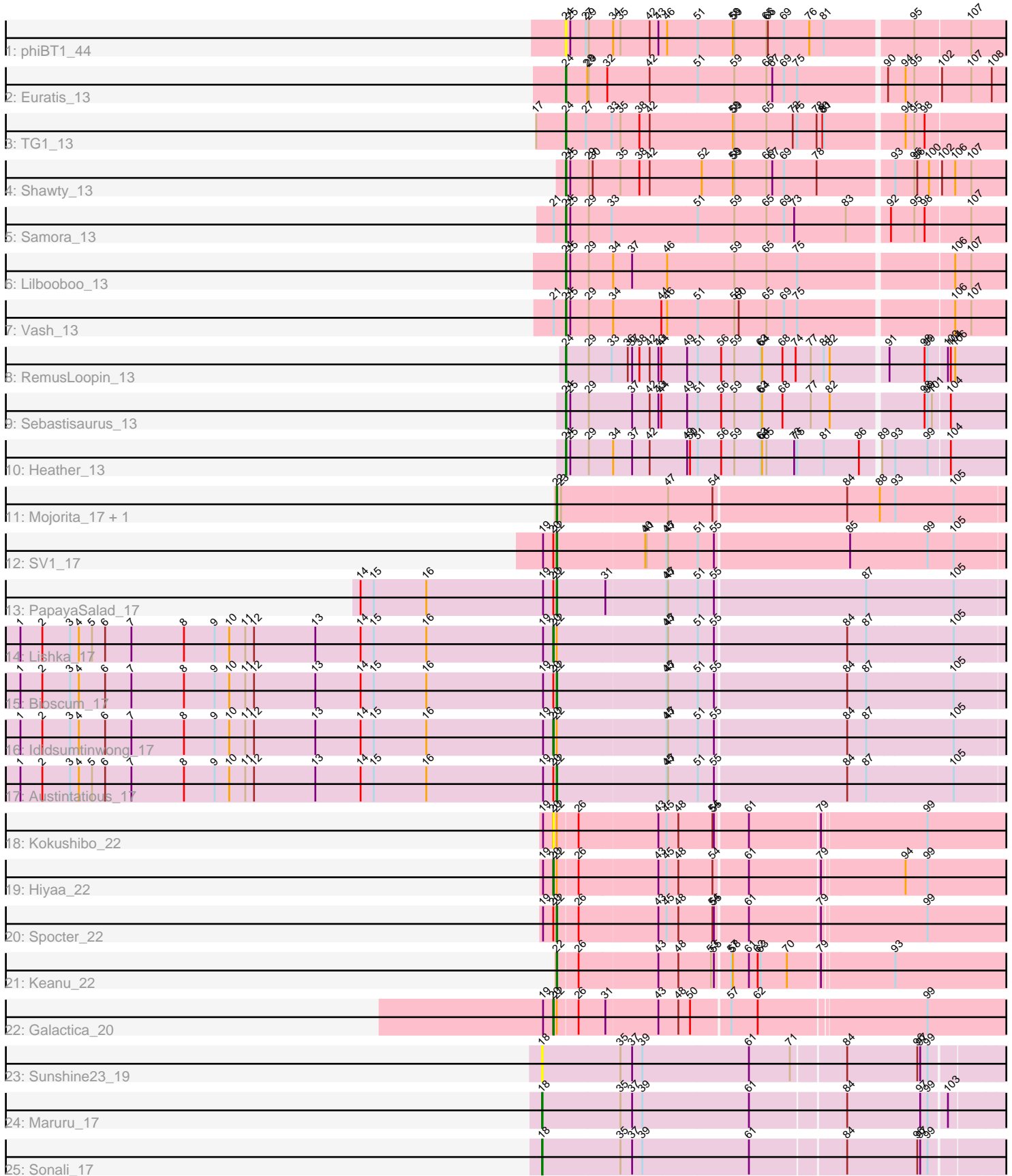


Pham 305228



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 305228 Report

This analysis was run 06/08/26 on database version 649.

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 305228 has 26 members, 3 are drafts.

Phages represented in each track:

- Track 1 : phiBT1_44
- Track 2 : Euratis_13
- Track 3 : TG1_13
- Track 4 : Shawty_13
- Track 5 : Samora_13
- Track 6 : Lilbooboo_13
- Track 7 : Vash_13
- Track 8 : RemusLoopin_13
- Track 9 : Sebastisaurus_13
- Track 10 : Heather_13
- Track 11 : Mojorita_17, Picard_17
- Track 12 : SV1_17
- Track 13 : PapayaSalad_17
- Track 14 : Lishka_17
- Track 15 : Bioscum_17
- Track 16 : Ididsumtinwong_17
- Track 17 : Austintatious_17
- Track 18 : Kokushibo_22
- Track 19 : Hiyaa_22
- Track 20 : Spocter_22
- Track 21 : Keanu_22
- Track 22 : Galactica_20
- Track 23 : Sunshine23_19
- Track 24 : Maruru_17
- Track 25 : Sonali_17

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

The start number called the most often in the published annotations is 24, it was called in 9 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Euratis_13, Heather_13, Lilbooboo_13, RemusLoopin_13, Samora_13, Sebastisaurus_13, Shawty_13, TG1_13, Vash_13, phiBT1_44,

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

-

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

- Austintatious_17, Bioscum_17, Galactica_20, Hiyaa_22, Ididsumtinwong_17, Keanu_22, Kokushibo_22, Lishka_17, Maruru_17, Mojorita_17, PapayaSalad_17, Picard_17, SV1_17, Sonali_17, Spocter_22, Sunshine23_19,

Summary by start number:

Start 18:

- Found in 3 of 26 (11.5%) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Maruru_17 (FG), Sonali_17 (FG), Sunshine23_19 (FG),

Start 20:

- Found in 10 of 26 (38.5%) of genes in pham
- Manual Annotations of this start: 4 of 23
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Galactica_20 (BQ), Hiyaa_22 (BQ), Ididsumtinwong_17 (BC3), Kokushibo_22 (BQ), Lishka_17 (BC3),

Start 22:

- Found in 13 of 26 (50.0%) of genes in pham
- Manual Annotations of this start: 8 of 23
- Called 61.5% of time when present
- Phage (with cluster) where this start called: Austintatious_17 (BC3), Bioscum_17 (BC3), Keanu_22 (BQ), Mojorita_17 (BC1), PapayaSalad_17 (BC3), Picard_17 (BC1), SV1_17 (BC1), Spocter_22 (BQ),

Start 24:

- Found in 10 of 26 (38.5%) of genes in pham
- Manual Annotations of this start: 9 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Euratis_13 (BB1), Heather_13 (BB2), Lilbooboo_13 (BB1), RemusLoopin_13 (BB2), Samora_13 (BB1), Sebastisaurus_13 (BB2), Shawty_13 (BB1), TG1_13 (BB1), Vash_13 (BB1), phiBT1_44 (BB1),

Summary by clusters:

There are 6 clusters represented in this pham: BC1, BQ, FG, BB2, BB1, BC3,

Info for manual annotations of cluster BB1:

- Start number 24 was manually annotated 6 times for cluster BB1.

Info for manual annotations of cluster BB2:

- Start number 24 was manually annotated 3 times for cluster BB2.

Info for manual annotations of cluster BC1:

- Start number 22 was manually annotated 3 times for cluster BC1.

Info for manual annotations of cluster BC3:

- Start number 20 was manually annotated 2 times for cluster BC3.
- Start number 22 was manually annotated 3 times for cluster BC3.

Info for manual annotations of cluster BQ:

- Start number 20 was manually annotated 2 times for cluster BQ.
- Start number 22 was manually annotated 2 times for cluster BQ.

Info for manual annotations of cluster FG:

- Start number 18 was manually annotated 2 times for cluster FG.

Gene Information:

Gene: Austintatious_17 Start: 12200, Stop: 13096, Start Num: 22

Candidate Starts for Austintatious_17:

(1, 11099), (2, 11144), (3, 11201), (4, 11219), (5, 11246), (6, 11273), (7, 11327), (8, 11435), (9, 11498), (10, 11528), (11, 11561), (12, 11579), (13, 11705), (14, 11798), (15, 11825), (16, 11933), (19, 12173), (Start: 20 @12194 has 4 MA's), (Start: 22 @12200 has 8 MA's), (45, 12416), (47, 12419), (51, 12476), (55, 12506), (84, 12770), (87, 12809), (105, 12983),

Gene: Bioscum_17 Start: 12236, Stop: 13132, Start Num: 22

Candidate Starts for Bioscum_17:

(1, 11135), (2, 11180), (3, 11237), (4, 11255), (6, 11309), (7, 11363), (8, 11471), (9, 11534), (10, 11564), (11, 11597), (12, 11615), (13, 11741), (14, 11834), (15, 11861), (16, 11969), (19, 12209), (Start: 20 @12230 has 4 MA's), (Start: 22 @12236 has 8 MA's), (45, 12452), (47, 12455), (51, 12512), (55, 12542), (84, 12806), (87, 12845), (105, 13019),

Gene: Euratis_13 Start: 10457, Stop: 11323, Start Num: 24

Candidate Starts for Euratis_13:

(Start: 24 @10457 has 9 MA's), (28, 10499), (29, 10502), (32, 10538), (42, 10625), (51, 10718), (59, 10790), (65, 10853), (67, 10865), (69, 10889), (75, 10916), (90, 11087), (94, 11123), (95, 11141), (102, 11192), (107, 11252), (108, 11294),

Gene: Galactica_20 Start: 17668, Stop: 18558, Start Num: 20

Candidate Starts for Galactica_20:

(19, 17647), (Start: 20 @17668 has 4 MA's), (Start: 22 @17674 has 8 MA's), (26, 17713), (31, 17767), (43, 17869), (48, 17908), (50, 17929), (57, 18004), (62, 18058), (99, 18385),

Gene: Heather_13 Start: 10445, Stop: 11311, Start Num: 24

Candidate Starts for Heather_13:

(Start: 24 @10445 has 9 MA's), (25, 10454), (29, 10490), (34, 10538), (37, 10577), (42, 10613), (49, 10685), (50, 10691), (51, 10706), (56, 10751), (59, 10778), (63, 10829), (64, 10832), (65, 10841), (73, 10898), (75, 10904), (81, 10958), (86, 11030), (89, 11063), (93, 11090), (99, 11156), (104, 11198),

Gene: Hiyaa_22 Start: 18704, Stop: 19594, Start Num: 20

Candidate Starts for Hiyaa_22:

(19, 18683), (Start: 20 @18704 has 4 MA's), (Start: 22 @18710 has 8 MA's), (26, 18749), (43, 18905), (45, 18920), (48, 18944), (54, 19010), (61, 19076), (79, 19214), (94, 19376), (99, 19421),

Gene: Ididsumtinwong_17 Start: 12230, Stop: 13132, Start Num: 20

Candidate Starts for Ididsumtinwong_17:

(1, 11135), (2, 11180), (3, 11237), (4, 11255), (6, 11309), (7, 11363), (8, 11471), (9, 11534), (10, 11564), (11, 11597), (12, 11615), (13, 11741), (14, 11834), (15, 11861), (16, 11969), (19, 12209), (Start: 20 @12230 has 4 MA's), (Start: 22 @12236 has 8 MA's), (45, 12452), (47, 12455), (51, 12512), (55, 12542), (84, 12806), (87, 12845), (105, 13019),

Gene: Keanu_22 Start: 18751, Stop: 19635, Start Num: 22

Candidate Starts for Keanu_22:

(Start: 22 @18751 has 8 MA's), (26, 18790), (43, 18946), (48, 18985), (53, 19048), (55, 19054), (57, 19081), (58, 19084), (61, 19117), (62, 19135), (63, 19141), (70, 19192), (79, 19255), (93, 19396),

Gene: Kokushibo_22 Start: 18719, Stop: 19609, Start Num: 20

Candidate Starts for Kokushibo_22:

(19, 18698), (Start: 20 @18719 has 4 MA's), (Start: 22 @18725 has 8 MA's), (26, 18764), (43, 18920), (45, 18935), (48, 18959), (54, 19025), (55, 19028), (61, 19091), (79, 19229), (99, 19436),

Gene: Lilbooboo_13 Start: 10470, Stop: 11336, Start Num: 24

Candidate Starts for Lilbooboo_13:

(Start: 24 @10470 has 9 MA's), (25, 10479), (29, 10515), (34, 10563), (37, 10602), (46, 10671), (59, 10803), (65, 10866), (75, 10929), (106, 11232), (107, 11265),

Gene: Lishka_17 Start: 12194, Stop: 13096, Start Num: 20

Candidate Starts for Lishka_17:

(1, 11099), (2, 11144), (3, 11201), (4, 11219), (5, 11246), (6, 11273), (7, 11327), (8, 11435), (9, 11498), (10, 11528), (11, 11561), (12, 11579), (13, 11705), (14, 11798), (15, 11825), (16, 11933), (19, 12173), (Start: 20 @12194 has 4 MA's), (Start: 22 @12200 has 8 MA's), (45, 12416), (47, 12419), (51, 12476), (55, 12506), (84, 12770), (87, 12809), (105, 12983),

Gene: Maruru_17 Start: 17270, Stop: 18190, Start Num: 18

Candidate Starts for Maruru_17:

(Start: 18 @17270 has 2 MA's), (35, 17426), (37, 17450), (39, 17471), (61, 17687), (84, 17864), (97, 18014), (99, 18029), (103, 18062),

Gene: Mojarita_17 Start: 12339, Stop: 13232, Start Num: 22

Candidate Starts for Mojarita_17:

(Start: 22 @12339 has 8 MA's), (23, 12348), (47, 12555), (54, 12639), (84, 12906), (88, 12972), (93, 13002), (105, 13119),

Gene: PapayaSalad_17 Start: 12206, Stop: 13102, Start Num: 22

Candidate Starts for PapayaSalad_17:

(14, 11804), (15, 11831), (16, 11939), (19, 12179), (Start: 20 @12200 has 4 MA's), (Start: 22 @12206 has 8 MA's), (31, 12305), (45, 12422), (47, 12425), (51, 12482), (55, 12512), (87, 12815), (105, 12989),

Gene: Picard_17 Start: 12333, Stop: 13226, Start Num: 22

Candidate Starts for Picard_17:

(Start: 22 @12333 has 8 MA's), (23, 12342), (47, 12549), (54, 12633), (84, 12900), (88, 12966), (93, 12996), (105, 13113),

Gene: RemusLoopin_13 Start: 10423, Stop: 11289, Start Num: 24

Candidate Starts for RemusLoopin_13:

(Start: 24 @10423 has 9 MA's), (29, 10468), (33, 10513), (36, 10546), (37, 10555), (38, 10570), (42, 10591), (43, 10606), (44, 10612), (49, 10663), (51, 10684), (56, 10729), (59, 10756), (63, 10807), (64, 10810), (68, 10852), (74, 10879), (77, 10909), (81, 10936), (82, 10948), (91, 11056), (98, 11128), (99, 11134), (103, 11170), (104, 11176), (106, 11185),

Gene: SV1_17 Start: 12442, Stop: 13338, Start Num: 22

Candidate Starts for SV1_17:

(19, 12415), (Start: 20 @12436 has 4 MA's), (Start: 22 @12442 has 8 MA's), (40, 12619), (41, 12622), (45, 12658), (47, 12661), (51, 12718), (55, 12748), (85, 13018), (99, 13174), (105, 13225),

Gene: Samora_13 Start: 10501, Stop: 11367, Start Num: 24

Candidate Starts for Samora_13:

(21, 10480), (Start: 24 @10501 has 9 MA's), (25, 10510), (29, 10546), (33, 10591), (51, 10762), (59, 10834), (65, 10897), (69, 10933), (73, 10954), (83, 11059), (92, 11137), (95, 11185), (98, 11206), (107, 11296),

Gene: Sebastisaurus_13 Start: 10449, Stop: 11315, Start Num: 24

Candidate Starts for Sebastisaurus_13:

(Start: 24 @10449 has 9 MA's), (25, 10458), (29, 10494), (37, 10581), (42, 10617), (43, 10632), (44, 10638), (49, 10689), (51, 10710), (56, 10755), (59, 10782), (63, 10833), (64, 10836), (68, 10878), (77, 10935), (82, 10974), (98, 11154), (99, 11160), (101, 11169), (104, 11202),

Gene: Shawty_13 Start: 10451, Stop: 11317, Start Num: 24

Candidate Starts for Shawty_13:

(Start: 24 @10451 has 9 MA's), (25, 10460), (29, 10496), (30, 10502), (35, 10559), (38, 10598), (42, 10619), (52, 10721), (58, 10781), (59, 10784), (65, 10847), (67, 10859), (69, 10883), (78, 10949), (93, 11096), (95, 11135), (96, 11141), (100, 11165), (102, 11186), (106, 11213), (107, 11246),

Gene: Sonali_17 Start: 17836, Stop: 18756, Start Num: 18

Candidate Starts for Sonali_17:

(Start: 18 @17836 has 2 MA's), (35, 17992), (37, 18016), (39, 18037), (61, 18253), (84, 18430), (96, 18574), (97, 18580), (99, 18595),

Gene: Spocter_22 Start: 18698, Stop: 19582, Start Num: 22

Candidate Starts for Spocter_22:

(19, 18671), (Start: 20 @18692 has 4 MA's), (Start: 22 @18698 has 8 MA's), (26, 18737), (43, 18893), (45, 18908), (48, 18932), (54, 18998), (55, 19001), (61, 19064), (79, 19202), (99, 19409),

Gene: Sunshine23_19 Start: 17848, Stop: 18768, Start Num: 18

Candidate Starts for Sunshine23_19:

(Start: 18 @17848 has 2 MA's), (35, 18004), (37, 18028), (39, 18049), (61, 18265), (71, 18346), (84, 18442), (96, 18586), (97, 18592), (99, 18607),

Gene: TG1_13 Start: 10453, Stop: 11319, Start Num: 24

Candidate Starts for TG1_13:

(17, 10393), (Start: 24 @10453 has 9 MA's), (27, 10492), (33, 10543), (35, 10561), (38, 10600), (42, 10621), (58, 10783), (59, 10786), (65, 10849), (72, 10903), (75, 10912), (78, 10951), (80, 10963), (81, 10966), (94, 11119), (95, 11137), (98, 11158),

Gene: Vash_13 Start: 10476, Stop: 11342, Start Num: 24

Candidate Starts for Vash_13:

(21, 10455), (Start: 24 @10476 has 9 MA's), (25, 10485), (29, 10521), (34, 10569), (44, 10665), (46, 10677), (51, 10737), (59, 10809), (60, 10818), (65, 10872), (69, 10908), (75, 10935), (106, 11238), (107, 11271),

Gene: phiBT1_44 Start: 10499, Stop: 11365, Start Num: 24

Candidate Starts for phiBT1_44:

(Start: 24 @10499 has 9 MA's), (25, 10508), (27, 10538), (29, 10544), (34, 10592), (35, 10607), (42, 10667), (43, 10682), (46, 10700), (51, 10760), (58, 10829), (59, 10832), (65, 10895), (66, 10898), (69, 10931), (76, 10982), (81, 11012), (95, 11183), (107, 11294),