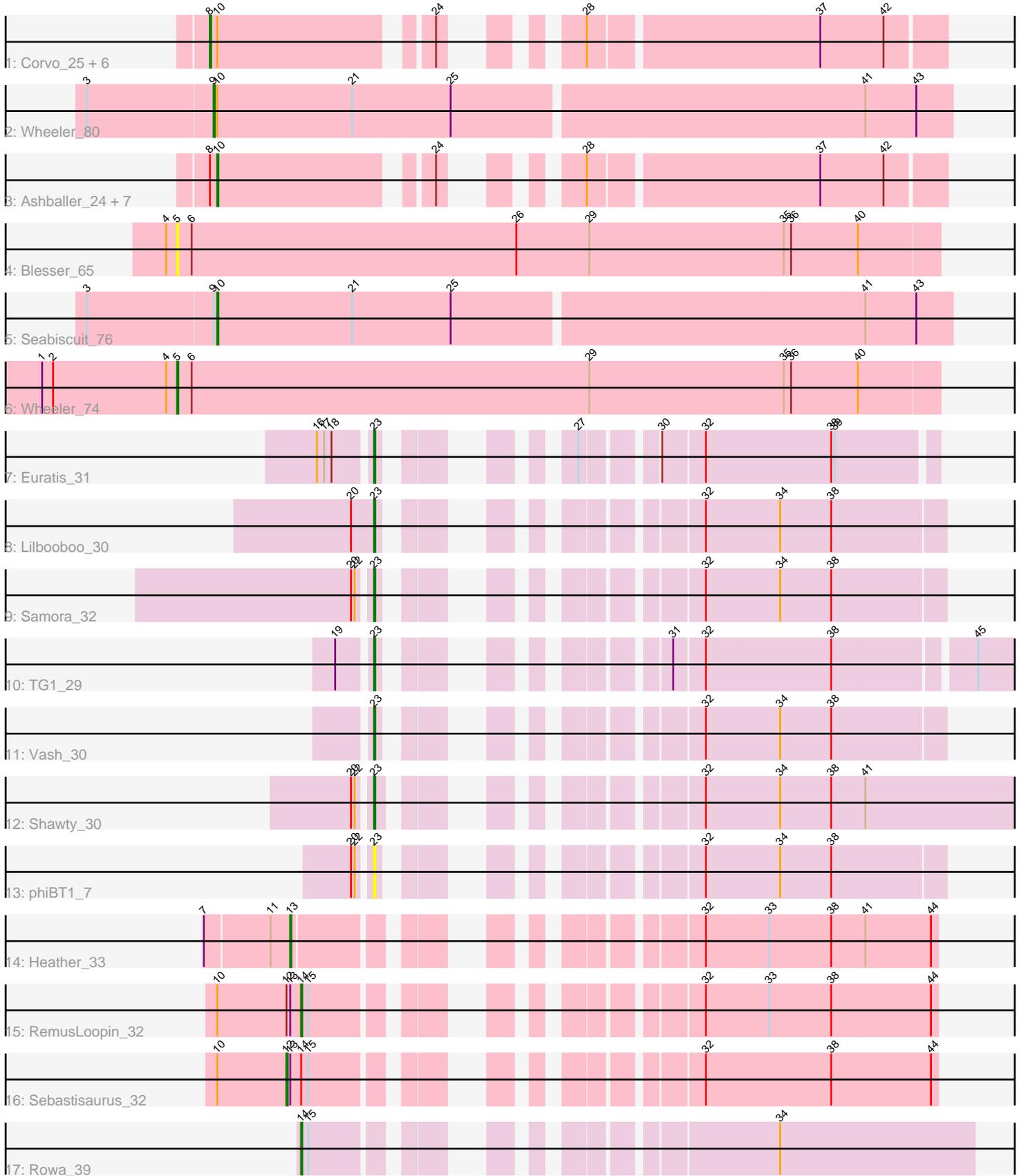# Pham 284055

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 284055 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 284055 has 30 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Corvo_25, Target_27, Snazzy_23, Pinto_27, Hermia_27, Zeeculate_24, Atkinbua_26
• Track 2 : Wheeler_80
• Track 3 : Ashballer_24, Trouble_25, GrecoEtereo_26, Petruchio_25, SwissCheese_25, ConceptII_26, Beatrix_24, Ajay_25
• Track 4 : Blesser_65
• Track 5 : Seabiscuit_76
• Track 6 : Wheeler_74
• Track 7 : Euratis_31
• Track 8 : Lilbooboo_30
• Track 9 : Samora_32
• Track 10 : TG1_29
• Track 11 : Vash_30
• Track 12 : Shawty_30
• Track 13 : phiBT1_7
• Track 14 : Heather_33
• Track 15 : RemusLoopin_32
• Track 16 : Sebastisaurus_32
• Track 17 : Rowa_39

### *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 9 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Ajay_25, Ashballer_24, Beatrix_24, ConceptII_26, GrecoEtereo_26, Petruchio_25, Seabiscuit_76, SwissCheese_25, Trouble_25,

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

• Atkinbua_26, Corvo_25, Hermia_27, Pinto_27, RemusLoopin_32, Sebastisaurus_32, Snazzy_23, Target_27, Wheeler_80, Zeeculate_24,

Genes that do not have the "Most Annotated" start:
• Blesser_65, Euratis_31, Heather_33, Lilbooboo_30, Rowa_39, Samora_32, Shawty_30, TG1_29, Vash_30, Wheeler_74, phiBT1_7,

**Summary by start number:**

Start 5:
• Found in 2 of 30 ( 6.7% ) of genes in pham
• Manual Annotations of this start: 1 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Blesser_65 (A1), Wheeler_74 (A1),

Start 8:
• Found in 15 of 30 ( 50.0% ) of genes in pham
• Manual Annotations of this start: 7 of 28
• Called 46.7% of time when present
• Phage (with cluster) where this start called: Atkinbua_26 (A1), Corvo_25 (A1), Hermia_27 (A1), Pinto_27 (A1), Snazzy_23 (A1), Target_27 (A1), Zeeculate_24 (A1),

Start 9:
• Found in 2 of 30 ( 6.7% ) of genes in pham
• Manual Annotations of this start: 1 of 28
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Wheeler_80 (A1),

Start 10:
• Found in 19 of 30 ( 63.3% ) of genes in pham
• Manual Annotations of this start: 9 of 28
• Called 47.4% of time when present
• Phage (with cluster) where this start called: Ajay_25 (A1), Ashballer_24 (A1), Beatrix_24 (A1), ConceptII_26 (A1), GrecoEtereo_26 (A1), Petruchio_25 (A1), Seabiscuit_76 (A1), SwissCheese_25 (A1), Trouble_25 (A1),

Start 12:
• Found in 2 of 30 ( 6.7% ) of genes in pham
• Manual Annotations of this start: 1 of 28
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Sebastisaurus_32 (BB2),

Start 13:
• Found in 3 of 30 ( 10.0% ) of genes in pham
• Manual Annotations of this start: 1 of 28
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Heather_33 (BB2),

Start 14:
• Found in 3 of 30 ( 10.0% ) of genes in pham
• Manual Annotations of this start: 2 of 28
• Called 66.7% of time when present
• Phage (with cluster) where this start called: RemusLoopin_32 (BB2), Rowa_39 (BL),

Start 23:
• Found in 7 of 30 ( 23.3% ) of genes in pham
• Manual Annotations of this start: 6 of 28
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Euratis_31 (BB1), Lilbooboo_30 (BB1), Samora_32 (BB1), Shawty_30 (BB1), TG1_29 (BB1), Vash_30 (BB1), phiBT1_7 (BB1),

**Summary by clusters:**

There are 4 clusters represented in this pham: A1, BL, BB2, BB1,

Info for manual annotations of cluster A1:
•Start number 5 was manually annotated 1 time for cluster A1.
•Start number 8 was manually annotated 7 times for cluster A1.
•Start number 9 was manually annotated 1 time for cluster A1.
•Start number 10 was manually annotated 9 times for cluster A1.

Info for manual annotations of cluster BB1:
•Start number 23 was manually annotated 6 times for cluster BB1.

Info for manual annotations of cluster BB2:
•Start number 12 was manually annotated 1 time for cluster BB2.
•Start number 13 was manually annotated 1 time for cluster BB2.
•Start number 14 was manually annotated 1 time for cluster BB2.

Info for manual annotations of cluster BL:
•Start number 14 was manually annotated 1 time for cluster BL.


*Gene Information:*
Gene: Ajay_25 Start: 18878, Stop: 19372, Start Num: 10
Candidate Starts for Ajay_25:
(Start: 8 @18872 has 7 MA's), (Start: 10 @18878 has 9 MA's), (24, 19034), (28, 19094), (37, 19274), (42, 19325),

Gene: Ashballer_24 Start: 18821, Stop: 19315, Start Num: 10
Candidate Starts for Ashballer_24:
(Start: 8 @18815 has 7 MA's), (Start: 10 @18821 has 9 MA's), (24, 18977), (28, 19037), (37, 19217), (42, 19268),

Gene: Atkinbua_26 Start: 18768, Stop: 19268, Start Num: 8
Candidate Starts for Atkinbua_26:
(Start: 8 @18768 has 7 MA's), (Start: 10 @18774 has 9 MA's), (24, 18930), (28, 18990), (37, 19170), (42, 19221),

Gene: Beatrix_24 Start: 19780, Stop: 20274, Start Num: 10
Candidate Starts for Beatrix_24:
(Start: 8 @19774 has 7 MA's), (Start: 10 @19780 has 9 MA's), (24, 19936), (28, 19996), (37, 20176), (42, 20227),

Gene: Blesser_65 Start: 43215, Stop: 42592, Start Num: 5
Candidate Starts for Blesser_65:
(4, 43224), (Start: 5 @43215 has 1 MA's), (6, 43203), (26, 42936), (29, 42876), (35, 42717), (36, 42711), (40, 42657),

Gene: ConceptII_26 Start: 19302, Stop: 19796, Start Num: 10
Candidate Starts for ConceptII_26:
(Start: 8 @19296 has 7 MA's), (Start: 10 @19302 has 9 MA's), (24, 19458), (28, 19518), (37, 19698), (42, 19749),

Gene: Corvo_25 Start: 19271, Stop: 19771, Start Num: 8
Candidate Starts for Corvo_25:
(Start: 8 @19271 has 7 MA's), (Start: 10 @19277 has 9 MA's), (24, 19433), (28, 19493), (37, 19673), (42, 19724),

Gene: Euratis_31 Start: 22823, Stop: 23176, Start Num: 23
Candidate Starts for Euratis_31:
(16, 22784), (17, 22790), (18, 22796), (Start: 23 @22823 has 6 MA's), (27, 22910), (30, 22961), (32, 22994), (38, 23096), (39, 23099),

Gene: GrecoEtereo_26 Start: 19123, Stop: 19617, Start Num: 10
Candidate Starts for GrecoEtereo_26:
(Start: 8 @19117 has 7 MA's), (Start: 10 @19123 has 9 MA's), (24, 19279), (28, 19339), (37, 19519), (42, 19570),

Gene: Heather_33 Start: 23706, Stop: 24128, Start Num: 13
Candidate Starts for Heather_33:
(7, 23640), (11, 23691), (Start: 13 @23706 has 1 MA's), (32, 23940), (33, 23991), (38, 24042), (41, 24069), (44, 24123),

Gene: Hermia_27 Start: 19855, Stop: 20355, Start Num: 8
Candidate Starts for Hermia_27:
(Start: 8 @19855 has 7 MA's), (Start: 10 @19861 has 9 MA's), (24, 20017), (28, 20077), (37, 20257), (42, 20308),

Gene: Lilbooboo_30 Start: 22871, Stop: 23233, Start Num: 23
Candidate Starts for Lilbooboo_30:
(20, 22853), (Start: 23 @22871 has 6 MA's), (32, 23042), (34, 23102), (38, 23144),

Gene: Petruchio_25 Start: 18798, Stop: 19292, Start Num: 10
Candidate Starts for Petruchio_25:
(Start: 8 @18792 has 7 MA's), (Start: 10 @18798 has 9 MA's), (24, 18954), (28, 19014), (37, 19194), (42, 19245),

Gene: Pinto_27 Start: 18931, Stop: 19431, Start Num: 8
Candidate Starts for Pinto_27:
(Start: 8 @18931 has 7 MA's), (Start: 10 @18937 has 9 MA's), (24, 19093), (28, 19153), (37, 19333), (42, 19384),

Gene: RemusLoopin_32 Start: 23906, Stop: 24322, Start Num: 14
Candidate Starts for RemusLoopin_32:

(Start: 10 @23837 has 9 MA's), (Start: 12 @23894 has 1 MA's), (Start: 13 @23897 has 1 MA's), (Start: 14 @23906 has 2 MA's), (15, 23912), (32, 24134), (33, 24185), (38, 24236), (44, 24317),

Gene: Rowa_39 Start: 26669, Stop: 27115, Start Num: 14
Candidate Starts for Rowa_39:
(Start: 14 @26669 has 2 MA's), (15, 26675), (34, 26957),

Gene: Samora_32 Start: 23469, Stop: 23831, Start Num: 23
Candidate Starts for Samora_32:
(20, 23457), (22, 23460), (Start: 23 @23469 has 6 MA's), (32, 23640), (34, 23700), (38, 23742),

Gene: Seabiscuit_76 Start: 46023, Stop: 45430, Start Num: 10
Candidate Starts for Seabiscuit_76:
(3, 46128), (Start: 9 @46026 has 1 MA's), (Start: 10 @46023 has 9 MA's), (21, 45912), (25, 45831), (41, 45501), (43, 45459),

Gene: Sebastisaurus_32 Start: 23688, Stop: 24116, Start Num: 12
Candidate Starts for Sebastisaurus_32:
(Start: 10 @23631 has 9 MA's), (Start: 12 @23688 has 1 MA's), (Start: 13 @23691 has 1 MA's), (Start: 14 @23700 has 2 MA's), (15, 23706), (32, 23928), (38, 24030), (44, 24111),

Gene: Shawty_30 Start: 23340, Stop: 23774, Start Num: 23
Candidate Starts for Shawty_30:
(20, 23328), (22, 23331), (Start: 23 @23340 has 6 MA's), (32, 23514), (34, 23574), (38, 23616), (41, 23643),

Gene: Snazzy_23 Start: 18265, Stop: 18765, Start Num: 8
Candidate Starts for Snazzy_23:
(Start: 8 @18265 has 7 MA's), (Start: 10 @18271 has 9 MA's), (24, 18427), (28, 18487), (37, 18667), (42, 18718),

Gene: SwissCheese_25 Start: 18840, Stop: 19334, Start Num: 10
Candidate Starts for SwissCheese_25:
(Start: 8 @18834 has 7 MA's), (Start: 10 @18840 has 9 MA's), (24, 18996), (28, 19056), (37, 19236), (42, 19287),

Gene: TG1_29 Start: 22916, Stop: 23344, Start Num: 23
Candidate Starts for TG1_29:
(19, 22892), (Start: 23 @22916 has 6 MA's), (31, 23063), (32, 23087), (38, 23189), (45, 23297),

Gene: Target_27 Start: 19834, Stop: 20334, Start Num: 8
Candidate Starts for Target_27:
(Start: 8 @19834 has 7 MA's), (Start: 10 @19840 has 9 MA's), (24, 19996), (28, 20056), (37, 20236), (42, 20287),

Gene: Trouble_25 Start: 19144, Stop: 19638, Start Num: 10
Candidate Starts for Trouble_25:
(Start: 8 @19138 has 7 MA's), (Start: 10 @19144 has 9 MA's), (24, 19300), (28, 19360), (37, 19540), (42, 19591),

Gene: Vash_30 Start: 22721, Stop: 23083, Start Num: 23
Candidate Starts for Vash_30:
(Start: 23 @22721 has 6 MA's), (32, 22892), (34, 22952), (38, 22994),

Gene: Wheeler_80 Start: 48775, Stop: 48179, Start Num: 9
Candidate Starts for Wheeler_80:
(3, 48877), (Start: 9 @48775 has 1 MA's), (Start: 10 @48772 has 9 MA's), (21, 48661), (25, 48580), (41, 48250), (43, 48208),

Gene: Wheeler_74 Start: 46185, Stop: 45562, Start Num: 5
Candidate Starts for Wheeler_74:
(1, 46296), (2, 46287), (4, 46194), (Start: 5 @46185 has 1 MA's), (6, 46173), (29, 45846), (35, 45687), (36, 45681), (40, 45627),

Gene: Zeeculate_24 Start: 19013, Stop: 19513, Start Num: 8
Candidate Starts for Zeeculate_24:
(Start: 8 @19013 has 7 MA's), (Start: 10 @19019 has 9 MA's), (24, 19175), (28, 19235), (37, 19415), (42, 19466),

Gene: phiBT1_7 Start: 24178, Stop: 24540, Start Num: 23
Candidate Starts for phiBT1_7:
(20, 24166), (22, 24169), (Start: 23 @24178 has 6 MA's), (32, 24349), (34, 24409), (38, 24451),