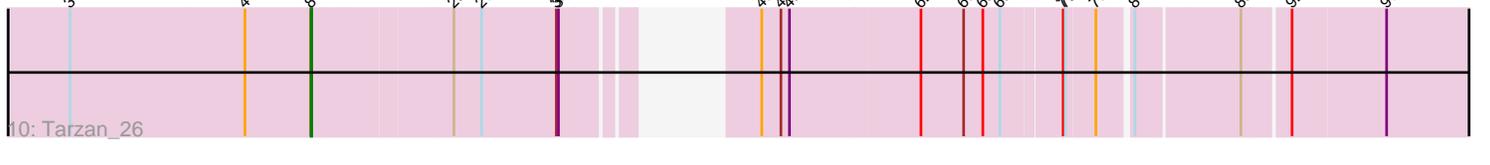
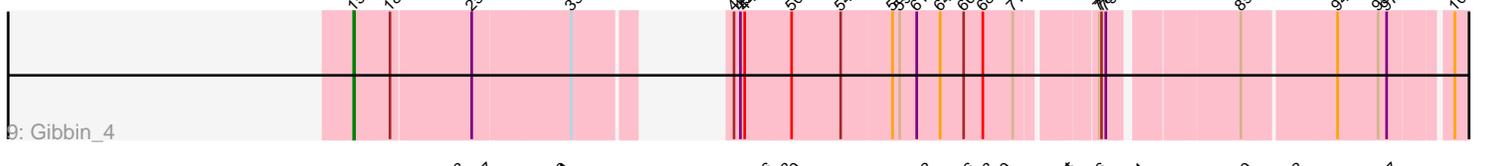
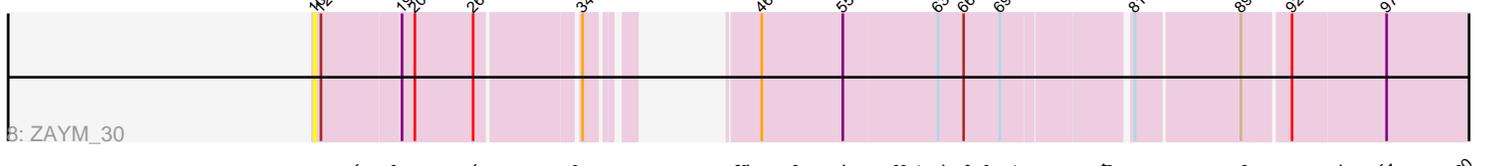
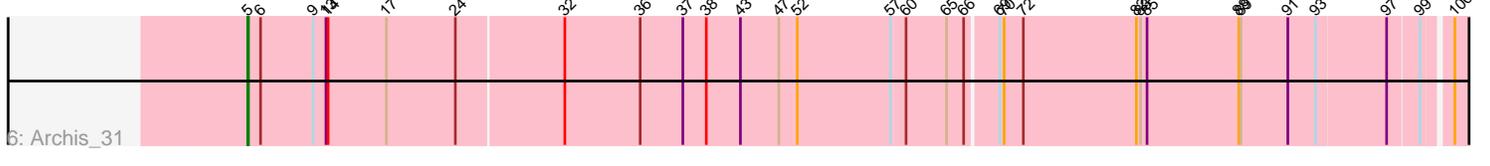
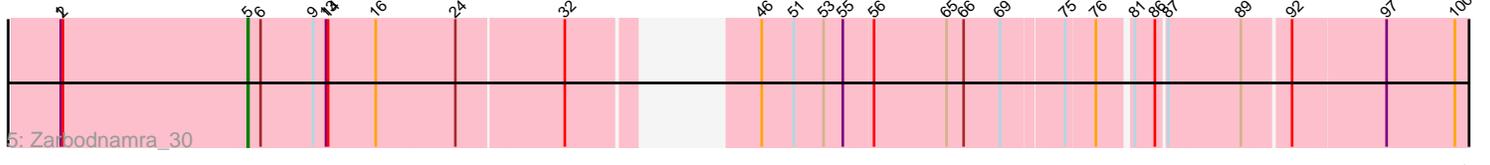
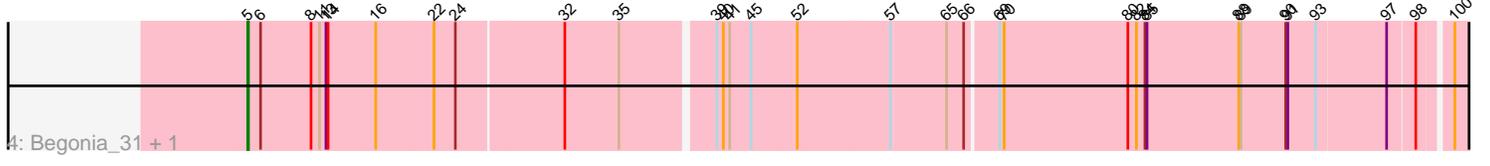
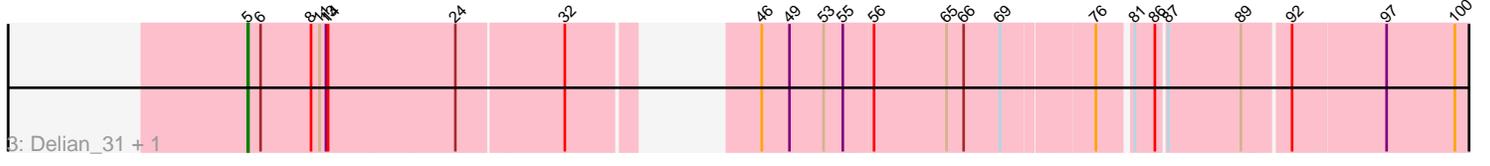
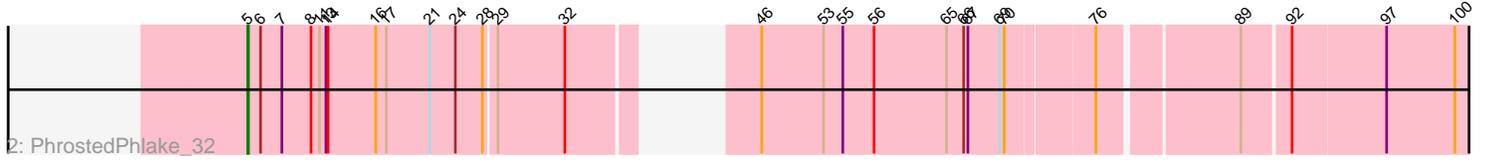


# Zoomed Pham 284363



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 284363 Report

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

Pham number 284363 has 12 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Hitter\_30
- Track 2 : PhrostedPhlake\_32
- Track 3 : Delian\_31, CaptainKirk2\_30
- Track 4 : Begonia\_31, Malachai\_31
- Track 5 : Zarbodnamra\_30
- Track 6 : Archis\_31
- Track 7 : TaronosaurusRx\_29
- Track 8 : ZAYM\_30
- Track 9 : Gibbin\_4
- Track 10 : Tarzan\_26

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

The start number called the most often in the published annotations is 5, it was called in 8 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Archis\_31, Begonia\_31, CaptainKirk2\_30, Delian\_31, Hitter\_30, Malachai\_31, PhrostedPhlake\_32, Zarbodnamra\_30,

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

- 

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

- Gibbin\_4, TaronosaurusRx\_29, Tarzan\_26, ZAYM\_30,

### **Summary by start number:**

Start 5:

- Found in 8 of 12 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 8 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Archis\_31 (CV), Begonia\_31 (CV), CaptainKirk2\_30 (CV), Delian\_31 (CV), Hitter\_30 (CV), Malachai\_31 (CV),

PhrostedPhlake\_32 (CV), Zarbodnamra\_30 (CV),

Start 8:

- Found in 7 of 12 ( 58.3% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Tarzan\_26 (DY),

Start 10:

- Found in 2 of 12 ( 16.7% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TaronosaurusRx\_29 (DB), ZAYM\_30 (DB),

Start 15:

- Found in 1 of 12 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gibbin\_4 (DV),

### **Summary by clusters:**

There are 4 clusters represented in this pham: DV, DB, CV, DY,

Info for manual annotations of cluster CV:

- Start number 5 was manually annotated 8 times for cluster CV.

Info for manual annotations of cluster DB:

- Start number 10 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DV:

- Start number 15 was manually annotated 1 time for cluster DV.

Info for manual annotations of cluster DY:

- Start number 8 was manually annotated 1 time for cluster DY.

### **Gene Information:**

Gene: Archis\_31 Start: 25439, Stop: 27490, Start Num: 5

Candidate Starts for Archis\_31:

(Start: 5 @25439 has 8 MA's), (6, 25457), (9, 25529), (13, 25547), (14, 25550), (17, 25631), (24, 25727), (32, 25871), (36, 25976), (37, 26036), (38, 26069), (43, 26117), (47, 26171), (52, 26195), (57, 26324), (60, 26342), (65, 26399), (66, 26423), (69, 26465), (70, 26471), (72, 26498), (82, 26657), (83, 26663), (85, 26672), (88, 26798), (89, 26801), (91, 26867), (93, 26906), (97, 27002), (99, 27044), (100, 27077), (101, 27113), (102, 27152), (114, 27437),

Gene: Begonia\_31 Start: 25691, Stop: 27724, Start Num: 5

Candidate Starts for Begonia\_31:

(Start: 5 @25691 has 8 MA's), (6, 25709), (Start: 8 @25778 has 1 MA's), (11, 25790), (13, 25799), (14, 25802), (16, 25868), (22, 25949), (24, 25979), (32, 26123), (35, 26198), (39, 26321), (40, 26330), (41,

26339), (45, 26366), (52, 26429), (57, 26558), (65, 26633), (66, 26657), (69, 26699), (70, 26705), (80, 26879), (82, 26891), (84, 26903), (85, 26906), (88, 27032), (89, 27035), (90, 27098), (91, 27101), (93, 27140), (97, 27236), (98, 27272), (100, 27311), (102, 27386), (113, 27665), (115, 27695),

Gene: CaptainKirk2\_30 Start: 25252, Stop: 27144, Start Num: 5

Candidate Starts for CaptainKirk2\_30:

(Start: 5 @25252 has 8 MA's), (6, 25270), (Start: 8 @25339 has 1 MA's), (11, 25351), (13, 25360), (14, 25363), (24, 25540), (32, 25684), (46, 25825), (49, 25864), (53, 25912), (55, 25939), (56, 25978), (65, 26080), (66, 26104), (69, 26155), (76, 26272), (81, 26314), (86, 26341), (87, 26350), (89, 26449), (92, 26509), (97, 26638), (100, 26734), (101, 26770), (104, 26833), (105, 26842), (106, 26887), (107, 26908), (109, 26983), (110, 27016), (112, 27076), (113, 27082), (116, 27118),

Gene: Delian\_31 Start: 25250, Stop: 27142, Start Num: 5

Candidate Starts for Delian\_31:

(Start: 5 @25250 has 8 MA's), (6, 25268), (Start: 8 @25337 has 1 MA's), (11, 25349), (13, 25358), (14, 25361), (24, 25538), (32, 25682), (46, 25823), (49, 25862), (53, 25910), (55, 25937), (56, 25976), (65, 26078), (66, 26102), (69, 26153), (76, 26270), (81, 26312), (86, 26339), (87, 26348), (89, 26447), (92, 26507), (97, 26636), (100, 26732), (101, 26768), (104, 26831), (105, 26840), (106, 26885), (107, 26906), (109, 26981), (110, 27014), (112, 27074), (113, 27080), (116, 27116),

Gene: Gibbin\_4 Start: 3409, Stop: 5115, Start Num: 15

Candidate Starts for Gibbin\_4:

(Start: 15 @3409 has 1 MA's), (18, 3457), (25, 3565), (33, 3700), (42, 3790), (43, 3799), (44, 3805), (50, 3868), (54, 3937), (58, 4006), (59, 4015), (61, 4039), (64, 4072), (66, 4105), (68, 4132), (71, 4174), (77, 4267), (78, 4270), (79, 4276), (89, 4438), (94, 4561), (95, 4615), (97, 4627), (100, 4702), (103, 4783), (108, 4942), (112, 5047), (114, 5059), (117, 5104),

Gene: Hitter\_30 Start: 25228, Stop: 27120, Start Num: 5

Candidate Starts for Hitter\_30:

(Start: 5 @25228 has 8 MA's), (6, 25246), (Start: 8 @25315 has 1 MA's), (11, 25327), (13, 25336), (14, 25339), (16, 25405), (24, 25516), (32, 25660), (52, 25825), (57, 25954), (65, 26029), (66, 26053), (69, 26095), (70, 26101), (73, 26158), (80, 26275), (83, 26293), (85, 26302), (88, 26428), (89, 26431), (90, 26494), (91, 26497), (93, 26536), (97, 26632), (99, 26674), (100, 26707), (101, 26743), (102, 26782), (113, 27061), (114, 27067),

Gene: Malachai\_31 Start: 25691, Stop: 27724, Start Num: 5

Candidate Starts for Malachai\_31:

(Start: 5 @25691 has 8 MA's), (6, 25709), (Start: 8 @25778 has 1 MA's), (11, 25790), (13, 25799), (14, 25802), (16, 25868), (22, 25949), (24, 25979), (32, 26123), (35, 26198), (39, 26321), (40, 26330), (41, 26339), (45, 26366), (52, 26429), (57, 26558), (65, 26633), (66, 26657), (69, 26699), (70, 26705), (80, 26879), (82, 26891), (84, 26903), (85, 26906), (88, 27032), (89, 27035), (90, 27098), (91, 27101), (93, 27140), (97, 27236), (98, 27272), (100, 27311), (102, 27386), (113, 27665), (115, 27695),

Gene: PhrostedPhlake\_32 Start: 25921, Stop: 27813, Start Num: 5

Candidate Starts for PhrostedPhlake\_32:

(Start: 5 @25921 has 8 MA's), (6, 25939), (7, 25969), (Start: 8 @26008 has 1 MA's), (11, 26020), (13, 26029), (14, 26032), (16, 26098), (17, 26113), (21, 26173), (24, 26209), (28, 26245), (29, 26260), (32, 26353), (46, 26494), (53, 26581), (55, 26608), (56, 26647), (65, 26749), (66, 26773), (67, 26779), (69, 26824), (70, 26830), (76, 26941), (89, 27118), (92, 27178), (97, 27307), (100, 27403), (101, 27439), (104, 27502), (105, 27511), (106, 27556), (109, 27652), (110, 27685), (112, 27745), (113, 27751), (116, 27787),

Gene: TaronosaurusRx\_29 Start: 24667, Stop: 26418, Start Num: 10

Candidate Starts for TaronosaurusRx\_29:

(Start: 10 @24667 has 1 MA's), (12, 24676), (19, 24781), (20, 24799), (26, 24880), (34, 25009), (46, 25099), (55, 25213), (63, 25342), (66, 25378), (69, 25429), (81, 25588), (89, 25723), (92, 25783), (96, 25903), (97, 25912), (101, 26044), (104, 26107), (105, 26116), (106, 26161), (109, 26257), (110, 26290), (111, 26332), (112, 26350), (113, 26356), (116, 26392),

Gene: Tarzan\_26 Start: 21313, Stop: 23103, Start Num: 8

Candidate Starts for Tarzan\_26:

(3, 20977), (4, 21220), (Start: 8 @21313 has 1 MA's), (23, 21499), (27, 21538), (30, 21643), (31, 21646), (46, 21784), (48, 21811), (49, 21823), (62, 22003), (66, 22063), (68, 22090), (69, 22114), (74, 22189), (75, 22192), (76, 22231), (81, 22273), (89, 22408), (92, 22468), (97, 22597), (101, 22729), (104, 22792), (106, 22846), (109, 22942), (110, 22975), (111, 23017), (112, 23035), (113, 23041), (116, 23077), (117, 23092),

Gene: ZAYM\_30 Start: 25127, Stop: 26878, Start Num: 10

Candidate Starts for ZAYM\_30:

(Start: 10 @25127 has 1 MA's), (12, 25136), (19, 25241), (20, 25259), (26, 25340), (34, 25469), (46, 25559), (55, 25673), (63, 25802), (66, 25838), (69, 25889), (81, 26048), (89, 26183), (92, 26243), (97, 26372), (101, 26504), (104, 26567), (105, 26576), (106, 26621), (110, 26750), (112, 26810), (113, 26816), (116, 26852),

Gene: Zarbodnamra\_30 Start: 25272, Stop: 27164, Start Num: 5

Candidate Starts for Zarbodnamra\_30:

(1, 25014), (2, 25017), (Start: 5 @25272 has 8 MA's), (6, 25290), (9, 25362), (13, 25380), (14, 25383), (16, 25449), (24, 25560), (32, 25704), (46, 25845), (51, 25890), (53, 25932), (55, 25959), (56, 25998), (65, 26100), (66, 26124), (69, 26175), (75, 26253), (76, 26292), (81, 26334), (86, 26361), (87, 26370), (89, 26469), (92, 26529), (97, 26658), (100, 26754), (101, 26790), (104, 26853), (105, 26862), (106, 26907), (107, 26928), (109, 27003), (110, 27036), (112, 27096), (113, 27102), (116, 27138),