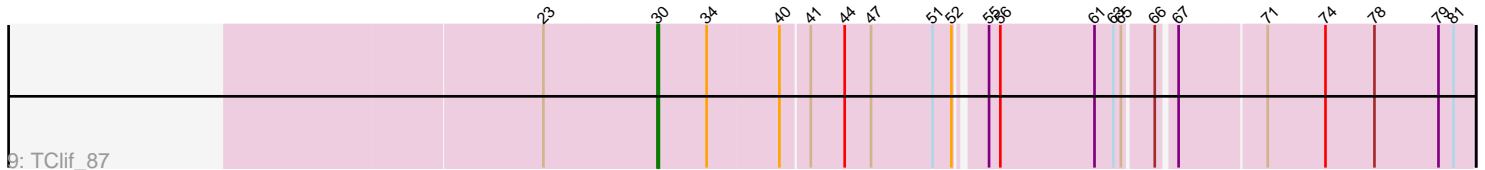
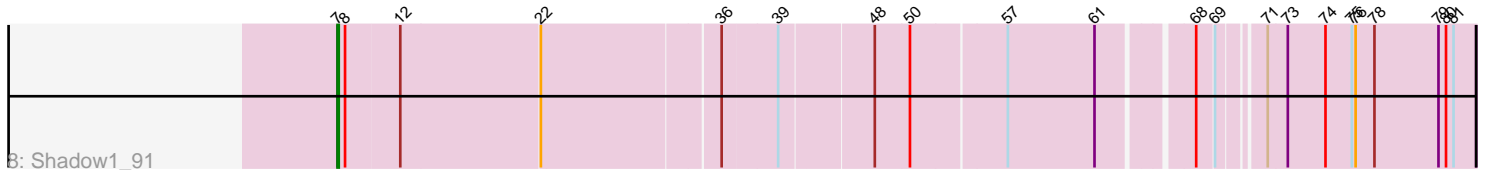
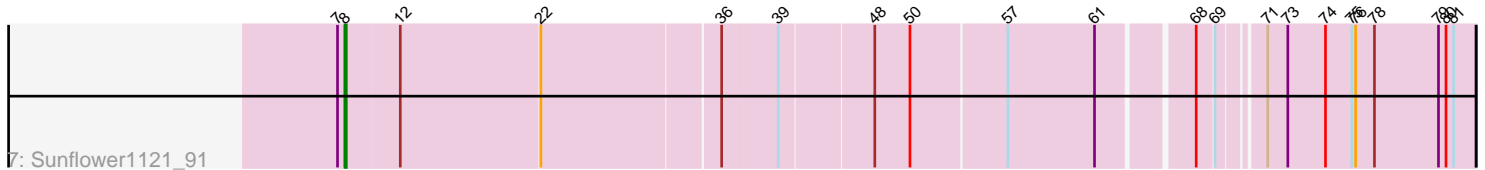
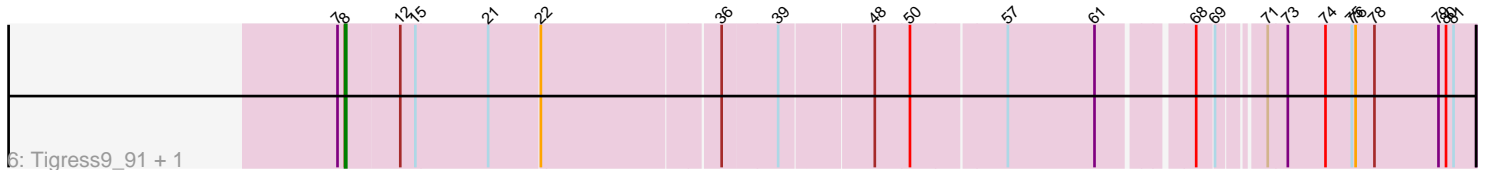
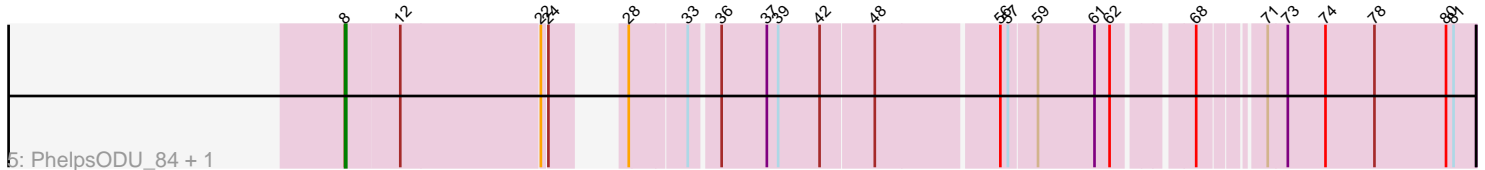
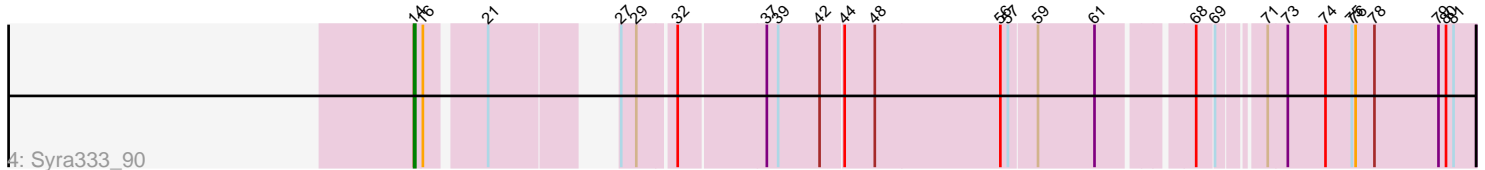
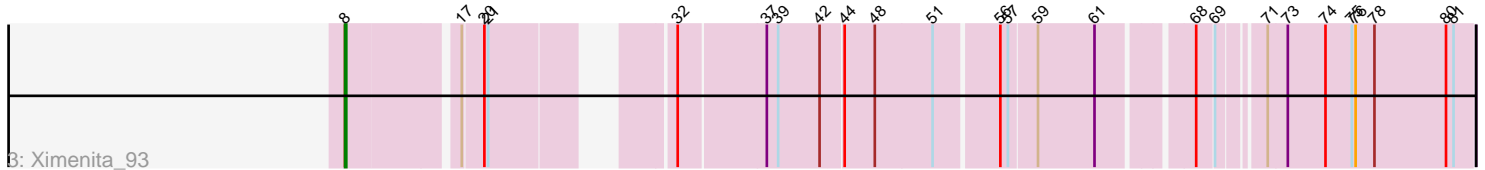
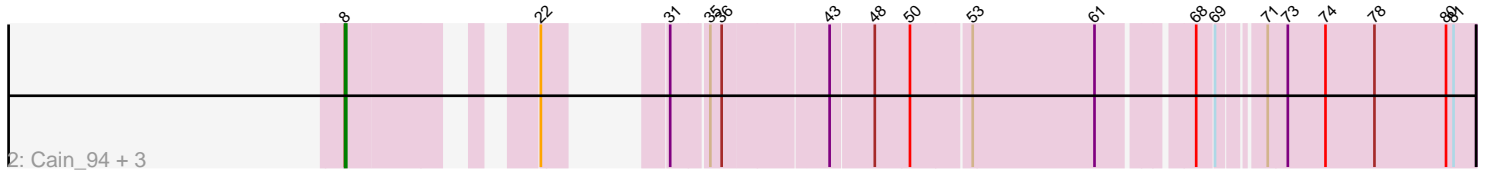
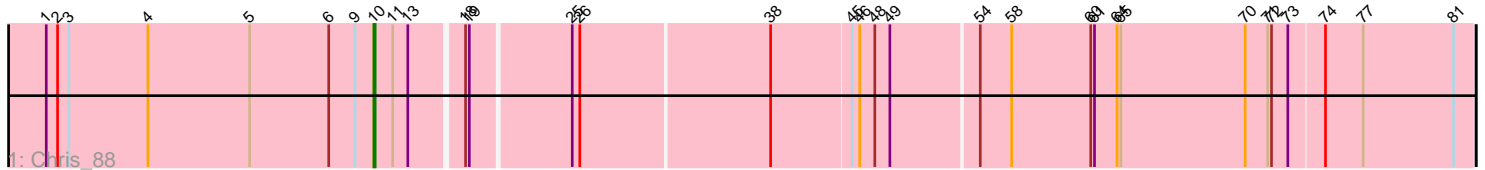


# Pham 305415



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 305415 Report

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

Pham number 305415 has 14 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Chris\_88
- Track 2 : Cain\_94, Phrank\_94, Bryler\_86, Tierra\_94
- Track 3 : Ximenita\_93
- Track 4 : Syra333\_90
- Track 5 : PhelpsODU\_84, Unicorn\_94
- Track 6 : Tigress9\_91, Krueger\_91
- Track 7 : Sunflower1121\_91
- Track 8 : Shadow1\_91
- Track 9 : TClif\_87

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

The start number called the most often in the published annotations is 8, it was called in 10 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bryler\_86, Cain\_94, Krueger\_91, PhelpsODU\_84, Phrank\_94, Sunflower1121\_91, Tierra\_94, Tigress9\_91, Unicorn\_94, Ximenita\_93,

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

- Shadow1\_91,

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

- Chris\_88, Syra333\_90, TClif\_87,

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

Start 7:

- Found in 4 of 14 ( 28.6% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Shadow1\_91 (K6),

Start 8:

- Found in 11 of 14 ( 78.6% ) of genes in pham
- Manual Annotations of this start: 10 of 14
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Bryler\_86 (K6), Cain\_94 (K6), Krueger\_91 (K6), PhelpsODU\_84 (K6), Phrank\_94 (K6), Sunflower1121\_91 (K6), Tierra\_94 (K6), Tigress9\_91 (K6), Unicorn\_94 (K6), Ximenita\_93 (K6),

#### Start 10:

- Found in 1 of 14 ( 7.1% ) 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: Chris\_88 (K1),

#### Start 14:

- Found in 1 of 14 ( 7.1% ) 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: Syra333\_90 (K6),

#### Start 30:

- Found in 1 of 14 ( 7.1% ) 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: TClif\_87 (K6),

### **Summary by clusters:**

There are 2 clusters represented in this pham: K1, K6,

Info for manual annotations of cluster K1:

- Start number 10 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K6:

- Start number 7 was manually annotated 1 time for cluster K6.
- Start number 8 was manually annotated 10 times for cluster K6.
- Start number 14 was manually annotated 1 time for cluster K6.
- Start number 30 was manually annotated 1 time for cluster K6.

### **Gene Information:**

Gene: Bryler\_86 Start: 53452, Stop: 54183, Start Num: 8

Candidate Starts for Bryler\_86:

(Start: 8 @53452 has 10 MA's), (22, 53560), (31, 53599), (35, 53626), (36, 53635), (43, 53713), (48, 53746), (50, 53773), (53, 53818), (61, 53914), (68, 53977), (69, 53989), (71, 54019), (73, 54034), (74, 54064), (78, 54103), (80, 54160), (81, 54166),

Gene: Cain\_94 Start: 56599, Stop: 57330, Start Num: 8

Candidate Starts for Cain\_94:

(Start: 8 @56599 has 10 MA's), (22, 56707), (31, 56746), (35, 56773), (36, 56782), (43, 56860), (48, 56893), (50, 56920), (53, 56965), (61, 57061), (68, 57124), (69, 57136), (71, 57166), (73, 57181), (74, 57211), (78, 57250), (80, 57307), (81, 57313),

Gene: Chris\_88 Start: 55802, Stop: 56641, Start Num: 10

Candidate Starts for Chris\_88:

(1, 55541), (2, 55550), (3, 55559), (4, 55622), (5, 55703), (6, 55766), (9, 55787), (Start: 10 @55802 has 1 MA's), (11, 55817), (13, 55829), (18, 55868), (19, 55871), (25, 55946), (26, 55952), (38, 56099), (45, 56159), (46, 56165), (48, 56177), (49, 56189), (54, 56255), (58, 56279), (60, 56342), (61, 56345), (64, 56363), (65, 56366), (70, 56465), (71, 56483), (72, 56486), (73, 56498), (74, 56525), (77, 56555), (81, 56627),

Gene: Krueger\_91 Start: 55693, Stop: 56526, Start Num: 8

Candidate Starts for Krueger\_91:

(Start: 7 @55687 has 1 MA's), (Start: 8 @55693 has 10 MA's), (12, 55735), (15, 55747), (21, 55804), (22, 55843), (36, 55978), (39, 56020), (48, 56089), (50, 56116), (57, 56188), (61, 56257), (68, 56320), (69, 56332), (71, 56362), (73, 56377), (74, 56407), (75, 56428), (76, 56431), (78, 56446), (79, 56497), (80, 56503), (81, 56509),

Gene: PhelpsODU\_84 Start: 52304, Stop: 53098, Start Num: 8

Candidate Starts for PhelpsODU\_84:

(Start: 8 @52304 has 10 MA's), (12, 52346), (22, 52454), (24, 52457), (28, 52484), (33, 52526), (36, 52547), (37, 52583), (39, 52592), (42, 52625), (48, 52664), (56, 52757), (57, 52763), (59, 52784), (61, 52829), (62, 52841), (68, 52892), (71, 52934), (73, 52949), (74, 52979), (78, 53018), (80, 53075), (81, 53081),

Gene: Phrank\_94 Start: 56586, Stop: 57317, Start Num: 8

Candidate Starts for Phrank\_94:

(Start: 8 @56586 has 10 MA's), (22, 56694), (31, 56733), (35, 56760), (36, 56769), (43, 56847), (48, 56880), (50, 56907), (53, 56952), (61, 57048), (68, 57111), (69, 57123), (71, 57153), (73, 57168), (74, 57198), (78, 57237), (80, 57294), (81, 57300),

Gene: Shadow1\_91 Start: 55827, Stop: 56666, Start Num: 7

Candidate Starts for Shadow1\_91:

(Start: 7 @55827 has 1 MA's), (Start: 8 @55833 has 10 MA's), (12, 55875), (22, 55983), (36, 56118), (39, 56160), (48, 56229), (50, 56256), (57, 56328), (61, 56397), (68, 56460), (69, 56472), (71, 56502), (73, 56517), (74, 56547), (75, 56568), (76, 56571), (78, 56586), (79, 56637), (80, 56643), (81, 56649),

Gene: Sunflower1121\_91 Start: 55592, Stop: 56425, Start Num: 8

Candidate Starts for Sunflower1121\_91:

(Start: 7 @55586 has 1 MA's), (Start: 8 @55592 has 10 MA's), (12, 55634), (22, 55742), (36, 55877), (39, 55919), (48, 55988), (50, 56015), (57, 56087), (61, 56156), (68, 56219), (69, 56231), (71, 56261), (73, 56276), (74, 56306), (75, 56327), (76, 56330), (78, 56345), (79, 56396), (80, 56402), (81, 56408),

Gene: Syra333\_90 Start: 55739, Stop: 56482, Start Num: 14

Candidate Starts for Syra333\_90:

(Start: 14 @55739 has 1 MA's), (16, 55745), (21, 55787), (27, 55856), (29, 55868), (32, 55895), (37, 55961), (39, 55970), (42, 56003), (44, 56018), (48, 56042), (56, 56141), (57, 56147), (59, 56168), (61, 56213), (68, 56276), (69, 56288), (71, 56318), (73, 56333), (74, 56363), (75, 56384), (76, 56387), (78, 56402), (79, 56453), (80, 56459), (81, 56465),

Gene: TClif\_87 Start: 55031, Stop: 55636, Start Num: 30

Candidate Starts for TClif\_87:

(23, 54941), (Start: 30 @55031 has 1 MA's), (34, 55070), (40, 55124), (41, 55145), (44, 55172), (47, 55193), (51, 55241), (52, 55256), (55, 55274), (56, 55283), (61, 55358), (63, 55373), (65, 55379), (66, 55400), (67, 55412), (71, 55475), (74, 55520), (78, 55559), (79, 55610), (81, 55622),

Gene: Tierra\_94 Start: 57212, Stop: 57943, Start Num: 8

Candidate Starts for Tierra\_94:

(Start: 8 @57212 has 10 MA's), (22, 57320), (31, 57359), (35, 57386), (36, 57395), (43, 57473), (48, 57506), (50, 57533), (53, 57578), (61, 57674), (68, 57737), (69, 57749), (71, 57779), (73, 57794), (74, 57824), (78, 57863), (80, 57920), (81, 57926),

Gene: Tigress9\_91 Start: 56021, Stop: 56854, Start Num: 8

Candidate Starts for Tigress9\_91:

(Start: 7 @56015 has 1 MA's), (Start: 8 @56021 has 10 MA's), (12, 56063), (15, 56075), (21, 56132), (22, 56171), (36, 56306), (39, 56348), (48, 56417), (50, 56444), (57, 56516), (61, 56585), (68, 56648), (69, 56660), (71, 56690), (73, 56705), (74, 56735), (75, 56756), (76, 56759), (78, 56774), (79, 56825), (80, 56831), (81, 56837),

Gene: Unicorn\_94 Start: 56932, Stop: 57726, Start Num: 8

Candidate Starts for Unicorn\_94:

(Start: 8 @56932 has 10 MA's), (12, 56974), (22, 57082), (24, 57085), (28, 57112), (33, 57154), (36, 57175), (37, 57211), (39, 57220), (42, 57253), (48, 57292), (56, 57385), (57, 57391), (59, 57412), (61, 57457), (62, 57469), (68, 57520), (71, 57562), (73, 57577), (74, 57607), (78, 57646), (80, 57703), (81, 57709),

Gene: Ximenita\_93 Start: 56440, Stop: 57225, Start Num: 8

Candidate Starts for Ximenita\_93:

(Start: 8 @56440 has 10 MA's), (17, 56521), (20, 56536), (21, 56539), (32, 56647), (37, 56713), (39, 56722), (42, 56755), (44, 56770), (48, 56794), (51, 56839), (56, 56887), (57, 56893), (59, 56914), (61, 56959), (68, 57022), (69, 57034), (71, 57064), (73, 57079), (74, 57109), (75, 57130), (76, 57133), (78, 57148), (80, 57205), (81, 57211),