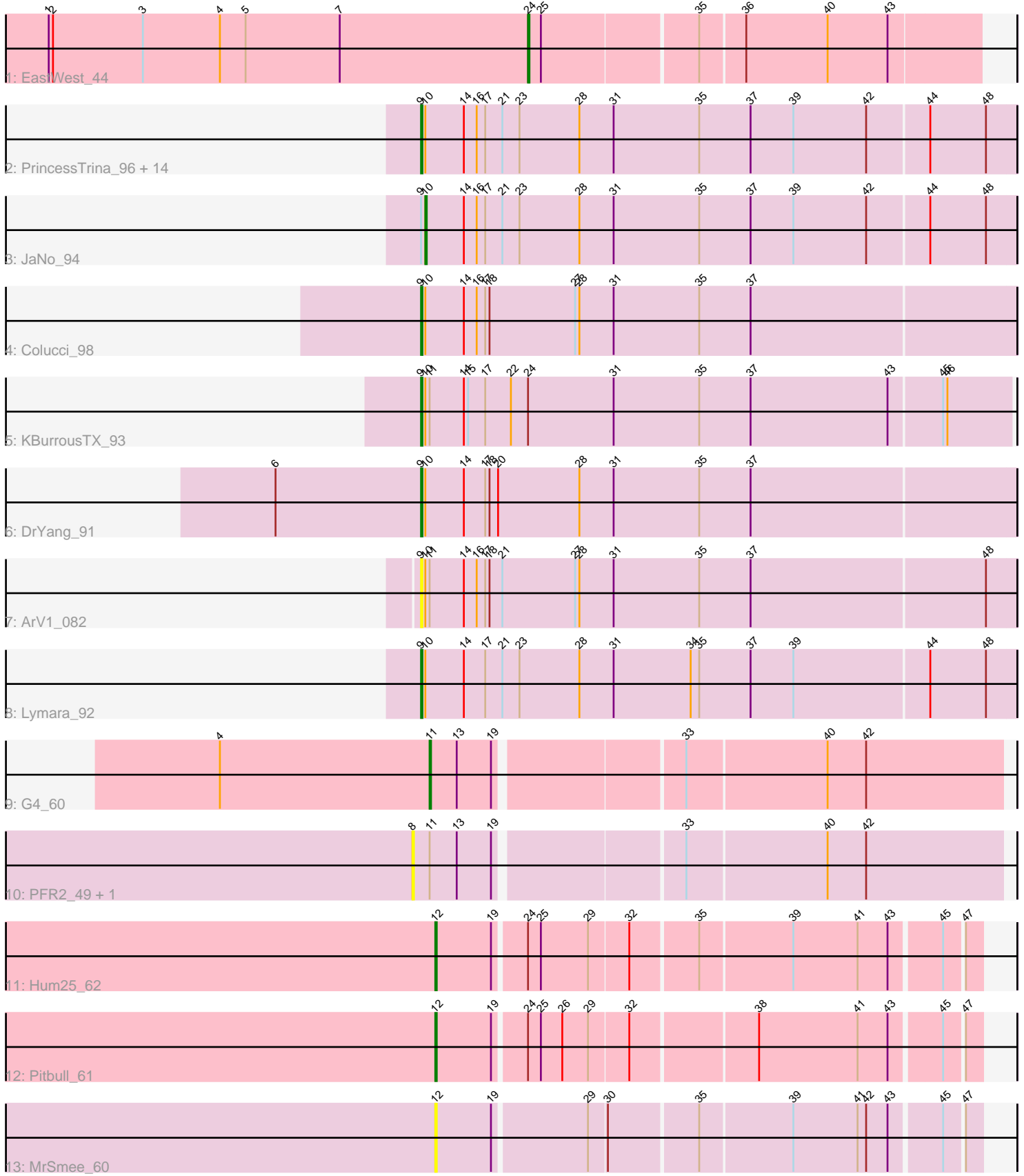


# Pham 194266



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 194266 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194266 has 28 members, 5 are drafts.

Phages represented in each track:

- Track 1 : EastWest\_44
- Track 2 : PrincessTrina\_96, Mordred\_95, HumptyDumpty\_95, Tophat\_96, JayCookie\_95, Chubster\_95, RosiePosie\_95, Conboy\_93, EdgarPoe\_94, Linus\_95, Chocolat\_95, MoyaNatalis\_94, Kabreeze\_95, Chipper1996\_960, Scavito\_96
- Track 3 : JaNo\_94
- Track 4 : Colucci\_98
- Track 5 : KBurrousTX\_93
- Track 6 : DrYang\_91
- Track 7 : ArV1\_082
- Track 8 : Lymara\_92
- Track 9 : G4\_60
- Track 10 : PFR2\_49, PFR1\_47
- Track 11 : Hum25\_62
- Track 12 : Pitbull\_61
- Track 13 : MrSmee\_60

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

The start number called the most often in the published annotations is 9, it was called in 18 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArV1\_082, Chipper1996\_960, Chocolat\_95, Chubster\_95, Colucci\_98, Conboy\_93, DrYang\_91, EdgarPoe\_94, HumptyDumpty\_95, JayCookie\_95, KBurrousTX\_93, Kabreeze\_95, Linus\_95, Lymara\_92, Mordred\_95, MoyaNatalis\_94, PrincessTrina\_96, RosiePosie\_95, Scavito\_96, Tophat\_96,

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

- JaNo\_94,

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

- EastWest\_44, G4\_60, Hum25\_62, MrSmee\_60, PFR1\_47, PFR2\_49, Pitbull\_61,

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

Start 8:

- Found in 2 of 28 ( 7.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PFR1\_47 (BX), PFR2\_49 (BX),

Start 9:

- Found in 21 of 28 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 18 of 23
- Called 95.2% of time when present
- Phage (with cluster) where this start called: ArV1\_082 (AR), Chipper1996\_960 (AR), Chocolat\_95 (AR), Chubster\_95 (AR), Colucci\_98 (AR), Conboy\_93 (AR), DrYang\_91 (AR), EdgarPoe\_94 (AR), HumptyDumpty\_95 (AR), JayCookie\_95 (AR), KBurrousTX\_93 (AR), Kabreeze\_95 (AR), Linus\_95 (AR), Lymara\_92 (AR), Mordred\_95 (AR), MoyaNatalis\_94 (AR), PrincessTrina\_96 (AR), RosiePosie\_95 (AR), Scavito\_96 (AR), Tophat\_96 (AR),

Start 10:

- Found in 21 of 28 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 4.8% of time when present
- Phage (with cluster) where this start called: JaNo\_94 (AR),

Start 11:

- Found in 5 of 28 ( 17.9% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 20.0% of time when present
- Phage (with cluster) where this start called: G4\_60 (BW),

Start 12:

- Found in 3 of 28 ( 10.7% ) 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: Hum25\_62 (FQ), MrSmee\_60 (UNK), Pitbull\_61 (FQ),

Start 24:

- Found in 4 of 28 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 25.0% of time when present
- Phage (with cluster) where this start called: EastWest\_44 (AO),

**Summary by clusters:**

There are 6 clusters represented in this pham: FQ, AO, BW, UNK, BX, AR,

Info for manual annotations of cluster AO:

- Start number 24 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AR:

- Start number 9 was manually annotated 18 times for cluster AR.
- Start number 10 was manually annotated 1 time for cluster AR.

Info for manual annotations of cluster BW:

- Start number 11 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster FQ:

- Start number 12 was manually annotated 2 times for cluster FQ.

### **Gene Information:**

Gene: ArV1\_082 Start: 60520, Stop: 60933, Start Num: 9

Candidate Starts for ArV1\_082:

(Start: 9 @60520 has 18 MA's), (Start: 10 @60523 has 1 MA's), (Start: 11 @60526 has 1 MA's), (14, 60550), (16, 60559), (17, 60565), (18, 60568), (21, 60577), (27, 60628), (28, 60631), (31, 60655), (35, 60715), (37, 60751), (48, 60913),

Gene: Chipper1996\_960 Start: 62228, Stop: 62641, Start Num: 9

Candidate Starts for Chipper1996\_960:

(Start: 9 @62228 has 18 MA's), (Start: 10 @62231 has 1 MA's), (14, 62258), (16, 62267), (17, 62273), (21, 62285), (23, 62297), (28, 62339), (31, 62363), (35, 62423), (37, 62459), (39, 62489), (42, 62540), (44, 62582), (48, 62621),

Gene: Chocolat\_95 Start: 61935, Stop: 62348, Start Num: 9

Candidate Starts for Chocolat\_95:

(Start: 9 @61935 has 18 MA's), (Start: 10 @61938 has 1 MA's), (14, 61965), (16, 61974), (17, 61980), (21, 61992), (23, 62004), (28, 62046), (31, 62070), (35, 62130), (37, 62166), (39, 62196), (42, 62247), (44, 62289), (48, 62328),

Gene: Chubster\_95 Start: 62175, Stop: 62588, Start Num: 9

Candidate Starts for Chubster\_95:

(Start: 9 @62175 has 18 MA's), (Start: 10 @62178 has 1 MA's), (14, 62205), (16, 62214), (17, 62220), (21, 62232), (23, 62244), (28, 62286), (31, 62310), (35, 62370), (37, 62406), (39, 62436), (42, 62487), (44, 62529), (48, 62568),

Gene: Colucci\_98 Start: 62563, Stop: 62976, Start Num: 9

Candidate Starts for Colucci\_98:

(Start: 9 @62563 has 18 MA's), (Start: 10 @62566 has 1 MA's), (14, 62593), (16, 62602), (17, 62608), (18, 62611), (27, 62671), (28, 62674), (31, 62698), (35, 62758), (37, 62794),

Gene: Conboy\_93 Start: 61684, Stop: 62097, Start Num: 9

Candidate Starts for Conboy\_93:

(Start: 9 @61684 has 18 MA's), (Start: 10 @61687 has 1 MA's), (14, 61714), (16, 61723), (17, 61729), (21, 61741), (23, 61753), (28, 61795), (31, 61819), (35, 61879), (37, 61915), (39, 61945), (42, 61996), (44, 62038), (48, 62077),

Gene: DrYang\_91 Start: 61721, Stop: 62134, Start Num: 9

Candidate Starts for DrYang\_91:

(6, 61619), (Start: 9 @61721 has 18 MA's), (Start: 10 @61724 has 1 MA's), (14, 61751), (17, 61766), (18, 61769), (20, 61775), (28, 61832), (31, 61856), (35, 61916), (37, 61952),

Gene: EastWest\_44 Start: 33743, Stop: 34048, Start Num: 24

Candidate Starts for EastWest\_44:

(1, 33407), (2, 33410), (3, 33473), (4, 33527), (5, 33545), (7, 33611), (Start: 24 @33743 has 1 MA's), (25, 33752), (35, 33857), (36, 33887), (40, 33944), (43, 33986),

Gene: EdgarPoe\_94 Start: 62092, Stop: 62505, Start Num: 9

Candidate Starts for EdgarPoe\_94:

(Start: 9 @62092 has 18 MA's), (Start: 10 @62095 has 1 MA's), (14, 62122), (16, 62131), (17, 62137), (21, 62149), (23, 62161), (28, 62203), (31, 62227), (35, 62287), (37, 62323), (39, 62353), (42, 62404), (44, 62446), (48, 62485),

Gene: G4\_60 Start: 34029, Stop: 34412, Start Num: 11

Candidate Starts for G4\_60:

(4, 33882), (Start: 11 @34029 has 1 MA's), (13, 34047), (19, 34071), (33, 34194), (40, 34290), (42, 34317),

Gene: Hum25\_62 Start: 35736, Stop: 36095, Start Num: 12

Candidate Starts for Hum25\_62:

(Start: 12 @35736 has 2 MA's), (19, 35775), (Start: 24 @35796 has 1 MA's), (25, 35805), (29, 35838), (32, 35865), (35, 35910), (39, 35973), (41, 36018), (43, 36039), (45, 36072), (47, 36084),

Gene: HumptyDumpty\_95 Start: 61895, Stop: 62308, Start Num: 9

Candidate Starts for HumptyDumpty\_95:

(Start: 9 @61895 has 18 MA's), (Start: 10 @61898 has 1 MA's), (14, 61925), (16, 61934), (17, 61940), (21, 61952), (23, 61964), (28, 62006), (31, 62030), (35, 62090), (37, 62126), (39, 62156), (42, 62207), (44, 62249), (48, 62288),

Gene: JaNo\_94 Start: 61869, Stop: 62279, Start Num: 10

Candidate Starts for JaNo\_94:

(Start: 9 @61866 has 18 MA's), (Start: 10 @61869 has 1 MA's), (14, 61896), (16, 61905), (17, 61911), (21, 61923), (23, 61935), (28, 61977), (31, 62001), (35, 62061), (37, 62097), (39, 62127), (42, 62178), (44, 62220), (48, 62259),

Gene: JayCookie\_95 Start: 62428, Stop: 62841, Start Num: 9

Candidate Starts for JayCookie\_95:

(Start: 9 @62428 has 18 MA's), (Start: 10 @62431 has 1 MA's), (14, 62458), (16, 62467), (17, 62473), (21, 62485), (23, 62497), (28, 62539), (31, 62563), (35, 62623), (37, 62659), (39, 62689), (42, 62740), (44, 62782), (48, 62821),

Gene: KBurrousTX\_93 Start: 63304, Stop: 63714, Start Num: 9

Candidate Starts for KBurrousTX\_93:

(Start: 9 @63304 has 18 MA's), (Start: 10 @63307 has 1 MA's), (Start: 11 @63310 has 1 MA's), (14, 63334), (15, 63337), (17, 63349), (22, 63367), (Start: 24 @63379 has 1 MA's), (31, 63439), (35, 63499), (37, 63535), (43, 63631), (45, 63667), (46, 63670),

Gene: Kabreeze\_95 Start: 61952, Stop: 62365, Start Num: 9

Candidate Starts for Kabreeze\_95:

(Start: 9 @61952 has 18 MA's), (Start: 10 @61955 has 1 MA's), (14, 61982), (16, 61991), (17, 61997), (21, 62009), (23, 62021), (28, 62063), (31, 62087), (35, 62147), (37, 62183), (39, 62213), (42, 62264), (44, 62306), (48, 62345),

Gene: Linus\_95 Start: 62400, Stop: 62813, Start Num: 9

Candidate Starts for Linus\_95:

(Start: 9 @62400 has 18 MA's), (Start: 10 @62403 has 1 MA's), (14, 62430), (16, 62439), (17, 62445), (21, 62457), (23, 62469), (28, 62511), (31, 62535), (35, 62595), (37, 62631), (39, 62661), (42, 62712), (44, 62754), (48, 62793),

Gene: Lymara\_92 Start: 60859, Stop: 61272, Start Num: 9

Candidate Starts for Lymara\_92:

(Start: 9 @60859 has 18 MA's), (Start: 10 @60862 has 1 MA's), (14, 60889), (17, 60904), (21, 60916), (23, 60928), (28, 60970), (31, 60994), (34, 61048), (35, 61054), (37, 61090), (39, 61120), (44, 61213), (48, 61252),

Gene: Mordred\_95 Start: 61991, Stop: 62404, Start Num: 9

Candidate Starts for Mordred\_95:

(Start: 9 @61991 has 18 MA's), (Start: 10 @61994 has 1 MA's), (14, 62021), (16, 62030), (17, 62036), (21, 62048), (23, 62060), (28, 62102), (31, 62126), (35, 62186), (37, 62222), (39, 62252), (42, 62303), (44, 62345), (48, 62384),

Gene: MoyaNatalis\_94 Start: 61874, Stop: 62287, Start Num: 9

Candidate Starts for MoyaNatalis\_94:

(Start: 9 @61874 has 18 MA's), (Start: 10 @61877 has 1 MA's), (14, 61904), (16, 61913), (17, 61919), (21, 61931), (23, 61943), (28, 61985), (31, 62009), (35, 62069), (37, 62105), (39, 62135), (42, 62186), (44, 62228), (48, 62267),

Gene: MrSmee\_60 Start: 35393, Stop: 35752, Start Num: 12

Candidate Starts for MrSmee\_60:

(Start: 12 @35393 has 2 MA's), (19, 35432), (29, 35495), (30, 35507), (35, 35567), (39, 35630), (41, 35675), (42, 35681), (43, 35696), (45, 35729), (47, 35741),

Gene: PFR1\_47 Start: 32984, Stop: 33379, Start Num: 8

Candidate Starts for PFR1\_47:

(8, 32984), (Start: 11 @32996 has 1 MA's), (13, 33014), (19, 33038), (33, 33161), (40, 33257), (42, 33284),

Gene: PFR2\_49 Start: 34553, Stop: 34948, Start Num: 8

Candidate Starts for PFR2\_49:

(8, 34553), (Start: 11 @34565 has 1 MA's), (13, 34583), (19, 34607), (33, 34730), (40, 34826), (42, 34853),

Gene: Pitbull\_61 Start: 34580, Stop: 34939, Start Num: 12

Candidate Starts for Pitbull\_61:

(Start: 12 @34580 has 2 MA's), (19, 34619), (Start: 24 @34640 has 1 MA's), (25, 34649), (26, 34664), (29, 34682), (32, 34709), (38, 34793), (41, 34862), (43, 34883), (45, 34916), (47, 34928),

Gene: PrincessTrina\_96 Start: 62182, Stop: 62595, Start Num: 9

Candidate Starts for PrincessTrina\_96:

(Start: 9 @62182 has 18 MA's), (Start: 10 @62185 has 1 MA's), (14, 62212), (16, 62221), (17, 62227), (21, 62239), (23, 62251), (28, 62293), (31, 62317), (35, 62377), (37, 62413), (39, 62443), (42, 62494), (44, 62536), (48, 62575),

Gene: RosiePosie\_95 Start: 62047, Stop: 62460, Start Num: 9

Candidate Starts for RosiePosie\_95:

(Start: 9 @62047 has 18 MA's), (Start: 10 @62050 has 1 MA's), (14, 62077), (16, 62086), (17, 62092), (21, 62104), (23, 62116), (28, 62158), (31, 62182), (35, 62242), (37, 62278), (39, 62308), (42, 62359), (44, 62401), (48, 62440),

Gene: Scavito\_96 Start: 62040, Stop: 62453, Start Num: 9

Candidate Starts for Scavito\_96:

(Start: 9 @62040 has 18 MA's), (Start: 10 @62043 has 1 MA's), (14, 62070), (16, 62079), (17, 62085), (21, 62097), (23, 62109), (28, 62151), (31, 62175), (35, 62235), (37, 62271), (39, 62301), (42, 62352), (44, 62394), (48, 62433),

Gene: Tophat\_96 Start: 62229, Stop: 62642, Start Num: 9

Candidate Starts for Tophat\_96:

(Start: 9 @62229 has 18 MA's), (Start: 10 @62232 has 1 MA's), (14, 62259), (16, 62268), (17, 62274), (21, 62286), (23, 62298), (28, 62340), (31, 62364), (35, 62424), (37, 62460), (39, 62490), (42, 62541), (44, 62583), (48, 62622),