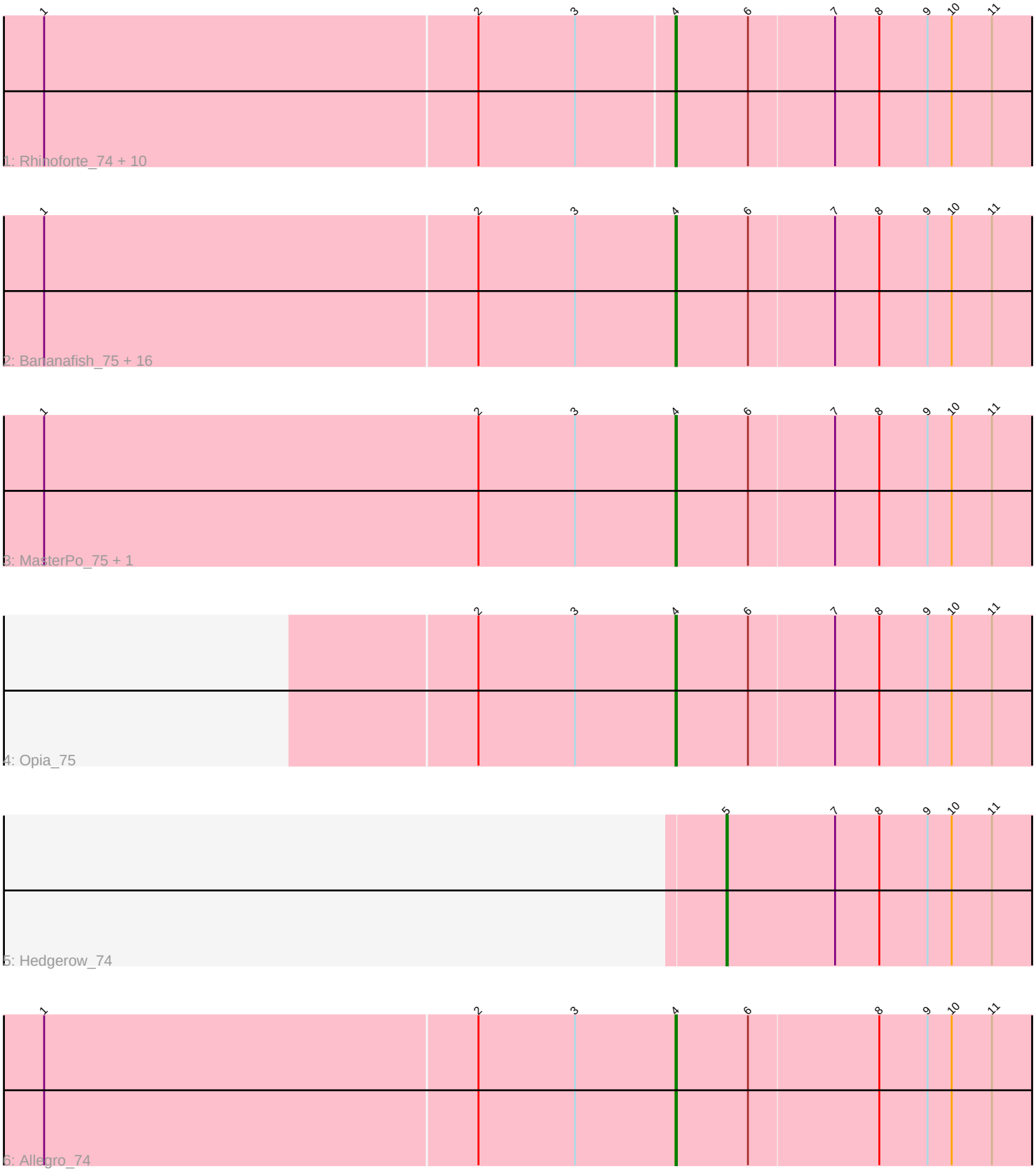
# Pham 86132


1 2 3 4 6 7 8 9 10 11
1: Rhinoforte_74 + 10
1 2 3 4 6 7 8 9 10 11
2: Bananafish_75 + 16
1 2 3 4 6 7 8 9 10 11
3: MasterPo_75 + 1
2 3 4 6 7 8 9 10 11
4: Opia_75
5 7 8 9 10 11
5: Hedgerow_74
1 2 3 4 6 8 9 10 11
6: Allegro_74

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 86132 Report

This analysis was run 04/28/24 on database version 559.

Pham number 86132 has 33 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Rhinoforte_74, Kheth_74, Rosebush_72, ItsyBitsy1_72, Tinciduntsolum_75, Blocker23_74, Holeinone_74, Brownie5_74, Kaleb_75, Boyle_74, Coffee_74
• Track 2 : Bananafish_75, Faze9_73, Tres_74, Lars_75, Godines_75, Ares_74, Calamitous_75, Phantasmagoria_73, FrenchFry_75, Laurie_75, Glass_76, Eaglehorse_74, TA17A_74, West99_74, LizLemon_74, Sabella_74, Arbiter_71
• Track 3 : MasterPo_75, Lephleur_74
• Track 4 : Opia_75
• Track 5 : Hedgerow_74
• Track 6 : Allegro_74

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

The start number called the most often in the published annotations is 4, it was called in 30 of the 31 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Allegro_74, Arbiter_71, Ares_74, Bananafish_75, Blocker23_74, Boyle_74, Brownie5_74, Calamitous_75, Coffee_74, Eaglehorse_74, Faze9_73, FrenchFry_75, Glass_76, Godines_75, Holeinone_74, ItsyBitsy1_72, Kaleb_75, Kheth_74, Lars_75, Laurie_75, Lephleur_74, LizLemon_74, MasterPo_75, Opia_75, Phantasmagoria_73, Rhinoforte_74, Rosebush_72, Sabella_74, TA17A_74, Tinciduntsolum_75, Tres_74, West99_74,

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

Genes that do not have the "Most Annotated" start:
• Hedgerow_74,

**Summary by start number:**

Start 4:
• Found in 32 of 33 ( 97.0% ) of genes in pham

• Manual Annotations of this start: 30 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Allegro_74 (B2), Arbiter_71 (B2), Ares_74 (B2), Bananafish_75 (B2), Blocker23_74 (B2), Boyle_74 (B2), Brownie5_74 (B2), Calamitous_75 (B2), Coffee_74 (B2), Eaglehorse_74 (B2), Faze9_73 (B2), FrenchFry_75 (B2), Glass_76 (B2), Godines_75 (B2), Holeinone_74 (B2), ItsyBitsy1_72 (B2), Kaleb_75 (B2), Kheth_74 (B2), Lars_75 (B2), Laurie_75 (B2), Lephleur_74 (B2), LizLemon_74 (B2), MasterPo_75 (B2), Opia_75 (B2), Phantasmagoria_73 (B2), Rhinoforte_74 (B2), Rosebush_72 (B2), Sabella_74 (B2), TA17A_74 (B2), Tinciduntsolum_75 (B2), Tres_74 (B2), West99_74 (B2),

Start 5:
• Found in 1 of 33 ( 3.0% ) of genes in pham
• Manual Annotations of this start: 1 of 31
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Hedgerow_74 (B2),

**Summary by clusters:**

There is one cluster represented in this pham: B2

Info for manual annotations of cluster B2:
•Start number 4 was manually annotated 30 times for cluster B2.
•Start number 5 was manually annotated 1 time for cluster B2.

***Gene Information:***

Gene: Allegro_74 Start: 60109, Stop: 59831, Start Num: 4
Candidate Starts for Allegro_74:
(1, 60577), (2, 60256), (3, 60184), (Start: 4 @60109 has 30 MA's), (6, 60055), (8, 59959), (9, 59923), (10, 59905), (11, 59875),

Gene: Arbiter_71 Start: 60156, Stop: 59878, Start Num: 4
Candidate Starts for Arbiter_71:
(1, 60624), (2, 60303), (3, 60231), (Start: 4 @60156 has 30 MA's), (6, 60102), (7, 60039), (8, 60006), (9, 59970), (10, 59952), (11, 59922),

Gene: Ares_74 Start: 60115, Stop: 59837, Start Num: 4
Candidate Starts for Ares_74:
(1, 60583), (2, 60259), (3, 60187), (Start: 4 @60115 has 30 MA's), (6, 60061), (7, 59998), (8, 59965), (9, 59929), (10, 59911), (11, 59881),

Gene: Bananafish_75 Start: 60045, Stop: 59767, Start Num: 4
Candidate Starts for Bananafish_75:
(1, 60513), (2, 60192), (3, 60120), (Start: 4 @60045 has 30 MA's), (6, 59991), (7, 59928), (8, 59895), (9, 59859), (10, 59841), (11, 59811),

Gene: Blocker23_74 Start: 60116, Stop: 59838, Start Num: 4
Candidate Starts for Blocker23_74:
(1, 60581), (2, 60260), (3, 60188), (Start: 4 @60116 has 30 MA's), (6, 60062), (7, 59999), (8, 59966), (9, 59930), (10, 59912), (11, 59882),

Gene: Boyle_74 Start: 60160, Stop: 59882, Start Num: 4
Candidate Starts for Boyle_74:
(1, 60625), (2, 60304), (3, 60232), (Start: 4 @60160 has 30 MA's), (6, 60106), (7, 60043), (8, 60010), (9, 59974), (10, 59956), (11, 59926),

Gene: Brownie5_74 Start: 60161, Stop: 59883, Start Num: 4
Candidate Starts for Brownie5_74:
(1, 60626), (2, 60305), (3, 60233), (Start: 4 @60161 has 30 MA's), (6, 60107), (7, 60044), (8, 60011), (9, 59975), (10, 59957), (11, 59927),

Gene: Calamitous_75 Start: 60038, Stop: 59760, Start Num: 4
Candidate Starts for Calamitous_75:
(1, 60506), (2, 60185), (3, 60113), (Start: 4 @60038 has 30 MA's), (6, 59984), (7, 59921), (8, 59888), (9, 59852), (10, 59834), (11, 59804),

Gene: Coffee_74 Start: 60154, Stop: 59876, Start Num: 4
Candidate Starts for Coffee_74:
(1, 60619), (2, 60298), (3, 60226), (Start: 4 @60154 has 30 MA's), (6, 60100), (7, 60037), (8, 60004), (9, 59968), (10, 59950), (11, 59920),

Gene: Eaglehorse_74 Start: 60034, Stop: 59756, Start Num: 4
Candidate Starts for Eaglehorse_74:
(1, 60502), (2, 60181), (3, 60109), (Start: 4 @60034 has 30 MA's), (6, 59980), (7, 59917), (8, 59884), (9, 59848), (10, 59830), (11, 59800),

Gene: Faze9_73 Start: 60172, Stop: 59894, Start Num: 4
Candidate Starts for Faze9_73:
(1, 60640), (2, 60319), (3, 60247), (Start: 4 @60172 has 30 MA's), (6, 60118), (7, 60055), (8, 60022), (9, 59986), (10, 59968), (11, 59938),

Gene: FrenchFry_75 Start: 60165, Stop: 59887, Start Num: 4
Candidate Starts for FrenchFry_75:
(1, 60633), (2, 60312), (3, 60240), (Start: 4 @60165 has 30 MA's), (6, 60111), (7, 60048), (8, 60015), (9, 59979), (10, 59961), (11, 59931),

Gene: Glass_76 Start: 60166, Stop: 59888, Start Num: 4
Candidate Starts for Glass_76:
(1, 60634), (2, 60313), (3, 60241), (Start: 4 @60166 has 30 MA's), (6, 60112), (7, 60049), (8, 60016), (9, 59980), (10, 59962), (11, 59932),

Gene: Godines_75 Start: 60419, Stop: 60141, Start Num: 4
Candidate Starts for Godines_75:
(1, 60887), (2, 60566), (3, 60494), (Start: 4 @60419 has 30 MA's), (6, 60365), (7, 60302), (8, 60269), (9, 60233), (10, 60215), (11, 60185),

Gene: Hedgerow_74 Start: 60080, Stop: 59838, Start Num: 5
Candidate Starts for Hedgerow_74:
(Start: 5 @60080 has 1 MA's), (7, 59999), (8, 59966), (9, 59930), (10, 59912), (11, 59882),

Gene: Holeinone_74 Start: 60021, Stop: 59743, Start Num: 4
Candidate Starts for Holeinone_74:

(1, 60486), (2, 60165), (3, 60093), (Start: 4 @60021 has 30 MA's), (6, 59967), (7, 59904), (8, 59871), (9, 59835), (10, 59817), (11, 59787),

Gene: ItsyBitsy1_72 Start: 60251, Stop: 59973, Start Num: 4
Candidate Starts for ItsyBitsy1_72:
(1, 60716), (2, 60395), (3, 60323), (Start: 4 @60251 has 30 MA's), (6, 60197), (7, 60134), (8, 60101), (9, 60065), (10, 60047), (11, 60017),

Gene: Kaleb_75 Start: 60172, Stop: 59894, Start Num: 4
Candidate Starts for Kaleb_75:
(1, 60637), (2, 60316), (3, 60244), (Start: 4 @60172 has 30 MA's), (6, 60118), (7, 60055), (8, 60022), (9, 59986), (10, 59968), (11, 59938),

Gene: Kheth_74 Start: 60083, Stop: 59805, Start Num: 4
Candidate Starts for Kheth_74:
(1, 60548), (2, 60227), (3, 60155), (Start: 4 @60083 has 30 MA's), (6, 60029), (7, 59966), (8, 59933), (9, 59897), (10, 59879), (11, 59849),

Gene: Lars_75 Start: 60144, Stop: 59866, Start Num: 4
Candidate Starts for Lars_75:
(1, 60612), (2, 60291), (3, 60219), (Start: 4 @60144 has 30 MA's), (6, 60090), (7, 60027), (8, 59994), (9, 59958), (10, 59940), (11, 59910),

Gene: Laurie_75 Start: 59822, Stop: 59544, Start Num: 4
Candidate Starts for Laurie_75:
(1, 60290), (2, 59969), (3, 59897), (Start: 4 @59822 has 30 MA's), (6, 59768), (7, 59705), (8, 59672), (9, 59636), (10, 59618), (11, 59588),

Gene: Lephleur_74 Start: 60000, Stop: 59722, Start Num: 4
Candidate Starts for Lephleur_74:
(1, 60471), (2, 60147), (3, 60075), (Start: 4 @60000 has 30 MA's), (6, 59946), (7, 59883), (8, 59850), (9, 59814), (10, 59796), (11, 59766),

Gene: LizLemon_74 Start: 60171, Stop: 59893, Start Num: 4
Candidate Starts for LizLemon_74:
(1, 60639), (2, 60318), (3, 60246), (Start: 4 @60171 has 30 MA's), (6, 60117), (7, 60054), (8, 60021), (9, 59985), (10, 59967), (11, 59937),

Gene: MasterPo_75 Start: 60038, Stop: 59760, Start Num: 4
Candidate Starts for MasterPo_75:
(1, 60509), (2, 60185), (3, 60113), (Start: 4 @60038 has 30 MA's), (6, 59984), (7, 59921), (8, 59888), (9, 59852), (10, 59834), (11, 59804),

Gene: Opia_75 Start: 60064, Stop: 59786, Start Num: 4
Candidate Starts for Opia_75:
(2, 60211), (3, 60139), (Start: 4 @60064 has 30 MA's), (6, 60010), (7, 59947), (8, 59914), (9, 59878), (10, 59860), (11, 59830),

Gene: Phantasmagoria_73 Start: 60047, Stop: 59769, Start Num: 4
Candidate Starts for Phantasmagoria_73:
(1, 60515), (2, 60194), (3, 60122), (Start: 4 @60047 has 30 MA's), (6, 59993), (7, 59930), (8, 59897), (9, 59861), (10, 59843), (11, 59813),

Gene: Rhinoforte_74 Start: 60085, Stop: 59807, Start Num: 4
Candidate Starts for Rhinoforte_74:
(1, 60550), (2, 60229), (3, 60157), (Start: 4 @60085 has 30 MA's), (6, 60031), (7, 59968), (8, 59935), (9, 59899), (10, 59881), (11, 59851),

Gene: Rosebush_72 Start: 60158, Stop: 59880, Start Num: 4
Candidate Starts for Rosebush_72:
(1, 60623), (2, 60302), (3, 60230), (Start: 4 @60158 has 30 MA's), (6, 60104), (7, 60041), (8, 60008), (9, 59972), (10, 59954), (11, 59924),

Gene: Sabella_74 Start: 59993, Stop: 59715, Start Num: 4
Candidate Starts for Sabella_74:
(1, 60461), (2, 60140), (3, 60068), (Start: 4 @59993 has 30 MA's), (6, 59939), (7, 59876), (8, 59843), (9, 59807), (10, 59789), (11, 59759),

Gene: TA17A_74 Start: 59998, Stop: 59720, Start Num: 4
Candidate Starts for TA17A_74:
(1, 60466), (2, 60142), (3, 60070), (Start: 4 @59998 has 30 MA's), (6, 59944), (7, 59881), (8, 59848), (9, 59812), (10, 59794), (11, 59764),

Gene: Tinciduntsolum_75 Start: 60160, Stop: 59882, Start Num: 4
Candidate Starts for Tinciduntsolum_75:
(1, 60625), (2, 60304), (3, 60232), (Start: 4 @60160 has 30 MA's), (6, 60106), (7, 60043), (8, 60010), (9, 59974), (10, 59956), (11, 59926),

Gene: Tres_74 Start: 60014, Stop: 59736, Start Num: 4
Candidate Starts for Tres_74:
(1, 60482), (2, 60161), (3, 60089), (Start: 4 @60014 has 30 MA's), (6, 59960), (7, 59897), (8, 59864), (9, 59828), (10, 59810), (11, 59780),

Gene: West99_74 Start: 60179, Stop: 59901, Start Num: 4
Candidate Starts for West99_74:
(1, 60647), (2, 60326), (3, 60254), (Start: 4 @60179 has 30 MA's), (6, 60125), (7, 60062), (8, 60029), (9, 59993), (10, 59975), (11, 59945),