## Recombinant EIF4A1 protein



## Catalog No: 81216, 81916 Expressed In: *E. coli*

## Quantity: 50, 1000 µg Concentration: 0.8 µg/µl Source: Human

**Buffer Contents:** Recombinant EIF4A1 protein is supplied in 25 mM Tris-HCl pH 7.4, 300 mM NaCl, 5% glycerol, and 0.1% Triton X-100.

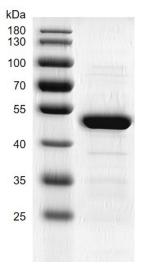
**Background:** EIF4A1 (Eukaryotic Translation Initiation Factor 4A, Isoform 1), also called as EIF4A or DDX2A, is a ATP dependent RNA helicase which is a subunit of the eIF4F complex involved in cap recognition. It is required for mRNA binding to ribosome. In the current model of translation initiation, eIF4A unwinds RNA secondary structures in the 5'-UTR of mRNAs which is necessary to allow efficient binding of the small ribosomal subunit, and subsequent scanning for the initiator codon. This protein is involved in the binding of mRNA to 40S subunit of ribosome, ubiquitous with high expression in skeletal muscle and ovary. The helicase activity of EIF4A1 and function in translation are inhibited by interaction with PDCD4.

**Protein Details:** Recombinant EIF4A1 protein was expressed in *E.coli* as the full length protein (accession number NP\_001407.1) with an N-terminal 6×His-Tag. The molecular weight of the protein is 49.7 kDa.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data this product is shown.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

EIF4A1



Recombinant EIF4A1 protein gel 10% SDS-PAGE gel with Coomassie staining MW: 49.7 kDa Purity: >90%