abcam

Product datasheet

Anti-eIF4A2 antibody ab31218

★★★★★ 7 Abreviews 29 References 3 Images

Overview

Product name	Anti-eIF4A2 antibody
Description	Rabbit polyclonal to eIF4A2
Host species	Rabbit
Tested applications	**Suitable for:** IP, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to Human eIF4A2 aa 1-100 conjugated to keyhole limpet haemocyanin. (Peptide available as **ab32473**)
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab31218 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

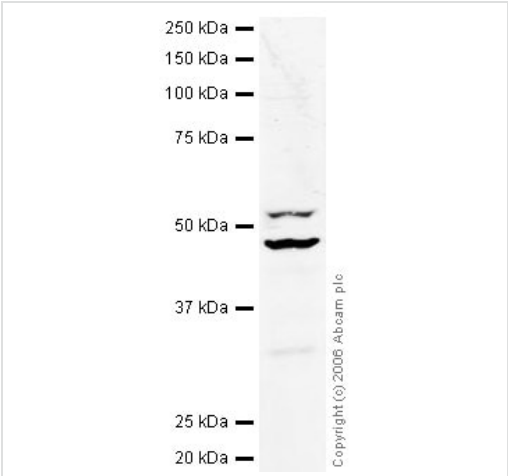
Application	Abreviews	Notes
IP	★★★★★ (1)	Use at an assay dependent concentration.
WB	★★★★☆ (4)	Use a concentration of 1 µg/ml. Detects a band of approximately 47 kDa (predicted molecular weight: 47 kDa).

Target

Function ATP-dependent RNA helicase which is a subunit of the eIF4F complex involved in cap recognition and 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.

Sequence similarities Belongs to the DEAD box helicase family. eIF4A subfamily.
Contains 1 helicase ATP-binding domain.
Contains 1 helicase C-terminal domain.

Images



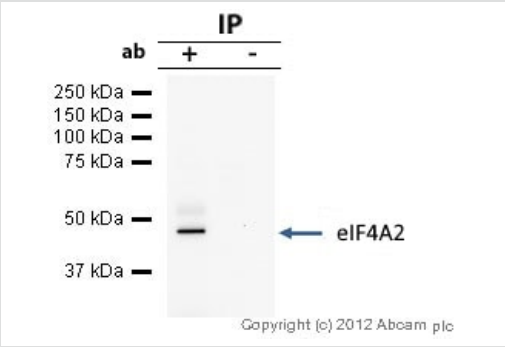
Western blot - Anti-eIF4A2 antibody (ab31218)

Anti-eIF4A2 antibody (ab31218) at 1 µg/ml + Jurkat whole cell lysate (**ab7899**) at 20 µg

Secondary
IR Dye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/15000 dilution

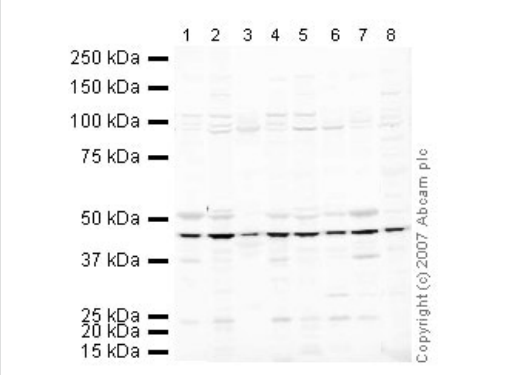
Performed under reducing conditions.

Predicted band size: 47 kDa
Observed band size: 47 kDa
Additional bands at: 52 kDa. We are unsure as to the identity of these extra bands.



Immunoprecipitation - Anti-eIF4A2 antibody (ab31218)

eIF4A2 was immunoprecipitated using 0.5mg Mouse skeletal muscle whole tissue extract, 5µg of Rabbit polyclonal to eIF4A2 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).
The antibody was incubated under agitation with Protein G beads for 10min, Mouse skeletal muscle whole tissue extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.
Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70^{o}C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab31218.
Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (**ab99697**).
Band: 47kDa: eIF4A2 .



Western blot - Anti-eIF4A2 antibody (ab31218)

All lanes : Anti-eIF4A2 antibody (ab31218) at 1 µg/ml

Lane 1 : Brain (Mouse) Tissue Lysate
Lane 2 : Testis (Mouse) Tissue Lysate
Lane 3 : Mouse skeletal muscle tissue lysate - total protein (**ab29711**)
Lane 4 : Spinal Cord (Mouse) Tissue Lysate
Lane 5 : Ovary (Mouse) Tissue Lysate
Lane 6 : PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate
Lane 7 : Brain (Rat) Tissue Lysate
Lane 8 : Heart (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 47 kDa
Observed band size: 47 kDa

Additional bands at: 51 kDa. We are unsure as to the identity of these extra bands.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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