abcam

Product datasheet

Anti-DDX5 antibody ab21696



★★★★★ 6 Abreviews 29 References 4 Images

Overview

Product name Anti-DDX5 antibody

Description Rabbit polyclonal to DDX5

Host species Rabbit

Specificity Replenishment batches of our polyclonal antibody, ab21696 are tested in WB. Previous batches

were additionally validated in ICC/IF. This application is still expected to work and is covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody,

ab126730.

Tested applications Suitable for: ICC/IF, WB

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide corresponding to Human DDX5 aa 600 to the C-terminus (C terminal)

conjugated to keyhole limpet haemocyanin.

(Peptide available as ab22412)

Positive control This antibody gave a positive signal in the following lysates: Hela nuclear lysate MEF1 (Mouse

embryonic fibroblast cell line) Whole Cell Lysate Testis (Mouse) Tissue Lysate - normal tissue

PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate ICC/IF: HeLa cells.

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

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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 ab21696 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
ICC/IF		Use a concentration of 1 µg/ml.
WB	**** <u>(3)</u>	Use a concentration of 1 µg/ml. Detects a band of approximately 69 kDa (predicted molecular weight: 69 kDa).

Target

Function RNA-dependent ATPase activity. The rate of ATP hydrolysis is highly stimulated by single-

stranded RNA. May be involved in pre-mRNA splicing.

Sequence similaritiesBelongs to the DEAD box helicase family. DDX5/DBP2 subfamily.

Contains 1 helicase ATP-binding domain. Contains 1 helicase C-terminal domain.

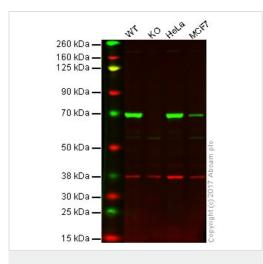
Post-translational

modifications

Arg-502 is dimethylated, probably to asymmetric dimethylarginine.

Cellular localization Nucleus > nucleolus.

Images



Western blot - Anti-DDX5 antibody (ab21696)

Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

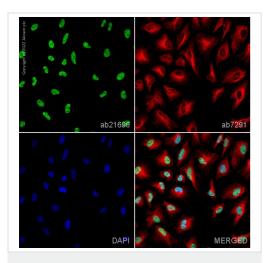
Lane 2: DDX5 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: MCF7 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab21696 observed at 69 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab21696 was shown to specifically react with DDX5 in wild-type HAP1 cells as signal was lost in DDX5 knockout cells. Wild-type and DDX5 knockout samples were subjected to SDS-PAGE. Ab21696 and ab9484 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1 µg/ml and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



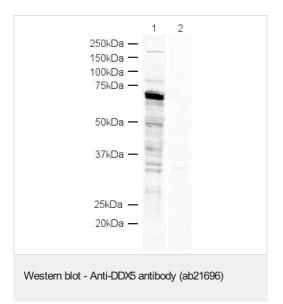
Immunocytochemistry/ Immunofluorescence - Anti-DDX5 antibody (ab21696)

ab21696 staining DDX5 in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab21696 at 1µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit lgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse lgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

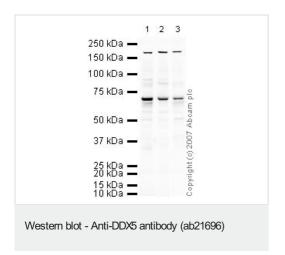
Also suitable in cells fixed with 4% paraformaldehyde (10 min).

Image was acquired with a high-content analyser (Operetta CLS,
Perkin Elmer) and a maximum intensity projection of confocal

sections is shown.



ab21696 recognizes a clear, strong band at ~ 69kDa corresponding to DDX5. A number of other, non specific bands are weakly recognized by the antibody. All bands are quenched by the addition of the blocking peptide.



All lanes: Anti-DDX5 antibody (ab21696) at 1 µg/ml

Lane 1 : MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

Lane 2: Testis (Mouse) Tissue Lysate - normal tissue

Lane 3: PC12 (Rat adrenal pheochromocytoma cell line) Whole

Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Performed under reducing conditions.

Predicted band size: 69 kDa **Observed band size:** 70 kDa

Additional bands at: 170 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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