# abcam

# Product datasheet

# Anti-UAP56 antibody ab47955

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Overview

Product name Anti-UAP56 antibody

**Description** Rabbit polyclonal to UAP56

Host species Rabbit

Tested applications Suitable for: IHC-P, WB, ICC/IF

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Chicken, Cow, Pig, Chimpanzee

**Immunogen** Synthetic peptide conjugated to KLH derived from within residues 300 - 400 of Human

UAP56.Read Abcam's proprietary immunogen policy(Peptide available as ab48225.)

Positive control ab47955 gave a positive signal in the following Whole Cell Lysates: Hela, Jurkat, HepG2 and

A431. It also gave a positive signal in human tonsil tissue sections.

**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

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**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab47955 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
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB	****(1)	Use a concentration of 1 µg/ml. Detects a band of approximately 49 kDa (predicted molecular weight: 49 kDa).
ICC/IF		Use a concentration of 1 µg/ml.

### **Target**

#### **Function**

Component of the THO subcomplex of the TREX complex. The TREX complex specifically associates with spliced mRNA and not with unspliced pre-mRNA. It is recruited to spliced mRNAs by a transcription-independent mechanism. Binds to mRNA upstream of the exon-junction complex (EJC) and is recruited in a splicing- and cap-dependent manner to a region near the 5' end of the mRNA where it functions in mRNA export. The recruitment occurs via an interaction between THOC4 and the cap-binding protein NCBP1. DDX39B functions as a bridge between THOC4 and the THO complex. The TREX complex is essential for the export of Kaposi's sarcoma-associated herpesvirus (KSHV) intronless mRNAs and infectious virus production. The recruitment of the TREX complex to the intronless viral mRNA occurs via an interaction between KSHV ORF57 protein and THOC4.

Splice factor that is required for the first ATP-dependent step in spliceosome assembly and for the interaction of U2 snRNP with the branchpoint. Has both RNA-stimulated ATP binding/hydrolysis activity and ATP-dependent RNA unwinding activity. Even with the stimulation of RNA, the ATPase activity is weak. Can only hydrolyze ATP but not other NTPs. The RNA stimulation of ATPase activity does not have a strong preference for the sequence and length of the RNA. However, ssRNA stimulates the ATPase activity much more strongly than dsRNA. Can unwind 5' or 3' overhangs or blunt end RNA duplexes in vitro. The ATPase and helicase activities are not influenced by U2AF2 and THOC4.

# Sequence similarities

Belongs to the DEAD box helicase family. DECD subfamily.

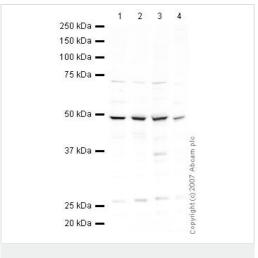
Contains 1 helicase ATP-binding domain. Contains 1 helicase C-terminal domain.

#### **Domain**

The helicase C-terminal domain mediates interaction with THOC4.

**Cellular localization** Nucleus. Nucleus speckle.

## **Images**



Western blot - Anti-UAP56 antibody (ab47955)

All lanes: Anti-UAP56 antibody (ab47955) at 1 µg/ml

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lane 3**: HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lane 4 : A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

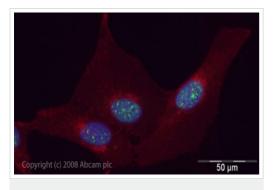
Lysates/proteins at 10 µg per lane.

# **Secondary**

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

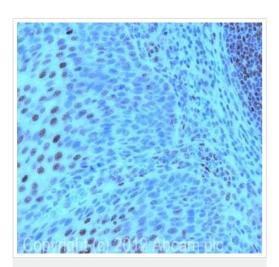
Performed under reducing conditions.

**Predicted band size:** 49 kDa **Observed band size:** 49 kDa



Immunocytochemistry/ Immunofluorescence - Anti-UAP56 antibody (ab47955)

ICC/IF image of ab47955 stained human HeLa cells. The cells were PFA fixed (10 min), permabilised in PBS-T (20 min) and incubated with the antibody (ab47955, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat serum / 0.3M glycine was used to quench autofluorescence and block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-UAP56 antibody (ab47955)

IHC image of ab47955 staining in human tonsil formalin fixed paraffin embedded tissue section, performed on a Leica Bond TM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab47955, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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

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