abcam

Product datasheet

Anti-USP16 antibody [EPR20914-47] - BSA and Azide free ab269961



2 Images

Overview

Product name Anti-USP16 antibody [EPR20914-47] - BSA and Azide free

Description Rabbit monoclonal [EPR20914-47] to USP16 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: Flow Cyt,ICC/IF,IHC-Fr,IHC-P or IP

Species reactivity Reacts with: Mouse, Rat

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Rat testis and liver lysates; Mouse testis lysate; MEF whole cell lysate.

General notes ab269961 is the carrier-free version of ab236628.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR20914-47

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab269961 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
WB		Use at an assay dependent concentration. Detects a band of approximately 110 kDa (predicted molecular weight: 94 kDa).

Application notes Is unsuitable for Flow Cyt,ICC/IF,IHC-Fr,IHC-P or IP.

Target

Function Specifically deubiquitinates histone H2A, a specific tag for epigenetic transcriptional repression, thereby acting as a coactivator. Deubiquitination of histone H2A is a prerequisite for subsequent phosphorylation at 'Ser-10' of histone H3, and is required for chromosome segregation when cells enter into mitosis. Regulates Hox gene expression via histone H2A deubiquitination. Prefers

 $nucleo somal\ substrates.\ Does\ not\ deubiquitinate\ histone\ H2B.$

Tissue specificity Present in all the tissues examined including fetal brain, lung, liver, kidney, and adult heart, brain,

placenta, lung, liver, skeletal muscle, kidney and pancreas.

Involvement in disease Note=A chromosomal aberration involving USP16 is a cause of Chronic myelomonocytic

leukemia. Inversion inv(21) (q21;q22) with RUNX1/AML1.

Sequence similaritiesBelongs to the peptidase C19 family. USP16 subfamily.

Contains 1 UBP-type zinc finger.

Domain The UBP-type zinc finger binds 3 zinc ions that form a pair of cross-braced ring fingers

encapsulated within a third zinc finger in the primary structure. It recognizes the C-terminal tail of

free ubiquitin.

Post-translational modifications

Phosphorylated at the onset of mitosis and dephosphorylated during the metaphase/anaphase

transition. The phosphorylated form of the protein is also enzymatically active.

Cellular localization Nucleus.

Images



Western blot - Anti-USP16 antibody [EPR20914-47]
- BSA and Azide free (ab269961)

All lanes : Anti-USP16 antibody [EPR20914-47] (<u>ab236628</u>) at 1/1000 dilution

Lane 1: Rat testis tissue lysate at 20 µg

Lane 2: Rat liver tissue lysate at 20 µg

Lane 3: Mouse testis tissue lysate at 20 µg

Lane 4: MEF (mouse embryonic fibroblast (immortalized)), whole

cell lysate at 10 µg

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

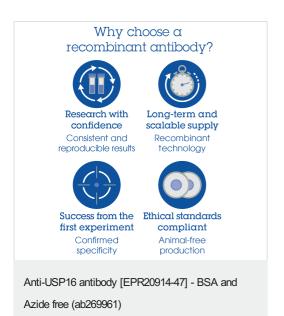
Predicted band size: 94 kDa **Observed band size:** 110 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID: 26323689).

Exposure time: Lanes 1-3: 3 minutes Lane 4: 48 seconds

This data was developed using the same antibody clone in a different buffer formulation containing PBS, glycerol, BSA and sodium azide (<u>ab236628</u>).



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

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