abcam

Product datasheet

APC Anti-HAUSP / USP7 antibody [EPR4253] ab303173

Recombinant

RabMAb

1 Image

Overview

General notes

Product name APC Anti-HAUSP / USP7 antibody [EPR4253]

Description APC Rabbit monoclonal [EPR4253] to HAUSP / USP7

Host species Rabbit

Conjugation APC. Ex: 645nm, Em: 660nm

Tested applications Suitable for: Target binding affinity, Antibody labelling

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

This **conjugated primary antibody** is released using a quantitative quality control method that

evaluates binding affinity post-conjugation and efficiency of antibody labeling.

For suitable applications and species reactivity, please refer to the unconjugated version of this

clone. This conjugated antibody is eligible for Abtrial: learn more **here**.

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**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at +4°C.

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.4

Preservative: 0.02% Sodium azide Constituents: 1% BSA, 98% PBS

Purity Protein A purified

Clonality Monoclonal

1

Clone number EPR4253

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab303173 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
Target binding affinity		Use at an assay dependent concentration.
Antibody labelling		Use at an assay dependent concentration.

Target

Function

DNMT1, UHRF1, PTEN and DAXX (PubMed:11923872, PubMed:15053880, PubMed:16964248, PubMed:18716620, PubMed:25283148). Together with DAXX, prevents MDM2 self-ubiquitination and enhances the E3 ligase activity of MDM2 towards p53/TP53, thereby promoting p53/TP53 ubiquitination and proteasomal degradation. Deubiquitinates p53/TP53, preventing degradation of p53/TP53, and enhances p53/TP53-dependent transcription regulation, cell growth repression and apoptosis (PubMed:25283148). Deubiquitinates p53/TP53 and MDM2 and strongly stabilizes p53/TP53 even in the presence of excess MDM2, and also induces p53/TP53-dependent cell growth repression and apoptosis. Deubiquitination of FOXO4 in presence of hydrogen peroxide is not dependent on p53/TP53 and inhibits FOXO4-induced transcriptional activity. In association with DAXX, is involved in the deubiguitination and translocation of PTEN from the nucleus to the cytoplasm, both processes that are counteracted by PML. Involved in cell proliferation during early embryonic development. Involved in transcription-coupled nucleotide excision repair (TC-NER) in response to UV damage: recruited to DNA damage sites following interaction with KIAA1530/UVSSA and promotes deubiquitination of ERCC6, preventing UV-induced degradation of ERCC6. Contributes to the overall stabilization and trans-activation capability of the herpesvirus 1 trans-acting transcriptional protein ICP0/VMW110 during HSV-1 infection. Involved in maintenance of DNA methylation via its

interaction with UHRF1 and DNMT1: acts by mediating deubiquitination of UHRF1 and DNMT1, preventing their degradation and promoting DNA methylation by DNMT1 (PubMed:21745816). Exhibits a preference towards 'Lys-48'-linked ubiquitin chains. Increases regulatory T-cells (Treg) suppressive capacity by deubiquitinating and stabilizing the transcription factor FOXP3 which is

Hydrolase that deubiquitinates target proteins such as FOXO4, p53/TP53, MDM2, ERCC6,

Tissue specificity

Widely expressed. Overexpressed in prostate cancer.

crucial for Treg cell function (PubMed:23973222).

Sequence similarities

Belongs to the peptidase C19 family.

Contains 1 MATH domain. Contains 1 USP domain.

Domain

The C-terminus plays a role in its oligomerization.

Post-translational modifications

Isoform 1: Phosphorylated. Isoform 1 is phosphorylated at positions Ser-18 and Ser-963. Isoform

2: Not phosphorylated.

Isoform 1: Polyneddylated. Isoform 2: Not Polyneddylated.

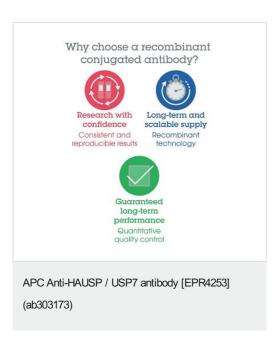
Isoform 1 and isoform 2: Not sumoylated.

Isoform 1 and isoform 2: Polyubiquitinated by herpesvirus 1 trans-acting transcriptional protein ICP0/VMW110; leading to its subsequent proteasomal degradation. Isoform 1: Ubiquitinated at Lys-869.

Cellular localization

Nucleus. Cytoplasm. Nucleus, PML body. Present in a minority of ND10 nuclear bodies. Association with ICP0/VMW110 at early times of infection leads to an increased proportion of USP7-containing ND10. Colocalizes with ATXN1 in the nucleus. Colocalized with DAXX in speckled structures. Colocalized with PML and PTEN in promyelocytic leukemia protein (PML) nuclear bodies.

Images



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