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USP6 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2135b

Specification

USP6 Antibody (C-term) - Product Information

Application	**WB, FC,E**
Primary Accession	P35125
Other Accession	Q6URH7
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**158658**
Antigen Region	**1280-1310**

USP6 Antibody (C-term) - Additional Information

Gene ID 9098

Other Names
Ubiquitin carboxyl-terminal hydrolase 6, Deubiquitinating enzyme 6, Proto-oncogene TRE-2, Ubiquitin thioesterase 6, Ubiquitin-specific-processing protease 6, USP6, HRP1, TRE2

Target/Specificity
This USP6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1280-1310 amino acids from the C-terminal region of human USP6.

Dilution
WB~~1:1000
FC~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
USP6 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

USP6 Antibody (C-term) - Protein Information

Name USP6

Synonyms HRP1, TRE2

Function Deubiquitinase with an ATP-independent isopeptidase activity, cleaving at the C-terminus of the ubiquitin moiety. Catalyzes its own deubiquitination. In vitro, isoform 2, but not isoform 3, shows deubiquitinating activity. Promotes plasma membrane localization of ARF6 and selectively regulates ARF6-dependent endocytic protein trafficking. Is able to initiate tumorigenesis by inducing the production of matrix metalloproteinases following NF-kappa-B activation. May act as a GTPase-activating protein for RAB3A (PubMed:19077034).

Cellular Location
Cell membrane. Cytoplasm. Endosome. Note=Localizes to the plasma membrane and to filamentous structures within the cell corresponding to ARF6 regulated tubular endosomes. Activation of RAC1 and CDC42 can direct the relocalization of USP6 to the plasma membrane in a manner that depends on the integrity of the actin cytoskeleton

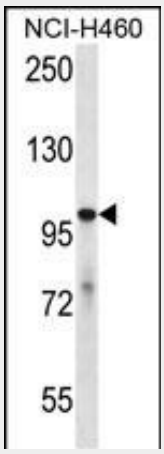
Tissue Location
Testis specific. Expressed in various cancer cell lines.

USP6 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

USP6 Antibody (C-term) - Images



USP6 Antibody (E978) (Cat. #AP2135b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the USP6 antibody detected the USP6 protein (arrow).

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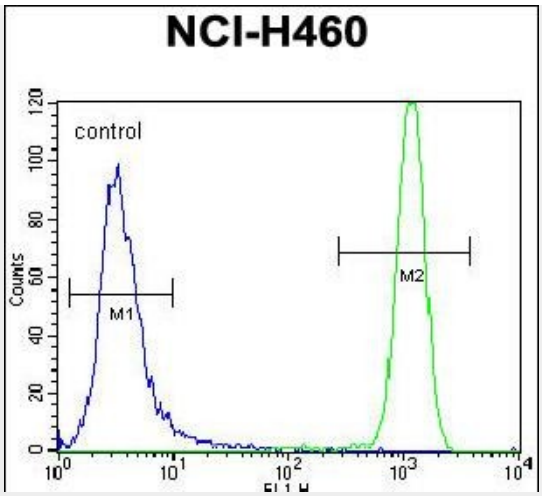

USP6 Antibody (C-term) (Cat. #AP2135b) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

USP6 Antibody (C-term) - Background

Modification of target proteins by ubiquitin participates in a wide array of biological functions. Proteins destined for degradation or processing via the 26 S proteasome are coupled to multiple copies of ubiquitin. However, attachment of ubiquitin or ubiquitin-related molecules may also result in changes in subcellular distribution or modification of protein activity. An additional level of ubiquitin regulation, deubiquitination, is catalyzed by proteases called deubiquitinating enzymes, which fall into four distinct families. Ubiquitin C-terminal hydrolases, ubiquitin-specific processing proteases (USPs),1 OTU-domain ubiquitin-aldehyde-binding proteins, and Jab1/Pad1/MPN-domain-containing metallo-enzymes. Among these four families, USPs represent the most widespread and represented deubiquitinating enzymes across evolution. USPs tend to release ubiquitin from a conjugated protein. They display similar catalytic domains containing conserved Cys and His boxes but divergent N-terminal and occasionally C-terminal extensions, which are thought to function in substrate recognition, subcellular localization, and protein-protein interactions.

USP6 Antibody (C-term) - References

Paulding, C.A., et al., Proc. Natl. Acad. Sci. U.S.A. 100(5):2507-2511 (2003). Papa, F.R., et al., Nature 366(6453):313-319 (1993). Nakamura, T., et al., Oncogene 7(4):733-741 (1992).