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USP6 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP2135b

Specification

USP6 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	P35125
Other Accession	UBP6_HUMAN

USP6 Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP2135b was selected from the C-term region of human USP6 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

USP6 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

USP6 Antibody (C-term) Blocking Peptide - Images

USP6 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - 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).