10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

USP11 Antibody (N-term R41) Blocking Peptide
Synthetic peptide
Catalog # BP2139b

Specification

USP11 Antibody (N-term R41) Blocking Peptide - Product Information

Primary Accession	P51784
Other Accession	Q8IUG6

USP11 Antibody (N-term R41) Blocking Peptide - Additional Information

Other Names
Ubiquitin carboxyl-terminal hydrolase 11, Deubiquitinating enzyme 11, Ubiquitin thioesterase 11, Ubiquitin-specific-processing protease 11, USP11, UHX1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2139b was selected from the N-term region of human USP11 . 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.

USP11 Antibody (N-term R41) Blocking Peptide - Protein Information

Name USP11

Synonyms UHX1

Function
Protease that can remove conjugated ubiquitin from target proteins and polyubiquitin chains (PubMed:12084015, PubMed:15314155, PubMed:17897950, PubMed:19874889, PubMed:20233726, PubMed:28992046, PubMed:24724799). Inhibits the degradation of target proteins by the proteasome (PubMed:12084015). Cleaves

preferentially 'Lys-6' and 'Lys- 63'-linked ubiquitin chains. Has lower activity with 'Lys-11' and 'Lys-33'-linked ubiquitin chains, and extremely low activity with 'Lys-27', 'Lys-29' and 'Lys-48'-linked ubiquitin chains (in vitro) (PubMed:24724799). Plays a role in the regulation of pathways leading to NF-kappa-B activation (PubMed:17897950, PubMed:19874889). Plays a role in the regulation of DNA repair after double-stranded DNA breaks (PubMed:15314155, PubMed:20233726). Acts as a chromatin regulator via its association with the Polycomb group (PcG) multiprotein PRC1-like complex; may act by deubiquitinating components of the PRC1-like complex (PubMed:20601937). Promotes cell proliferation by deubiquitinating phosphorylated E2F1 (PubMed:28992046).

Cellular Location
Nucleus. Cytoplasm. Chromosome. Note=Predominantly nuclear (PubMed:12084015, PubMed:15314155). Associates with chromatin (PubMed:20601937, PubMed:20233726).

USP11 Antibody (N-term R41) Blocking Peptide - Protocols

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

- Blocking Peptides

USP11 Antibody (N-term R41) Blocking Peptide - Images

USP11 Antibody (N-term R41) 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.

USP11 Antibody (N-term R41) Blocking Peptide - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).Swanson, D.A., et al., Hum. Mol. Genet. 5(4):533-538 (1996).Ideguchi, H., et al., Biochem. J. 367 (Pt 1), 87-95 (2002).