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

USP3 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP2132c

Specification

USP3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	Q9Y6I4
Other Accession	UBP3_HUMAN

USP3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 9960

Other Names
Ubiquitin carboxyl-terminal hydrolase 3, Deubiquitinating enzyme 3, Ubiquitin thioesterase 3, Ubiquitin-specific-processing protease 3, USP3

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2132c was selected from the C-term region of human USP3 . 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.

USP3 Antibody (C-term) Blocking Peptide - Protein Information

Name USP3

Function
Hydrolase that deubiquitinates monoubiquitinated target proteins such as histone H2A and H2B. Required for proper progression through S phase and subsequent mitotic entry. May regulate the DNA damage response (DDR) checkpoint through deubiquitination of H2A at DNA damage sites. Associates with the chromatin.

Cellular Location
Nucleus. Note=Localizes preferentially with monoubiquitinated H2A to chromatin

Tissue Location
Expressed in all tissues examined, with strongest expression in pancreas

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USP3 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

USP3 Antibody (C-term) Blocking Peptide - Images

USP3 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.

USP3 Antibody (C-term) Blocking Peptide - References

Puente, X.S., et al., Nat. Rev. Genet. 4(7):544-558 (2003).Sloper-Mould, K.E., et al., J. Biol. Chem. 274(38):26878-26884 (1999).