

**Anti-USP13 Monoclonal Antibody**  
**Catalog # ABO14534****Specification****Anti-USP13 Monoclonal Antibody - Product Information**

Application	WB, IF, ICC, IP, FC
Primary Accession	<a href="#">Q92995</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human, Mouse
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-USP13 Monoclonal Antibody . Tested in WB, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse.

**Anti-USP13 Monoclonal Antibody - Additional Information**

**Gene ID** 8975

**Other Names**

Ubiquitin carboxyl-terminal hydrolase 13, 3.4.19.12, Deubiquitinating enzyme 13, Isopeptidase T-3, ISOT-3, Ubiquitin thioesterase 13, Ubiquitin-specific-processing protease 13, USP13, ISOT3

**Application Details**

WB 1:500-1:2000<br>ICC/IF 1:50-1:200<br>IP 1:50<br>FC 1:100

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human USP13 Mediates deubiquitination of BECN1, a key regulator of autophagy, leading to stabilize the PIK3C3/VPS34-containing complexes. Also deubiquitinates USP10, an essential regulator of p53/TP53 stability.

**Purification**

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

**Anti-USP13 Monoclonal Antibody - Protein Information**

**Name** USP13

## Synonyms ISOT3

### Function

Deubiquitinase that mediates deubiquitination of target proteins such as BECN1, MITF, SKP2 and USP10 and is involved in various processes such as autophagy, endoplasmic reticulum-associated degradation (ERAD), cell cycle progression or DNA damage response (PubMed:<a href="http://www.uniprot.org/citations/21571647" target="\_blank">21571647</a>, PubMed:<a href="http://www.uniprot.org/citations/32772043" target="\_blank">32772043</a>, PubMed:<a href="http://www.uniprot.org/citations/33592542" target="\_blank">33592542</a>). Component of a regulatory loop that controls autophagy and p53/TP53 levels: mediates deubiquitination of BECN1, a key regulator of autophagy, leading to stabilize the PIK3C3/VPS34-containing complexes. Alternatively, forms with NEDD4 a deubiquitination complex, which subsequently stabilizes VPS34 to promote autophagy (PubMed:<a href="http://www.uniprot.org/citations/32101753" target="\_blank">32101753</a>). Also deubiquitinates USP10, an essential regulator of p53/TP53 stability. In turn, PIK3C3/VPS34-containing complexes regulate USP13 stability, suggesting the existence of a regulatory system by which PIK3C3/VPS34-containing complexes regulate p53/TP53 protein levels via USP10 and USP13. Recruited by nuclear UFD1 and mediates deubiquitination of SKP2, thereby regulating endoplasmic reticulum-associated degradation (ERAD). Also regulates ERAD through the deubiquitination of UBL4A a component of the BAG6/BAT3 complex. Mediates stabilization of SIAH2 independently of deubiquitinase activity: binds ubiquitinated SIAH2 and acts by impairing SIAH2 autoubiquitination. Regulates the cell cycle progression by stabilizing cell cycle proteins such as SKP2 and AURKB (PubMed:<a href="http://www.uniprot.org/citations/32772043" target="\_blank">32772043</a>). In addition, plays an important role in maintaining genomic stability and in DNA replication checkpoint activation via regulation of RAP80 and TOPBP1 (PubMed:<a href="http://www.uniprot.org/citations/33592542" target="\_blank">33592542</a>). Deubiquitinates the multifunctional protein HMGB1 and subsequently drives its nucleocytoplasmic localization and its secretion (PubMed:<a href="http://www.uniprot.org/citations/36585612" target="\_blank">36585612</a>). Positively regulates type I and type II interferon signalings by deubiquitinating STAT1 but negatively regulates antiviral response by deubiquitinating STING1 (PubMed:<a href="http://www.uniprot.org/citations/23940278" target="\_blank">23940278</a>, PubMed:<a href="http://www.uniprot.org/citations/28534493" target="\_blank">28534493</a>).

### Cellular Location

Cytoplasm.

### Tissue Location

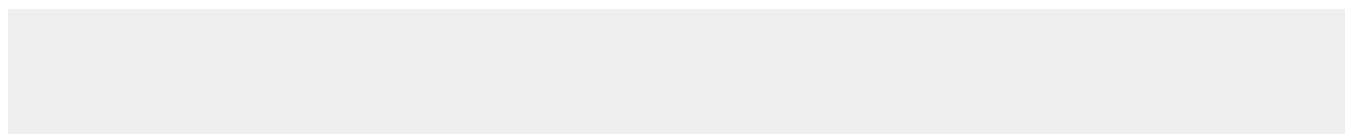
Highly expressed in ovary and testes.

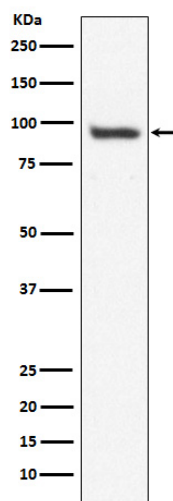
## Anti-USP13 Monoclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-USP13 Monoclonal Antibody - Images





Western blot analysis of USP13 expression in HepG2 cell lysate.