

**USP13 Antibody**  
Rabbit mAb  
Catalog # AP91560

## Specification

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### USP13 Antibody - Product Information

|                                                                   |                        |
|-------------------------------------------------------------------|------------------------|
| Application                                                       | WB, FC, ICC, IP        |
| Primary Accession                                                 | <a href="#">O92995</a> |
| Clonality                                                         | Monoclonal             |
| <b>Other Names</b>                                                |                        |
| Deubiquitinating enzyme 13; Isopeptidase T3; ISOT3; UBP13; USP13; |                        |
| Isotype                                                           | Rabbit IgG             |
| Host                                                              | Rabbit                 |
| Calculated MW                                                     | 97327 Da               |

### USP13 Antibody - Additional Information

|                              |                                                                                                                                                                                                                |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purification                 | <b>Affinity-chromatography</b>                                                                                                                                                                                 |
| Immunogen                    | <b>A synthesized peptide derived from human USP13</b>                                                                                                                                                          |
| Description                  | <b>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.</b> |
| Storage Condition and Buffer | <b>Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.</b>                       |

### USP13 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: [21571647](http://www.uniprot.org/citations/21571647), PubMed: [32772043](http://www.uniprot.org/citations/32772043), PubMed: [33592542](http://www.uniprot.org/citations/33592542)). 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: [32101753](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.

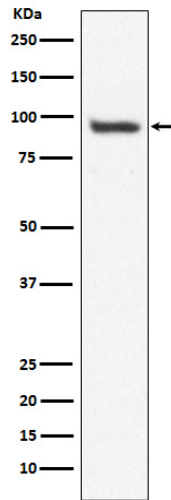
#### USP13 Antibody - Protocols

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](#)

#### USP13 Antibody - Images





Western blot analysis of USP13 expression in HepG2 cell lysate.