

USP25 Antibody

Catalog # ASC11789

Specification

USP25 Antibody - Product Information

Application **WB, IHC, IF**
Primary Accession [Q9UHP3](#)
Other Accession [NP_037528](#),
[50312666](#)
Reactivity **Human, Mouse**
Host **Rabbit**
Clonality **Polyclonal**
Isotype **IgG**
Calculated MW **Predicted: 116 kDa**

Application Notes

Observed: 105 kDa
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USP25 antibody can be used for detection of USP25 by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry at 5 µg/mL. For Immunofluorescence start at 20 µg/mL.

USP25 Antibody - Additional Information

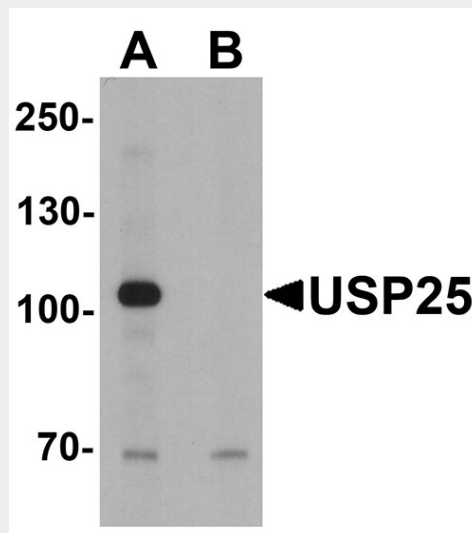
Gene ID **29761**
Target/Specificity
USP25; USP25 antibody is human and mouse reactive. Multiple isoforms of USP25 are known to exist.

Reconstitution & Storage

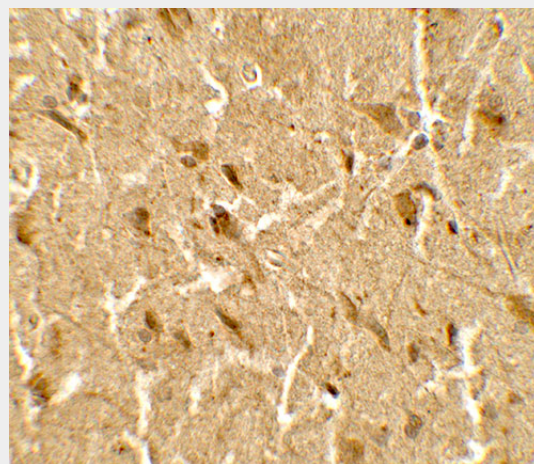
USP25 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

USP25 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Western blot analysis of USP25 in mouse brain tissue lysate with USP25 antibody at 1 µg/ml in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of USP25 in human brain tissue with USP25 antibody at 5 µg/mL.

USP25 Antibody - Protein Information

Name USP25

Synonyms USP21

Function

Deubiquitinating enzyme that hydrolyzes ubiquitin moieties conjugated to substrates and thus, functions to process newly synthesized Ubiquitin, to recycle ubiquitin molecules or to edit polyubiquitin chains and prevents proteasomal degradation of substrates. Hydrolyzes both 'Lys-48'- and 'Lys-63'-linked tetraubiquitin chains.

Cellular Location

Cytoplasm

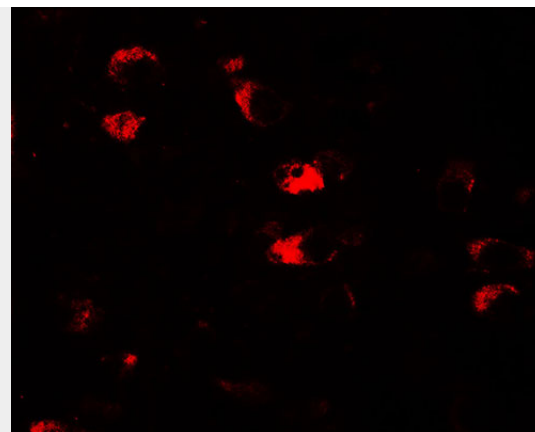
Tissue Location

Isoform USP25a is found in most adult and fetal tissues; expression is moderately high in testis, pancreas, kidney, skeletal muscle, liver, lung, placenta, brain, heart, but very low in peripheral blood, colon, small intestine, ovary, prostate, thymus and spleen. Isoform USP25b is found in all tissues except heart and skeletal muscle. Isoform USP25m is heart and skeletal muscle specific

USP25 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](#)



Immunofluorescence of USP25 in human brain tissue with USP25 antibody at 20 µg/mL.

USP25 Antibody - Background

USP25 (ubiquitin specific peptidase 25), also known as USP21, belongs to the peptidase C19 family and is a highly conserved 76-amino acid protein involved in regulation of intracellular protein breakdown, cell cycle regulation, and stress response (1). It contains one UBA-like domain and two UIM (ubiquitin-interacting motif) repeats. Due to alternative splicing events, USP25 is expressed as two short, ubiquitously expressed isoforms and one long, muscle-specific isoform (2). The long isoform of USP25 (USP25m) is upregulated in myogenesis and is implicated in regulation of muscular differentiation and function. USP25 is a deubiquitinating enzyme (DUB) that negatively regulates IL-17-triggered signaling (3,4).

USP25 Antibody - References

- Valero R, Marfany G, Gonzalez-Angulo O, et al. USP25, a novel gene encoding a deubiquitinating enzyme, is located in the gene-poor region 21q11.2. *Genomics* 1999; 62:395-405.
- Valero R, Bayes M, Francisca Sanchez-Font M, et al. Characterization of alternatively spliced products and tissue-specific isoforms of USP28 and USP25. *Genome Biol.* 2001; 2: RESEARCH0043.
- Zhong B, Liu X, Wang X, et al. Negative regulation of IL-17-mediated signaling and inflammation by the ubiquitin-specific protease USP25. *Nat. Immunol.* 2012; 13:1110-7.
- Zhong B, Liu X, Wang X, et al.

Ubiquitin-specific protease 25 regulates
TLR4-dependent innate immune responses
through deubiquitination of the adaptor protein
TRAF3. Sci. Signal. 2013; 6:ra35.