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# USP25 Antibody
**Purified Mouse Monoclonal Antibody (Mab)**
**Catalog # AM2255a**

## Specification

### USP25 Antibody - Product Information

| | |
|---|---|
| Application | **WB,E** |
| Primary Accession | Q9UHP3 |
| Reactivity | **Human** |
| Host | **Mouse** |
| Clonality | **Monoclonal** |
| Isotype | **IgG1,κ** |
| Calculated MW | **122218** |

### USP25 Antibody - Additional Information

**Gene ID** 29761

**Other Names**
Ubiquitin carboxyl-terminal hydrolase 25, Deubiquitinating enzyme 25, USP on chromosome 21, Ubiquitin thioesterase 25, Ubiquitin-specific-processing protease 25, USP25, USP21

**Target/Specificity**
This USP25 antibody is generated from a mouse immunized with a recombinant protein from human USP25.

**Dilution**
WB~~1:1000
E~~Use at an assay dependent concentration.

**Format**
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

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

### USP25 Antibody - Protein Information

**Name** USP25

**Synonyms** USP21

**Function** Deubiquitinating enzyme that hydrolyzes ubiquitin moieties conjugated to substrates

and thus, functions in various biological processes including inflammation and immune response (PubMed:29518389, PubMed:37683630). Modulates the Wnt/beta-catenin pathway by deubiquitinating and stabilizing tankyrases TNKS1 and TNKS2 (PubMed:28619731, PubMed:30926243, PubMed:38875478). Regulates KEAP1- NRF2 axis in the defense against oxidative assaults by deubiquitinating KEAP1 and protecting it from degradation leading to degradation of the NRF2 transcription factor that is responsible for mounting an anti- oxidation gene expression program (PubMed:37339955). Positively regulates RNA virus-induced innate signaling by interacting with and deubiquitinating ERLIN1 and ERLIN2 (PubMed:37683630). In turn, restricts virus production by regulating cholesterol biosynthetic flux (PubMed:37683630). Acts as a negative regulator of interleukin-17- mediated signaling and inflammation through the removal of 'Lys-63'- linked ubiquitination of TRAF5 and TRAF6 (PubMed:23042150). Prevents the ubiquitination and degradation of TRAF3 to reduce the phosphorylation levels of JNK and P38, the secretion of IL-1B and to induce endotoxin tolerance (PubMed:30579117).

**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, heart, but very low in peripheral blood, colon, small intestine, ovary, prostate, thymus and spleen. Expressed in the brain, with high levels in the cerebral cortex (PubMed:38875478). 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 Cytomety
- Cell Culture

## USP25 Antibody - Images

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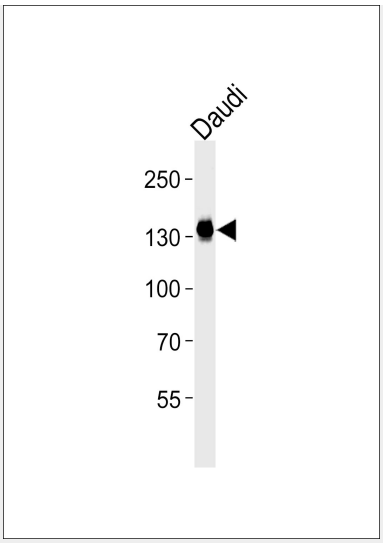


Western blot analysis of lysate from Daudi cell line, using USP25 Antibody (Cat. #AM2255a). AM2255a was diluted at 1:1000. A goat anti-mouse IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35µg.

## USP25 Antibody - Background

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.

## USP25 Antibody - References

Valero R.,et al.Genomics 62:395-405(1999).
Groet J.,et al.Genes Chromosomes Cancer 27:153-161(2000).
Valero R.,et al.Submitted (FEB-2009) to the EMBL/GenBank/DDBJ databases.
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).