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USP25 Antibody [Knockdown Validated]

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM2255a

Product Information

Application	WB, E
Primary Accession	Q9UHP3
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,κ
Clone Names	1277CT376.106.171
Calculated MW	122218

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~~1:2000 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 [Knockdown Validated] is for research use only and not for use in diagnostic or therapeutic procedures.

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.

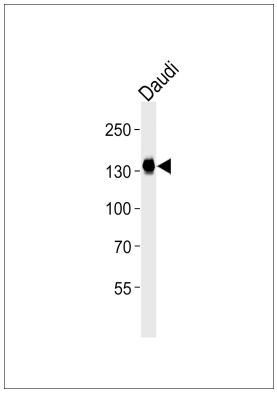
Background

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.

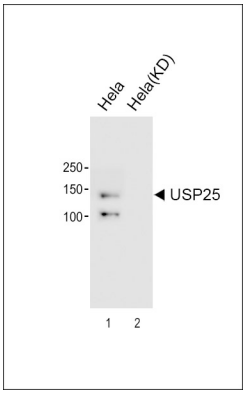
References

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).

Images



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.



All lanes : Anti-USP25 Antibody at 1:2000 dilution Lane 1: Hela Lane 2: Hela-Knockdown Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1613) at 1/8000 dilution.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.