10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

USP5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant USP5.
Catalog # AT4495a

Product Information

Application	WB, E
Primary Accession	P45974
Other Accession	NM_003481
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2C8
Calculated MW	95786

Additional Information

Gene ID	8078
Other Names	Ubiquitin carboxyl-terminal hydrolase 5, Deubiquitinating enzyme 5, Isopeptidase T, Ubiquitin thioesterase 5, Ubiquitin-specific-processing protease 5, USP5, ISOT
Target/Specificity	USP5 (NP_003472, 71 a.a. ~ 180 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	USP5 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

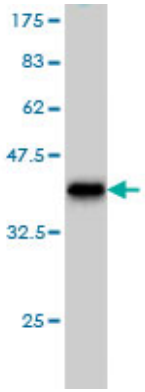
Background

Ubiquitin (see MIM 191339)-dependent proteolysis is a complex pathway of protein metabolism implicated in such diverse cellular functions as maintenance of chromatin structure, receptor function, and degradation of abnormal proteins. A late step of the process involves disassembly of the polyubiquitin chains on degraded proteins into ubiquitin monomers. USP5 disassembles branched polyubiquitin chains by a sequential exo mechanism, starting at the proximal end of the chain (Wilkinson et al., 1995 [PubMed 7578059]).

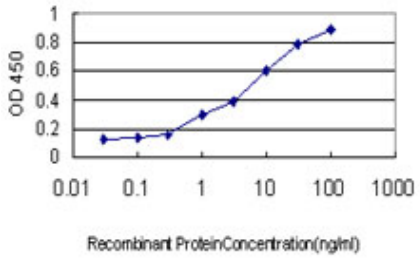
References

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.Suppression of the deubiquitinating enzyme USP5 causes the accumulation of unanchored polyubiquitin and the activation of p53. Dayal S, et al. J Biol Chem, 2009 Feb 20. PMID 19098288.Recognition of polyubiquitin isoforms by the multiple ubiquitin binding modules of isopeptidase T. Reyes-Turcu FE, et al. J Biol Chem, 2008 Jul 11. PMID 18482987.Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.Human USP3 is a chromatin modifier required for S phase progression and genome stability. Nicassio F, et al. Curr Biol, 2007 Nov 20. PMID 17980597.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.84 KDa) .



Detection limit for recombinant GST tagged USP5 is approximately 0.03ng/ml as a capture antibody.