Product Datasheet

USP13 Antibody

Catalog No: #35116

Package Size: #35116-1 50ul #35116-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

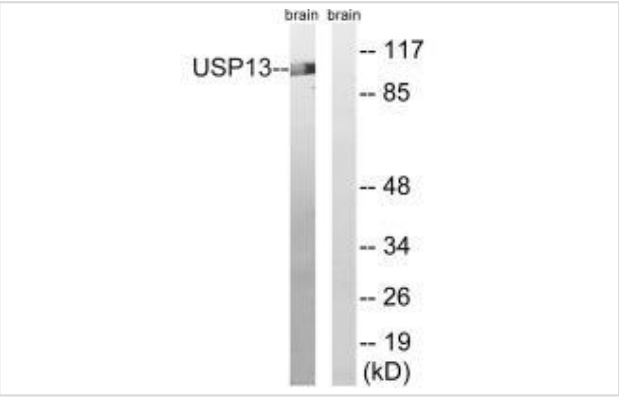
Product Name	USP13 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Applications	WB IHC
Species Reactivity	Hu Ms
Specificity	The antibody detects endogenous levels of total USP13 protein.
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from internal of human USP13.
Target Name	USP13
Other Names	Ubiquitin carboxyl-terminal hydrolase 13; EC 3.1.2.15; Ubiquitin thioesterase 13; Ubiquitin-specific-processing protease 13; Deubiquitinating enzyme 13
Accession No.	Swiss-Prot: Q92995NCBI Gene ID: 8975
Uniprot	Q92995
GeneID	8975;
SDS-PAGE MW	97kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

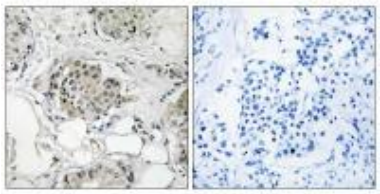
Western blotting: 1:500~1:3000

Immunohistochemistry: 1:50~1:100

Images



Western blot analysis of extracts from mouse brain cells, using USP13 antibody #35116.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using USP13 antibody #35116.

Background

Deubiquitinase that mediates deubiquitination of target proteins such as BECN1, MITF, SKP2 and USP10 and is involved in various processes such as autophagy and endoplasmic reticulum-associated degradation (ERAD). 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. 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). Mediates stabilization of SIAH2 independently of deubiquitinase activity: binds ubiquitinated SIAH2 and acts by impairing SIAH2 autoubiquitination. Has a weak deubiquitinase activity in vitro and preferentially cleaves 'Lys-63'-linked polyubiquitin chains. In contrast to USP5, it is not able to mediate unanchored polyubiquitin disassembly. Able to cleave ISG15 in vitro; however, additional experiments are required to confirm such data.

Timms K.M., Gene 217:101-106(1998).
Mural R.J., Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Dephoure N., Proc. Natl. Acad. Sci. U.S.A. 105:10762-10767(2008).

Note: This product is for in vitro research use only