

Anti-USP13 antibody



Description	Rabbit polyclonal to USP13.
Model	STJ96194
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human USP13
Immunogen Region	780-860 aa, C-terminal
Gene ID	8975
Gene Symbol	USP13
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000
Specificity	USP13 Polyclonal Antibody detects endogenous levels of USP13 protein.
Tissue Specificity	Highly expressed in ovary and testes.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Ubiquitin carboxyl-terminal hydrolase 13 Deubiquitinating enzyme 13 Isopeptidase T-3 ISOT-3 Ubiquitin thioesterase 13 Ubiquitin-specific-processing protease 13
Molecular Weight	97 kDa
Clonality	Polyclonal

Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:12611OMIM:603591
Alternative Names	Ubiquitin carboxyl-terminal hydrolase 13 Deubiquitinating enzyme 13 Isopeptidase T-3 ISOT-3 Ubiquitin thioesterase 13 Ubiquitin-specific-processing protease 13
Function	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). Also regulates ERAD through the deubiquitination of UBL4A a component of the BAG6/BAT3 complex. 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.
Sequence and Domain Family	The UBP-type zinc finger has lost its ability to bind ubiquitin and USP13 is not activated by unanchored ubiquitin. Swapping with the UBP-type zinc finger from USP5 restores ability to bind unanchored ubiquitin and subsequent activation of the protein . The UBA domains mediate binding to ubiquitin.