

## Mouse Anti-USP5 antibody

SLM-51588M

<b>Product Name</b>	USP5
<b>Chinese Name</b>	Ubiquitin 羧基末端水解酶 5 单克隆抗体
<b>Alias</b>	Deubiquitinating enzyme 5; Isopeptidase T; ISOT 1; ISOT; Ubiquitin carboxyl-terminal hydrolase 5; Ubiquitin isopeptidase T; Ubiquitin specific peptidase 5 (isopeptidase T); Ubiquitin specific peptidase 5; Ubiquitin specific processing protease 5; Ubiquitin specific protease 5 (isopeptidase T); Ubiquitin specific protease 5 (ubiquitin isopeptidase T); Ubiquitin thioesterase 5; Ubiquitin thiolesterase 5; Ubiquitin-specific-processing protease 5; UBP5_HUMAN.
<b>Research Area</b>	Cell biology Epigenetics Ubiquitin
<b>Immunogen Species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone NO.</b>	H4Y13
<b>React Species</b>	Human, Mouse, Rat, WB=1:500-2000
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Theoretical molecular weight</b>	96kDa
<b>Cellular localization</b>	The nucleus cytoplasmic
<b>Form</b>	Liquid
<b>Concentration immunogen</b>	1mg/ml Recombinant human USP5.
<b>Lsotype</b>	IgG1, $\kappa$
<b>Purification</b>	affinity purified by Protein G
<b>Buffer Solution</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
<b>Storage</b>	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
<b>Attention</b>	This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**PubMed**

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Profound changes in patterns of gene expression can result from relatively small changes in the concentrations of sequence specific transcription factors. 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]).[supplied by OMIM, Mar 2010]

**Function:**

Cleaves linear and branched multiubiquitin polymers with a marked preference for branched polymers. Involved in unanchored 'Lys-48'-linked polyubiquitin disassembly. Binds linear and 'Lys-63'-linked polyubiquitin with a lower affinity. Knock-down of USP5 causes the accumulation of p53/TP53 and an increase in p53/TP53 transcriptional activity because the unanchored polyubiquitin that accumulates is able to compete with ubiquitinated p53/TP53 but not with MDM2 for proteasomal recognition.

**Product Detail**

**Subunit:**

Interacts with TRIML1.

**Post-translational modifications:**

The N-terminus is blocked.

The UniProt Consortium

**Similarity:**

Belongs to the peptidase C19 family.

Contains 2 UBA domains.

Contains 1 UBP-type zinc finger.

**SWISS:**

P45974

**Gene ID:**

8078

**Database links:**

[Entrez Gene: 8078](#) Human

[Entrez Gene: 22225](#) Mouse

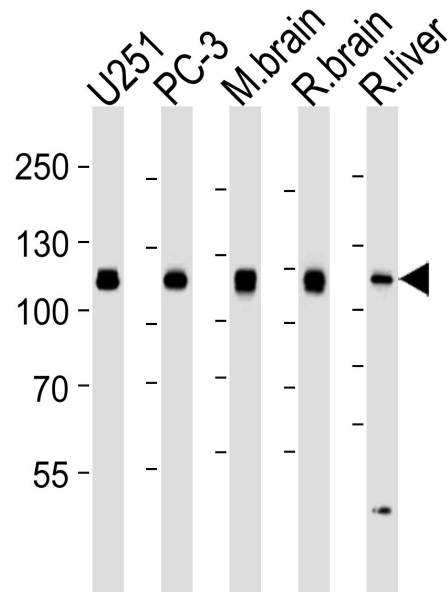
[Entrez Gene: 297593](#) Rat

[Omim: 601447](#) Human

[SwissProt: P45974](#) Human

[SwissProt: P56399](#) Mouse

**Product Picture**



Sample:

Lane 1: U251 cell lysates

Lane 2: PC-3 cell lysates

Lane 3: Mouse brain tissue lysates

Lane 4: Rat brain tissue lysates



Lane 5: Rat liver tissue lysates

Primary: Anti-USP5 (SLM-51588M) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 96 kD

Observed band size: 110 kD