

USP5 Antibody
Chicken Polyclonal Antibody
Catalog # ABV11126**Specification**

USP5 Antibody - Product Information

Application	WB
Primary Accession	P45974
Reactivity	Human
Host	Chicken
Clonality	Polyclonal
Isotype	Chicken IgG
Calculated MW	95786

USP5 Antibody - Additional Information**Gene ID** 8078**Application & Usage**

Western blot: Robust detection of 100 ng of recombinant protein was possible when antibody was used at a final concentration of 5 µg/mL

Other Names

Deubiquitinating enzyme 5, Isopeptidase T, IsoT, ISOT, Ubiquitin carboxyl-terminal hydrolase 5, Ubiquitin-specific-processing protease 5, Ubiquitin thioesterase 5, Ubiquitin-specific-processing protease 5.

Target/Specificity

USP5

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

50 µg of antibody in PBS containing 10% glycerol

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions**Precautions**

USP5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

USP5 Antibody - Protein Information

Name USP5

Synonyms ISOT

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.

USP5 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

USP5 Antibody - Images

USP5 Antibody - Background

The ubiquitin (Ub) pathway involves three sequential enzymatic steps that facilitate the conjugation of Ub and Ub-like molecules to specific protein substrates. Through the use of a wide range of enzymes that can add or remove ubiquitin, the Ub pathway controls many intracellular processes such as signal transduction, transcriptional activation and cell cycle progression. USP5 (ubiquitin specific peptidase 5), also known as ISOT (isopeptidase T), is a 858 amino acid zinc-binding deubiquitinating enzyme that participates in the Ub pathway. A member of the peptidase C19 family, the catalytic activity of USP5 involves a combination of the ubiquitin carboxyl-terminal thiolester and water to produce ubiquitin and a thiol. USP5 contains two UBA domains and one UBP-type zinc finger. USP5 is responsible for disassembling unanchored polyubiquitin chains in the cell. Full length USP5 mediated cleavage of Ub-PLA2 is significantly enhanced is enhanced by low concentrations of mono ubiquitin.