

USP5 (E-14): sc-79811

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.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: USP5 (human) mapping to 12p13.31; Usp5 (mouse) mapping to 6 F2.

SOURCE

USP5 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of USP5 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79811 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

USP5 (E-14) is recommended for detection of USP5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

USP5 (E-14) is also recommended for detection of USP5 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for USP5 siRNA (h): sc-76869, USP5 siRNA (m): sc-76870, USP5 shRNA Plasmid (h): sc-76869-SH, USP5 shRNA Plasmid (m): sc-76870-SH, USP5 shRNA (h) Lentiviral Particles: sc-76869-V and USP5 shRNA (m) Lentiviral Particles: sc-76870-V.

Molecular Weight of USP5: 96 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try **USP5 (C-11): sc-390943**, our highly recommended monoclonal alternative to USP5 (E-14).