

USP13 (N-18): sc-82075

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. USP13 (ubiquitin specific peptidase 13), also known as ISOT3 (Isopeptidase T-3), is an 863 amino acid protein that belongs to the peptidase C19 family and contains one UBP-type zinc finger and 2 UBA domains. Highly expressed in testicular and ovarian tissue, USP13 functions to catalyze the water-dependent conversion of a ubiquitin C-terminal thioester to a thiol and a free ubiquitin.

REFERENCES

1. D'Andrea, A. and Pellman, D. 1998. Deubiquitinating enzymes: a new class of biological regulators. *Crit. Rev. Biochem. Mol. Biol.* 33: 337-352.
2. Timms, K.M., Ansari-Lari, M.A., Morris, W., Brown, S.N. and Gibbs, R.A. 1998. The genomic organization of Isopeptidase T-3 (ISOT-3), a new member of the ubiquitin specific protease family (UBP). *Gene* 217: 101-106.

CHROMOSOMAL LOCATION

Genetic locus: USP13 (human) mapping to 3q26.33; Usp13 (mouse) mapping to 3 A3.

SOURCE

USP13 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of USP13 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-82075 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

USP13 (N-18) is recommended for detection of USP13 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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); non cross-reactive with other USP family members.

USP13 (N-18) is also recommended for detection of USP13 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for USP13 siRNA (h): sc-76815, USP13 siRNA (m): sc-76816, USP13 shRNA Plasmid (h): sc-76815-SH, USP13 shRNA Plasmid (m): sc-76816-SH, USP13 shRNA (h) Lentiviral Particles: sc-76815-V and USP13 shRNA (m) Lentiviral Particles: sc-76816-V.

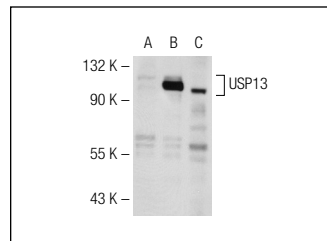
Molecular Weight of USP13: 97 kDa.

Positive Controls: USP13 (h5): 293T Lysate: sc-174342 or mouse brain extract: sc-2253.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



USP13 (N-18): sc-82075. Western blot analysis of USP13 expression in non-transfected: sc-117752 (A) and human USP13 transfected: sc-174342 (B) 293T whole cell lysates and mouse brain tissue extract (C).

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **USP13 (B-9): sc-514416** or **USP13 (E-11): sc-514442**, our highly recommended monoclonal alternatives to USP13 (N-18).