

USP47 (D-19): sc-82402

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. USP47 (ubiquitin specific peptidase 47), also known as TRFP (Trf (TATA binding protein-related factor)-proximal homolog), is a 1,375 amino acid protein that belongs to the peptidase C19 family of proteins. Expressed in skeletal muscle, testis and heart, USP47 contains all of the active residues necessary to function as a deubiquitinating enzyme, but it appears to be catalytically inactive. Three isoforms of USP47 are expressed due to alternative splicing events.

REFERENCES

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5. Lo, K.C., Rossi, M.R., Eberhart, C.G. and Cowell, J.K. 2007. Genome wide copy number abnormalities in pediatric medulloblastomas as assessed by array comparative genome hybridization. *Brain Pathol.* 17: 282-296.

CHROMOSOMAL LOCATION

Genetic locus: USP47 (human) mapping to 11p15.3; Usp47 (mouse) mapping to 7 F1.

SOURCE

USP47 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of USP47 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-82402 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

USP47 (D-19) is recommended for detection of USP47 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.

Suitable for use as control antibody for USP47 siRNA (h): sc-76863, USP47 siRNA (m): sc-76864, USP47 shRNA Plasmid (h): sc-76863-SH, USP47 shRNA Plasmid (m): sc-76864-SH, USP47 shRNA (h) Lentiviral Particles: sc-76863-V and USP47 shRNA (m) Lentiviral Particles: sc-76864-V.

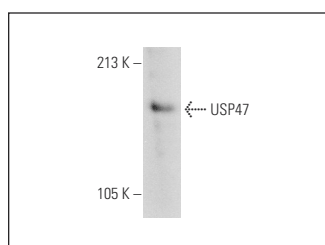
Molecular Weight of USP47: 157 kDa.

Positive Controls: Sol8 cell lysate: sc-2249 or HeLa whole cell lysate: sc-2200.

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



USP47 (D-19): sc-82402. Western blot analysis of USP47 expression in Sol8 whole cell lysate.

STORAGE

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



Try **USP47 (4E7): sc-100633**, our highly recommended monoclonal alternative to USP47 (D-19).