

# USP32 (K-17): sc-103921

## 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. USP32 (ubiquitin specific peptidase 32), also known as NY-REN-60, is a 1,604 amino acid protein that contains one DUSP domain and 3 EF-hand calcium binding domains. Localized to membranes in a lipid-anchored fashion and expressed in all normal tissues, USP32 catalyzes the conversion of a ubiquitin C-terminal thioester to a free ubiquitin and a thiol, a reaction that may influence several cellular processes.

## REFERENCES

1. Wilkinson, K.D. 1997. Regulation of ubiquitin-dependent processes by deubiquitinating enzymes. *FASEB J.* 11: 1245-1256.
2. Scanlan, M.J., et al. 1999. Antigens recognized by autologous antibody in patients with renal-cell carcinoma. *Int. J. Cancer* 83: 456-464.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607740. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Puente, X.S., et al. 2003. Human and mouse proteases: a comparative genomic approach. *Nat. Rev. Genet.* 4: 544-558.
5. Paulding, C.A., et al. 2003. The Tre2 (USP6) oncogene is a hominoid-specific gene. *Proc. Natl. Acad. Sci. USA* 100: 2507-2511.
6. Quesada, V., et al. 2004. Cloning and enzymatic analysis of 22 novel human ubiquitin-specific proteases. *Biochem. Biophys. Res. Commun.* 314: 54-62.

## CHROMOSOMAL LOCATION

Genetic locus: USP32 (human) mapping to 17q23.1; Usp32 (mouse) mapping to 11 C.

## SOURCE

USP32 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of USP32 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-103921 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

USP32 (K-17) is recommended for detection of USP32 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.

USP32 (K-17) is also recommended for detection of USP32 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for USP32 siRNA (h): sc-106678, USP32 siRNA (m): sc-106679, USP32 shRNA Plasmid (h): sc-106678-SH, USP32 shRNA Plasmid (m): sc-106679-SH, USP32 shRNA (h) Lentiviral Particles: sc-106678-V and USP32 shRNA (m) Lentiviral Particles: sc-106679-V.

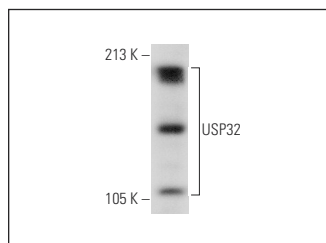
Molecular Weight of USP32: 182 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or mouse testis extract: sc-2405.

## 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



USP32 (K-17): sc-103921. Western blot analysis of USP32 expression in HeLa whole cell lysate.

## RESEARCH USE

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

**MONOS**  
Satisfaction  
Guaranteed

Try **USP32 (A-10): sc-374465** or **USP32 (F-3): sc-376491**, our highly recommended monoclonal alternatives to USP32 (K-17).