

# USP32 (F-3): sc-376491

## 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 three 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

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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/>
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5. Paulding, C.A., Ruvolo, M. and Haber, D.A. 2003. The Tre2 (USP6) oncogene is a hominoid-specific gene. *Proc. Natl. Acad. Sci. USA* 100: 2507-2511.
6. Quesada, V., Díaz-Perales, A., Gutiérrez-Fernández, A., Garabaya, C., Cal, S. and López-Otín, C. 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.

## SOURCE

USP32 (F-3) is a mouse monoclonal antibody raised against amino acids 361-660 mapping within an internal region of USP32 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

USP32 (F-3) is recommended for detection of USP32 of human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

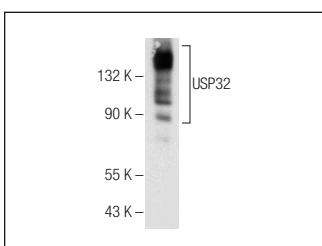
Molecular Weight of USP32: 182 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224.

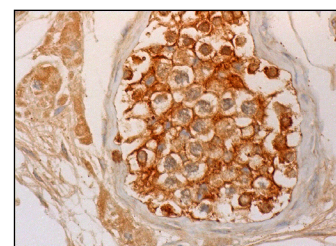
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



USP32 (F-3): sc-376491. Western blot analysis of USP32 expression in Caki-1 whole cell lysate.



USP32 (F-3): sc-376491. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and membrane staining of cells in seminiferous ducts and cytoplasmic staining of Leydig cells.

## RESEARCH USE

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

## PROTOCOLS

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