

# USP26 (E-15): sc-51007

## BACKGROUND

Ubiquitin specific peptidase 26 (USP26) is a deubiquitinating enzyme that is a member of the peptidase C19 family and contains Cys and His domains and one UBP-type zinc finger. USP26 plays a role in negative regulation of gluconeogenesis and is required for proteasome-dependent catabolite degradation of fructose-1,6-bisphosphate. It is involved with the 26S Proteasome in the ubiquitin-dependent proteolytic pathway. USP26 accelerates proteosomal breakdown of ubiquitinated proteins, while disassembling free ubiquitin chains. The catalytic activity of USP26 involves the combination of the ubiquitin carboxyl-terminal thiolester and water to produce ubiquitin and a thiol. USP26 is likely located in the cytoplasm and is specifically expressed in testis tissue. The gene maps to the X chromosome. Alterations in the gene are associated with Sertoli cell-only syndrome and male infertility.

## REFERENCES

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2. Paduch, D.A., Mielnik, A. and Schlegel, P.N. 2005. Novel mutations in testis-specific ubiquitin protease 26 gene may cause male infertility and hypogonadism. *Reprod. Biomed. Online* 10: 747-754.
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5. Ravel, C., El Houate, B., Chantot, S., Lourenço, D., Dumaine, A., Rouba, H., Bandyopadhyay, A., Radhakrishna, U., Das, B., Sengupta, S., Mandelbaum, J., Siffroi, J.P. and McElreavey, K. 2006. Haplotypes, mutations and male fertility: the story of the testis-specific ubiquitin protease USP26. *Mol. Hum. Reprod.* 12: 643-646.
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## CHROMOSOMAL LOCATION

Genetic locus: *Usp26* (mouse) mapping to X A5.

## SOURCE

USP26 (E-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of USP26 of mouse 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-51007 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

USP26 (E-15) is recommended for detection of Ubiquitin-specific Processing Protease 26 of mouse and rat 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).

Suitable for use as control antibody for USP26 siRNA (m): sc-61764, USP26 shRNA Plasmid (m): sc-61764-SH and USP26 shRNA (m) Lentiviral Particles: sc-61764-V.

Molecular Weight observed of USP26: 83 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.

## PROTOCOLS

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