# SANTA CRUZ BIOTECHNOLOGY, INC.

# RNF25 (T-25): sc-102094



### BACKGROUND

Ubiquitination is an important mechanism through which three classes of enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitinactivating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). RNF25 (RING finger protein 25), also known as A07, is a 459 amino acid protein that contains one RWD domain and one RING-type zinc finger. Via its RING-type zinc finger (a common domain that contains a conserved cysteine-rich region and is found in a number of viral and eukaryotic proteins), RNF25 is thought to exhibit E2-dependent E3 ubiquitin-protein ligase activity. Specifically, the RING finger of RNF25 interacts with an E2 ligase and, through this interaction, facilitates the ubiquitination of target proteins. RNF25 may also regulate the transcriptional activity of NF $\kappa$ B p65, a protein that plays important roles in cell survival, inflammation response, host defense and proliferation.

## REFERENCES

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- Lorick, K.L., Jensen, J.P., Fang, S., Ong, A.M., Hatakeyama, S. and Weissman, A.M. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. Proc. Natl. Acad. Sci. USA 96: 11364-11369.
- Asamitsu, K., Tetsuka, T., Kanazawa, S. and Okamoto, T. 2003. RING finger protein A07 supports NFκB-mediated transcription by interacting with the transactivation domain of the p65 subunit. J. Biol. Chem. 278: 26879-26887.
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- Penengo, L., Mapelli, M., Murachelli, A.G., Confalonieri, S., Magri, L., Musacchio, A., Di Fiore, P.P., Polo, S. and Schneider, T.R. 2006. Crystal structure of the ubiquitin binding domains of Rabex-5 reveals two modes of interaction with ubiquitin. Cell 124: 1183-1195.

#### CHROMOSOMAL LOCATION

Genetic locus: RNF25 (human) mapping to 2q35; Rnf25 (mouse) mapping to 1 C3.

## SOURCE

RNF25 (T-25) is a purified rabbit polyclonal antibody raised against RNF25 of human origin.

### **STORAGE**

Store at 4° C, \*\*D0 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 or our catalog for detailed protocols and support products.

#### PRODUCT

Each vial contains 50  $\mu g$  lgG in 500  $\mu l$  PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

### **APPLICATIONS**

RNF25 (T-25) is recommended for detection of RNF25 of mouse, human and dog origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 RNF25 siRNA (h): sc-94291, RNF25 siRNA (m): sc-153044, RNF25 shRNA Plasmid (h): sc-94291-SH, RNF25 shRNA Plasmid (m): sc-153044-SH, RNF25 shRNA (h) Lentiviral Particles: sc-94291-V and RNF25 shRNA (m) Lentiviral Particles: sc-153044-V.

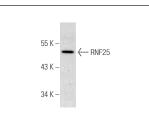
Molecular Weight of RNF25: 51 kDa.

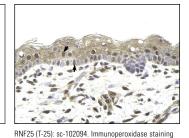
Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or Jurkat nuclear extract: sc-2132.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz<sup>™</sup>: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

#### DATA





of formalin fixed, paraffin-embedded human skin tissue showing nuclear and cytoplasmic staining

RNF25 (T-25): sc-102094. Western blot analysis of RNF25 expression in mouse prostate tissue extract.

#### **RESEARCH USE**

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