

# RNF25 (E-10): sc-398749



The Power to Question

## 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 ubiquitin-activating 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 NFκB p65, a protein that plays important roles in cell survival, inflammation response, host defense and proliferation.

## REFERENCES

1. Borden, K.L. and Freemont, P.S. 1996. The RING finger domain: a recent example of a sequence-structure family. *Curr. Opin. Struct. Biol.* 6: 395-401.
2. Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
3. Asamitsu, K., et al. 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.
4. Colland, F., et al. 2004. Functional proteomics mapping of a human signaling pathway. *Genome Res.* 14: 1324-1332.
5. Penengo, L., et al. 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 (E-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 74-103 within an internal region of RNF25 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>3</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-398749 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-398749 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## RESEARCH USE

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

## APPLICATIONS

RNF25 (E-10) is recommended for detection of RNF25 of mouse, rat and 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) 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.

RNF25 (E-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

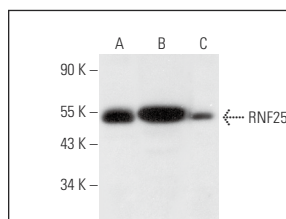
Molecular Weight of RNF25: 51 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, U-251-MG whole cell lysate: sc-364176 or HeLa nuclear extract: sc-2120.

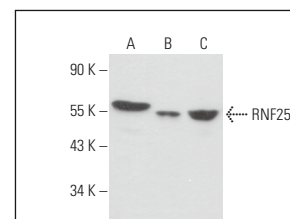
## RECOMMENDED SUPPORT REAGENTS

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.

## DATA



RNF25 (E-10): sc-398749. Western blot analysis of RNF25 expression in HeLa (A) and U-251-MG (B) whole cell lysates and HeLa nuclear extract (C).



RNF25 (E-10): sc-398749. Western blot analysis of RNF25 expression in U-251-MG (A), Hep G2 (B) and c4 (C) whole cell lysates.

## 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) for detailed protocols and support products.