

# RNF113A (E-15): sc-138588

## BACKGROUND

The RING-type zinc finger motif is present in a number of viral and eukaryotic proteins and contains conserved cysteine-rich domain that is able to bind two zinc atoms. Proteins that contain this conserved domain are generally involved in the ubiquitination pathway of protein degradation. RNF113A (ring finger protein 113A), also known as Cwc24, RNF113 or ZNF183, is a 343 amino acid protein that is ubiquitously expressed and contains a C3H1-type zinc finger and a RING-type zinc finger. RNF113A is encoded by a gene located on human chromosome Xq24. Chromosome X consists of about 153 million base pairs and nearly 1,000 genes. Color blindness, hemophilia and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently, as males carry a single X chromosome.

## REFERENCES

1. Freemont, P.S. 1993. The RING finger. A novel protein sequence motif related to the zinc finger. *Ann. N.Y. Acad. Sci.* 684: 174-192.
2. 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.
3. Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
4. Westbrook, V.A., et al. 2000. Spermatid-specific expression of the novel X-linked gene product SPAN-X localized to the nucleus of human spermatozoa. *Biol. Reprod.* 63: 469-481.
5. Bernardino-Sgherri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. *Cytogenet. Genome Res.* 99: 85-91.
6. Deeb, S.S. 2005. The molecular basis of variation in human color vision. *Clin. Genet.* 67: 369-377.
7. Hayashi, T., et al. 2006. Novel form of a single X-linked visual pigment gene in a unique dichromatic color-vision defect. *Vis. Neurosci.* 23: 411-417.

## CHROMOSOMAL LOCATION

Genetic locus: RNF113A (human) mapping to Xq24; Rnf113a1 (mouse) mapping to X A3.3, Rnf113a2 (mouse) mapping to 12 D1.

## SOURCE

RNF113A (E-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of RNF113A of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138588 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

RNF113A (E-15) is recommended for detection of RNF113A of human origin, and RNF113A1 and RNF113A2 of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with RNF113B.

RNF113A (E-15) is also recommended for detection of RNF113A in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for RNF113A siRNA (h): sc-91293, RNF113A shRNA Plasmid (h): sc-91293-SH and RNF113A shRNA (h) Lentiviral Particles: sc-91293-V.

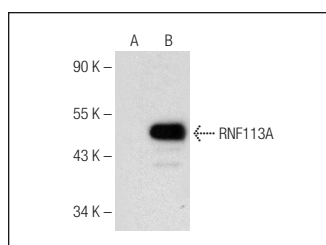
Molecular Weight of RNF113A: 39 kDa.

Positive Controls: RNF113A (h): 293T Lysate: sc-112744.

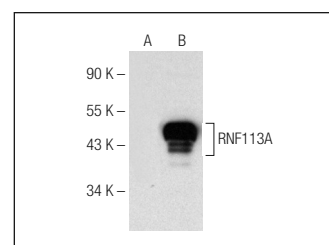
## RECOMMENDED SECONDARY REAGENTS

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 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™ Mounting Medium: sc-24941.

## DATA



RNF113A (E-15): sc-138588. Western blot analysis of RNF113A expression in non-transfected: sc-117752 (A) and human RNF113A transfected: sc-112744 (B) 293T whole cell lysates.



RNF113A (E-15): sc-138588. Western blot analysis of RNF113A expression in non-transfected: sc-117752 (A) and mouse RNF113A transfected: sc-123229 (B) 293T 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) or our catalog for detailed protocols and support products.