



# ADAM32 (M-105): sc-50492

## BACKGROUND

ADAM (disintegrin and metalloproteinase domain) proteins, also known as MDC (metalloproteinase, disintegrin and cysteine-rich domain) proteins or cellular disintegrins, are a family of proteins that are expressed in numerous tissues. ADAMs are membrane-anchored, glycosylated, Zn<sup>2+</sup> dependent proteases that catalyze proteolysis, adhesion, fusion and intracellular signaling. The ADAM family consists of more than 30 different members with many diverse functions. ADAM32 is expressed predominantly in the testis on the sperm surface. The ADAM32 precursor originates in the testis and is processed during epididymal maturation. ADAM32 may play a role in sperm-egg adhesion or sperm development.

## REFERENCES

1. Cho, C., et al. 1996. Chromosomal assignment of four testis-expressed mouse genes from a new family of transmembrane proteins (ADAMs) involved in cell-cell adhesion and fusion. *Genomics* 34: 413-417.
2. Yuan, R., et al. 1997. A role for the disintegrin domain of cyritestin, a sperm surface protein belonging to the ADAM family, in mouse sperm-egg plasma membrane adhesion and fusion. *J. Cell Biol.* 137: 105-112.
3. Sagane, K., et al. 1998. Metalloproteinase-like, disintegrin-like, cysteine-rich proteins MDC2 and MDC3: novel human cellular disintegrins highly expressed in the brain. *Biochem. J.* 334: 93-98.
4. Sagane, K., et al. 1999. Cloning and chromosomal mapping of mouse ADAM11, ADAM22 and ADAM23. *Gene* 236: 79-86.
5. Cal, S., et al. 2000. ADAM 23/MDC3, a human disintegrin that promotes cell adhesion via interaction with the  $\alpha V/\beta 3$  Integrin through an RGD-independent mechanism. *Mol. Biol. Cell.* 11: 1457-1469.
6. Choi, I., et al. 2003. Identification and characterization of ADAM32 with testis-predominant gene expression. *Gene* 304: 151-162.
7. Glassey, B., et al. 2004. Positive selection at reproductive ADAM genes with potential intercellular binding activity. *Mol. Biol. Evol.* 21: 851-859.
8. Takada, H., et al. 2005. ADAM23, a possible tumor suppressor gene, is frequently silenced in gastric cancers by homozygous deletion or aberrant promoter hypermethylation. *Oncogene* 24: 8051-8060.
9. Kierszenbaum, A.L., et al. 2006. Role of integrins, tetraspanins and ADAM proteins during the development of apoptotic bodies by spermatogenic cells. *Mol. Reprod. Dev.* 73: 906-917.

## CHROMOSOMAL LOCATION

Genetic locus: Adam32 (mouse) mapping to 8 A2.

## 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.

## SOURCE

ADAM32 (M-105) is a rabbit polyclonal antibody raised against amino acids 531-635 mapping within an extracellular domain of ADAM32 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.

## APPLICATIONS

ADAM32 (M-105) is recommended for detection of ADAM32 of mouse and, to a lesser extent, rat origin by Western Blotting (starting dilution 1:200, 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 ADAM32 siRNA (m): sc-61943, ADAM32 shRNA Plasmid (m): sc-61943-SH and ADAM32 shRNA (m) Lentiviral Particles: sc-61943-V.

Molecular Weight of ADAM32: 88 kDa.

Positive Controls: rat testis extract: sc-2400 or NTERA-2 cl.D1 whole cell lysate.

## 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.

## RESEARCH USE

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