

# ADAM32 (A-5): sc-376738

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: ADAM32 (human) mapping to 8p11.22.

## SOURCE

ADAM32 (A-5) is a mouse monoclonal antibody raised against amino acids 531-680 mapping within an extracellular domain of ADAM32 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ADAM32 (A-5) is available conjugated to agarose (sc-376738 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376738 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376738 PE), fluorescein (sc-376738 FITC), Alexa Fluor<sup>®</sup> 488 (sc-376738 AF488), Alexa Fluor<sup>®</sup> 546 (sc-376738 AF546), Alexa Fluor<sup>®</sup> 594 (sc-376738 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-376738 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-376738 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-376738 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

ADAM32 (A-5) is recommended for detection of ADAM32 of human origin by Western Blotting (starting dilution 1:100, 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 ADAM32 siRNA (h): sc-61942, ADAM32 shRNA Plasmid (h): sc-61942-SH and ADAM32 shRNA (h) Lentiviral Particles: sc-61942-V.

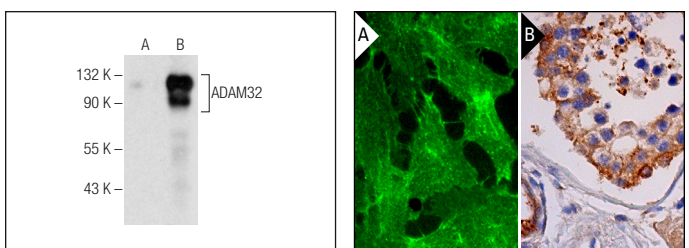
Molecular Weight of ADAM32: 88 kDa.

Positive Controls: human ADAM32 transfected HEK293T whole cell lysate.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



ADAM32 (A-5): sc-376738. Western blot analysis of ADAM32 expression in non-transfected (A) and human ADAM32 transfected (B) HEK293T whole cell lysates.

ADAM32 (A-5): sc-376738. Immunofluorescence staining of formalin-fixed HepG2 cells showing membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic and membrane staining of cells in seminiferous ducts and cytoplasmic staining of Leydig cells (B).

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

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