ADAM32 (P-16): sc-67422



The Power to Question

BACKGROUND

ADAM (a 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, Zn²+ 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 spermegg adhesion or sperm development.

REFERENCES

- 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.
- 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.
- Sagane, K., et al. 1998. Metalloproteinase-like, disintegrin-like, cysteinerich proteins MDC2 and MDC3: novel human cellular disintegrins highly expressed in the brain. Biochem. J. 334: 93-98.
- 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 α V/ β 3 Integrin through an RGD-independent mechanism. Mol. Biol. Cell 11: 1457-1469.
- 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.
- 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.

SOURCE

ADAM32 (P-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of ADAM32 of mouse origin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-67422 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ADAM32 (P-16) is recommended for detection of ADAM32 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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.

Molecular Weight of ADAM32: 88 kDa.

Positive Controls: rat testis extract: sc-2400.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com