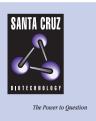
## SANTA CRUZ BIOTECHNOLOGY, INC.

# ADAM25 (G-20): sc-26005



BACKGROUND

The ADAM (A Disintegrin And Metalloprotease) protein family, which includes over 30 membrane-anchored, glycosylated, Zn<sup>2+</sup> dependent proteases, plays a role in cell-cell and cell-matrix interface related processes, including fertilization, muscle fusion, secretion of tumor necrosis factor- $\alpha$  (TNF $\alpha$ ), and modulation of the neurogenic function of Notch and Delta. The ADAM proteins possess a signal-domain, a pro-domain, a metalloprotease domain, a disintegrin domain (Integrin ligand), a cysteine-rich region, an epidermal growth factor-like domain, a transmembrane domain, and a cytoplasmic tail. ADAMs are expressed in a wide range of mammalian tissues and several are abundantly expressed in the male reproductive tract. Three testis-specific ADAM family members include ADAM24, ADAM25, and ADAM26, which are alternatively designated testase 1, testase 2, and testase 3, respectively. ADAM25 exists as two transcripts produced by different genes ( $\alpha$  and  $\beta$ ). ADAM24, an 88 kDa protein, is proteolytically processed on the sperm plasma membrane, and, therefore, may facilitate sperm penetration of the zona pellucida.

## REFERENCES

- Wolfsberg, T.G., Primakoff, P., Myles, D.G. and White, J.M. 1995. ADAM, a novel family of membrane proteins containing a disintegrin and metalloprotease domain: multipotential functions in cell-cell and cell-matrix interactions. J. Cell Biol. 131: 275-278.
- Primakoff, P. and Myles, D.G. 2000. The ADAM gene family: surface proteins with adhesion and protease activity. Trends Genet. 16: 83-87.
- Stone, A.L., Kroeger, M., and Sang, Q.X. 1999. Structure-function analysis of the ADAM family of disintegrin-like and metalloproteinase-containing proteins (review). J. Protein Chem. 18: 447-465.
- Zhu, G.Z., Myles, D.G. and Primakoff, P. 2001. Testase 1 (ADAM24) a plasma membrane-anchored sperm protease implicated in sperm function during epididymal maturation or fertilization. J. Cell Sci. 114: 1787-1794.
- Zhu, G.Z., Lin, Y., Myles, D.G. and Primakoff, P. 1999. Identification of four novel ADAMs with potential roles in spermatogenesis and fertilization. Gene. 234: 227-237.
- 6. Bolcun, E., Rzymski, T., Nayernia, K. and Engel, W. 2004. ADAM family genes testase  $2\alpha$  and  $2\beta$  are chromosomally linked and simultaneously expressed in male germ cells. Mol. Reprod. Dev. 65: 19-22.

## CHROMOSOMAL LOCATION

Genetic locus: Adam25 (mouse) mapping to 8 A4.

## SOURCE

ADAM25 (G-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ADAM25 of mouse origin.

## PROTOCOLS

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

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26005 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

ADAM25 (G-20) is recommended for detection of ADAM25 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).

#### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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<sup>™</sup> Mounting Medium: sc-24941.

#### **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.