



ADAM30 (K-14): sc-26022

BACKGROUND

The ADAM (a disintegrin and metalloprotease) protein family, which includes over 30 membrane-anchored, glycosylated, Zn²⁺ dependent proteases, plays a role in cell-cell and cell-matrix interface related processes. These processes include fertilization, muscle fusion, secretion of TNF α (tumor necrosis factor α) 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 and a cytoplasmic tail. ADAMs are expressed in a wide range of mammalian tissues and several are abundantly expressed in the male reproductive tract. ADAM30 is located specifically in the testis and is expressed as multiple isoforms varying at the C-terminus. Through its catalytic domains, ADAM30 is thought to play a role in spermatogenesis and fertilization.

REFERENCES

1. 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.
2. Cerretti, D.P., DuBose, R.F., Black, R.A. and Nelson, N. 1999. Isolation of two novel metalloproteinase-disintegrin (ADAM) cDNAs that show testis-specific gene expression. *Biochem. Biophys. Res. Commun.* 263: 810-815.
3. Stone, A.L., Kroeger, M. and Sang, Q.X. 1999. Structure-function analysis of the ADAM family of disintegrin-like and metalloproteinase-containing proteins. *J. Protein Chem.* 18: 447-465.
4. Xu, R., Cai, J., Xu, T., Zhou, W., Ying, B., Deng, K., Zhao, S. and Li, C. 1999. Molecular cloning and mapping of a novel ADAM gene (ADAM29) to human chromosome 4. *Genomics* 62: 537-539.
5. Primakoff, P. and Myles, D.G. 2000. The ADAM gene family: surface proteins with adhesion and protease activity. *Trends Genet.* 16: 83-87.
6. Rocks, N., Paulissen, G., El Hour, M., Quesada, F., Crahay, C., Gueders, M., Foidart, J.M., Noel, A. and Cataldo, D. 2007. Emerging roles of ADAM and ADAMTS metalloproteinases in cancer. *Biochimie* 90: 369-379.

CHROMOSOMAL LOCATION

Genetic locus: ADAM30 (human) mapping to 1p12.

SOURCE

ADAM30 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ADAM30 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with 0.1% sodium azide and 0.2% gelatin.

Blocking peptide available for competition studies, sc-26022 P, (100 μ g peptide in 0.5 ml PBS containing 0.1% sodium azide and 0.2% BSA)

APPLICATIONS

ADAM30 (K-14) is recommended for detection of ADAM30 of human 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 ADAM30 siRNA (h): sc-72239, ADAM30 shRNA Plasmid (h): sc-72239-SH and ADAM30 shRNA (h) Lentiviral Particles: sc-72239-V.

Molecular Weight of ADAM30: 88 kDa.

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.

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.

PROTOCOLS

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