

ADAM11 (H-19): sc-15507

BACKGROUND

ADAM (a disintegrin and metalloprotease) proteins are a family of over 30 membrane-anchored, glycosylated, Zn²⁺ dependent proteases that are involved in cell-cell, cell-matrix interface related processes including fertilization, muscle fusion, secretion of TNF (tumor necrosis factor α) and modulation of the neurogenic function of Notch and Delta. 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 brain, testis, epididymis, ovary, breast, placenta, liver, heart, lung, bone and muscle, and catalyze proteolysis, adhesion, fusion and intracellular signaling. Human ADAM 11 (metalloproteinase-like, disintegrin-like and cysteine-rich, MDC) transcripts generate 524 (short form) and 769 (long form) amino acid proteins that share sequence similarity to members of the snake-venom metalloprotease/disintegrin family.

REFERENCES

1. Emi, M., et al. 1993. A novel metalloprotease/disintegrin-like gene at 17q21.3 is somatically rearranged in two primary breast cancers. *Nat. Genet.* 5: 151-157.
2. Wolfsberg, T.G., et al. 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.
3. Katagiri, T., et al. 1995. Human metalloprotease/disintegrin-like (MDC) gene: exon-intron organization and alternative splicing. *Cytogenet. Cell Genet.* 68: 39-44.
4. Stone, A.L., et al. 1999. Structure-function analysis of the ADAM family of disintegrin-like and metalloproteinase-containing proteins (review). *J. Protein Chem.* 18: 447-465.
5. Online Mendelian Inheritance in Man, OMIM[™]. 1999. Johns Hopkins University, Baltimore, MD. MIM Number: 155120. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Primakoff, P. and Myles, D.G. 2000. The ADAM gene family: surface proteins with adhesion and protease activity. *Trends Genet.* 16: 83-87.

CHROMOSOMAL LOCATION

Genetic locus: ADAM11 (human) mapping to 17q21.31; Adam11 (mouse) mapping to 11 E1.

SOURCE

ADAM11 (H-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ADAM11 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-15507 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ADAM11 (H-19) is recommended for detection of ADAM11 isoform 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

ADAM11 (H-19) is also recommended for detection of ADAM11 isoform 1 in additional species, including equine, canine and porcine.

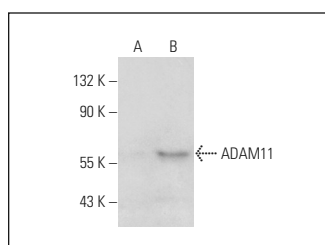
Suitable for use as control antibody for ADAM11 siRNA (h): sc-41412, ADAM11 siRNA (m): sc-41413, ADAM11 shRNA Plasmid (h): sc-41412-SH, ADAM11 shRNA Plasmid (m): sc-41413-SH, ADAM11 shRNA (h) Lentiviral Particles: sc-41412-V and ADAM11 shRNA (m) Lentiviral Particles: sc-41413-V.

Positive Controls: ADAM11 (h): 293T Lysate: sc-127936.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ADAM11 (H-19): sc-15507. Western blot analysis of ADAM11 expression in non-transfected: sc-117752 (A) and human ADAM11 transfected: sc-127936 (B) 293T whole cell lysates.

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.