SANTA CRUZ BIOTECHNOLOGY, INC.

ADAM9 (C-15): sc-23290



BACKGROUND

The human ADAM9 gene maps to chromosome 8p11.22 and encodes an 819 amino acid glycoprotein that is present in brain, liver, heart, kidney, lung, and trachea. ADAM (a disintegrin and metalloprotease) glycoproteins are a family of over 30 membrane-anchored, Zn²⁺-dependent proteases that influence fertilization, muscle fusion, cytokine secretion, modulation of Notch-related neurogenic pathways, monocyte fusion, and many other cell adhesion-dependent events. ADAM proteins contain 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 (TM) domain (alternative splicing before the TM domain in ADAM11, 12, 17, and 28 can yield soluble forms), and a cytoplasmic tail. Removal of the amino-terminal signal peptide initiates secretion from the cell, or anchoring on the cell surface. Furin or furin-like proprotein convertase-dependent cleavage of the pro domain initiates catalytic activity of the metalloprotease.

CHROMOSOMAL LOCATION

Genetic locus: ADAM9 (human) mapping to 8p11.22; Adam9 (mouse) mapping to 8 A2.

SOURCE

ADAM9 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ADAM9 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-23290 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ADAM9 (C-15) is recommended for detection of precursor and mature ADAM9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffinembedded 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).

ADAM9 (C-15) is also recommended for detection of precursor and mature ADAM9 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ADAM9 siRNA (h): sc-41408, ADAM9 siRNA (m): sc-41409, ADAM9 shRNA Plasmid (h): sc-41408-SH, ADAM9 shRNA Plasmid (m): sc-41409-SH, ADAM9 shRNA (h) Lentiviral Particles: sc-41408-V and ADAM9 shRNA (m) Lentiviral Particles: sc-41409-V.

Molecular Weight (predicted) of ADAM9 isoform 1/2: 91/72 kDa.

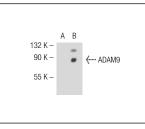
Molecular Weight (observed) of mature/pro ADAM9: 84/105 kDa.

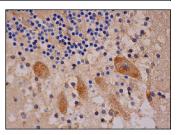
Positive Controls: ADAM9 (m): 293T Lysate: sc-118238, Caki-1 cell lysate: sc-2224 or HeLa whole cell lysate: sc-2200.

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA





ADAM9 (C-15): sc-23290. Western blot analysis of ADAM9 expression in non-transfected: sc-117752 (A) and mouse ADAM9 transfected: sc-118238 (B) 293T whole cell lysates

ADAM9 (C-15): sc-23290. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebellum tissue showing cytoplasmic staining of Purkinje cells and cells in granular and molecular layers

SELECT PRODUCT CITATIONS

- 1. Cissé, M., et al. 2011. The extracellular regulated kinase-1 (ERK1) controls regulated α -secretase-mediated processing, promoter transactivation, and mRNA levels of the cellular prion protein. J. Biol. Chem. 286: 29192-29206.
- 2. Cisse, M., et al. 2011. ERK1-independent α-secretase cut of β-amyloid precursor protein via M1 muscarinic receptors and PKC α/ϵ . Mol. Cell. Neurosci. 47: 223-232.

STORAGE

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

RESEARCH USE

MONOS

Satisfation

Guaranteed

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

Try ADAM9 (G-1): sc-377233 or ADAM9 (15):

sc-135822, our highly recommended monoclonal alternatives to ADAM9 (C-15).