

# ADAM9 (H-60): sc-50332

## 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, Zn<sup>2+</sup>-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 (H-60) is a rabbit polyclonal antibody raised against amino acids 35-94 mapping within an N-terminal extracellular domain of ADAM9 of human origin.

## PRODUCT

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

## RESEARCH USE

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

## APPLICATIONS

ADAM9 (H-60) is recommended for detection of ADAM9 precursor 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ADAM9 (H-60) is also recommended for detection of ADAM9 precursor in additional species, including equine, canine, bovine 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.

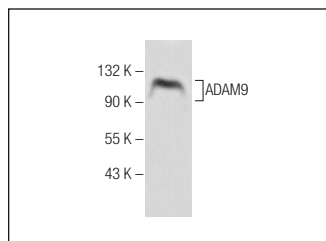
Molecular Weight (observed) of mature/pro ADAM9: 84/105 kDa.

Positive Controls: 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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



ADAM9 (H-60): sc-50332. Western blot analysis of ADAM9 expression in Caki-1 whole cell lysate.

## SELECT PRODUCT CITATIONS

1. Durairajan, S.S., et al. 2011. Stimulation of non-amyloidogenic processing of amyloid-β protein precursor by cryptotanshinone involves activation and translocation of ADAM10 and PKC-α. *J. Alzheimers Dis.* 25: 245-262.
2. Marolda, R., et al. 2012. Substance P activates ADAM9 mRNA expression and induces α-secretase-mediated amyloid precursor protein cleavage. *Neuropharmacology* 62: 1954-1963.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Try **ADAM9 (G-1): sc-377233** or **ADAM9 (15): sc-135822**, our highly recommended monoclonal alternatives to ADAM9 (H-60).