

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ADAM9 Ectodomain in Western blots. In Western blots, approximately 10% cross-reactivity with the ectodomain of recombinant mouse ADAM9 is observed and no cross-reactivity with the ectodomain of recombinant human ADAM8, 9, 15, or 17
Source	Monoclonal Mouse IgG ₁ Clone # 138537
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ADAM9 Ectodomain Accession # Q13443
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunoprecipitation	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

ADAM9, also known as MDC9 or meltrin γ, is a member of the ADAM family that contains a disintegrin and metalloprotease-like domain (1). Like other membrane-anchored ADAMs, ADAM9 consists of a pro domain with a cysteine switch and furin cleavage sequence, a catalytic domain with the zinc-binding site and Met-turn expected for reprotolysins, a disintegrin-like domain, a cysteine-rich domain, an EGF-like domain, a transmembrane domain, and the cytoplasmic domain. ADAM9 is able to cleave peptides corresponding to cleavage sites of tumor necrosis factor-α (TNF-α), the p75 TNF receptor, the β-amyloid protein precursor, and the c-kit ligand-1, implying that it may participate in shedding of these membrane proteins (2). In fact, ADAM9 has been shown to shed membrane-anchored heparin-binding EGF-like growth factor (3). In addition, it also cleaves oxidized insulin β-chain and fibronectin (2,4). Besides its catalytic activity, ADAM9 functions as an adhesion molecule through binding of its disintegrin domain to integrins such as α₅β₁ and α₆β₁ (5, 6). The cytoplasmic domain of ADAM9 interacts with Src homology 3 (SH3)-containing proteins and protein kinase C, and may mediate different signaling pathways (3, 7). ADAM9 is widely expressed in tissues (8).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.