Human ADAM9 Ectodomain Biotinylated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: BAF939

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ADAM9 Ectodomain in ELISAs and Western blots. In sandwich immunoassays, less than 20% cross-reactivity with recombinant mouse (rm) ADAM9 is observed and less than 0.05% cross-reactivity with recombinant human (rh) ADAM8, rhADAM10, rhTACE, rhTIMP-1, rhTIMP-2, rhTIMP-3, rhTIMP-4, rhBACE-1, and rmADAM10 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ADAM9 Ectodomain Ala206-Asp697 Accession # Q13443
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human ADAM9 (Catalog # 939-AD)
Human ADAM9 Sandwich Immunoassay		**Reagent**
ELISA Capture	0.2-0.8 µg/mL	Human ADAM9 Ectodomain Antibody (Catalog # AF939)
ELISA Detection	0.1-0.4 µg/mL	Human ADAM9 Ectodomain Biotinylated Antibody (Catalog # BAF939)
Standard		Recombinant Human ADAM9 (Catalog # 939-AD)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 reprolysins, 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 $\alpha_v\beta_5$ and $\alpha_6\beta_1$ (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).

References:

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