

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ADAM8 in direct ELISAs and Western blots. Detects aa 498-653 of rhADAM8, which corresponds to the cysteine-rich and EGF-like domains. In direct ELISAs, no cross-reactivity with recombinant human (rh) ADAM9, rhADAM10, rhADAM15, rhBACE, or rhTACE is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 143338
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human ADAM8 ectodomain Asp158-Ser653 Accession # P78325
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	Human peripheral blood mononuclear cells fixed with paraformaldehyde and permeabilized with saponin

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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

ADAM8, also known as cell surface antigen MS2 or CD156a, is a member of the ADAM family that contains a disintegrin and metalloprotease-like domain (1, 2). ADAM8 can cleave a variety of substrates and has been shown as a sheddase for the low affinity IgE receptor CD23 and the neural recognition molecule CHL1 (3, 4). Expression and regulation studies suggest that ADAM8 is a novel osteoclast stimulating factor and may play a role in asthma (5, 6). The 824 amino acid precursor of human ADAM8 consists of a signal peptide (residues 1 to 16), a pro peptide (residues 17 to 199), a metalloprotease domain (residues 200 to 400), a disintegrin-like domain (residues 408 to 494), a cysteine-rich region (residues 497 to 613), an EGF-like domain (residues 614 to 640), a transmembrane region (residues 656 to 676) and a cytoplasmic domain (residues 677 to 824).

References:

1. Yoshiyama, K. *et al.* (1997) *Genomics* **41**:56.
2. Moss, M.L. and J.W. Bartsch (2004) *Biochemistry* **43**:7227.
3. Fourie, A.M. *et al.* (2003) *J. Biol. Chem.* **278**:30469.
4. Naus, S. *et al.* (2004) *J. Biol. Chem.* **279**:16083.
5. Choi, S.J. *et al.* (2001) *J. Bone Miner. Res.* **16**:814.
6. King, N.E. *et al.* (2004) *Am. J. Respir. Cell Mol. Biol.* **31**:257.

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