

Human Aminopeptidase N/CD13 Alexa Fluor® 647-conjugated Antibody

Recombinant Monoclonal Mouse IgG_{2A} Clone # 986002

Catalog Number: FAB38152R

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Aminopeptidase N/CD13.
Source	Recombinant Monoclonal Mouse IgG _{2A} Clone # 986002
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Aminopeptidase N/CD13 Lys69-Lys967 Accession # AAA51719
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and 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.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	U937 Human cell line

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

The human ANPEP gene encodes aminopeptidase N (APN), which is also known as microsomal aminopeptidase, alanyl aminopeptidase, aminopeptidase M, CD13, or membrane protein p161 (1-3). The deduced amino acid sequence of human APN consists of a short cytoplasmic tail (residues 2 to 8), a transmembrane region (residue 9 to 32), a Ser/Thr rich region and a zinc metalloprotease domain (residues 69 to 966). The amino acid sequence of human APN is 78% and 77% identical to that of rat and mouse, respectively. Widely expressed in many cells, tissues and species, APN cleaves the N-terminal amino acids from bioactive peptides, leading to their inactivation or degradation. The roles of APN in many fields, such as neuroscience, hematopoietic cells, immune system, angiogenesis, cancer and viral infection, have been reviewed (3).

References:

1. Olsen, J. *et al.* (1988) FEBS Lett. **238**:307.
2. Look, A.T. *et al.* (1989) J. Clin. Invest. **83**:1299.
3. Turner, A.J. (2004) in *Handbook of Proteolytic Enzymes* (ed. Barrett, *et al.*) pp. 289, Academic Press, San Diego.

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.