

Human Aminopeptidase N/CD13 Alexa Fluor® 488-conjugated Antibody

Recombinant Monoclonal Mouse IgG_{2A} Clone # 986002

Catalog Number: FAB38152G

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 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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

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|--------------------------------|--|
| 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

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:

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

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