Human Neprilysin/CD10 PE-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: FAB8160P
100 TESTS

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Neprilysin/CD10 in ELISAs and Western blots. In sandwich ELISAs, approximately 20% cross-reactivity with recombinant mouse Neprilysin is observed, and less than 0.3% cross-reactivity with recombinant human Neprilysin-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*S. frugiperda* insect ovarian cell line *Sf* 21-derived recombinant human Neprilysin/CD10 Tyr52-Trp750 Accession # P08473
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied 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.

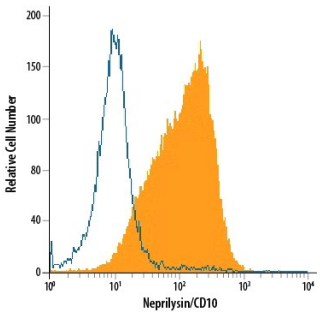
APPLICATIONS

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
Flow Cytometry	10 µL/10^6 cells	See Below

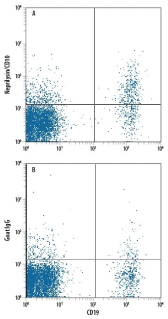
DATA

Flow Cytometry



Detection of Neprilysin/CD10 in Human Blood Granulocytes by Flow Cytometry. Human peripheral blood granulocytes were stained with Goat Anti-Human Neprilysin/CD10 PE-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB8160P, filled histogram) or isotype control antibody (Catalog # IC108P, open histogram). View our protocol for Staining Membrane-associated Proteins.

Flow Cytometry



Detection of Neprilysin/CD10 in Human Blood Lymphocytes by Flow Cytometry. Human peripheral blood lymphocytes were stained with Mouse Anti-Human CD19 APC-conjugated Monoclonal Antibody (Catalog # FAB4867A) and either (A) Goat Anti-Human Neprilysin/CD10 PE-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB8160P) or (B) Normal Goat IgG Phycoerythrin Control (Catalog # IC108P). View our protocol for Staining Membrane-associated Proteins.

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

Neprilysin/CD10, also known as NEP and neutral endopeptidase 24.11, is a zinc metallopeptidase expressed at the cell surface of a variety of cells. The enzyme functions both as an endopeptidase with a thermolysin-like specificity and as a dipeptidylcarboxypeptidase. NEP has been shown to be involved in the degradation of enkephalins in the mammalian brain and the inactivation of circulating atrial natriuretic peptide (1, 2). NEP has also been identified as the common acute lymphocytic leukemia antigen (CALLA), and is expressed on the surface of lymphocytes in some disease states (3, 4). These and other observations have resulted in considerable interest in NEP as a target for analgesics and antihypertensive drugs. NEP is also a major degrading enzyme of amyloid β peptide (Aβ) in the brain, indicating that down-regulation of NEP activity, which could be caused by aging, can contribute to the development of Alzheimer's disease by promoting Aβ accumulation (5).

References:

1. Malfroy, B. *et al.* (1978) Nature **276**:523.
2. Kenny, A.J. and Stephenson, S.L. (1988) FEBS Lett. **232**:1.
3. LeTarte, M. *et al.* (1988) J. Exp. Med. **168**:1247.
4. Shipp, M.A. *et al.* (1988) Proc. Natl. Acad. Sci. USA **85**:4819.
5. Itwata, N. *et al.* (2001) Science **292**:1550.

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