

PRODUCT INFORMATION

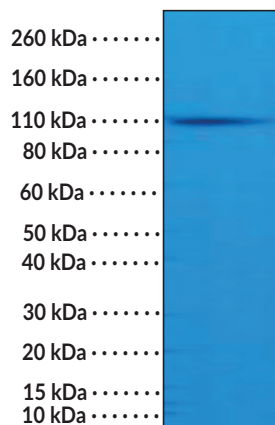
Neprilysin/CD10 (N-Term) Rabbit Monoclonal Antibody (Clone RM337)

Item No. 32276

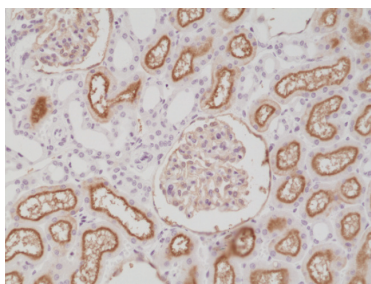
Overview and Properties

Contents:	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
Synonyms:	CALLA, Common Acute Lymphocytic Leukemia Antigen, Enkephalinase, Membrane Metalloendopeptidase, MME, Neutral Endopeptidase, NEP
Immunogen:	Peptide from the N-terminal region of human neprilysin
Cross Reactivity:	(+) Neprilysin
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
Clone:	RM337
Host:	Rabbit
Isotype:	IgG
Applications:	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:200-1:500 for IHC and 1:1,000-1:2,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

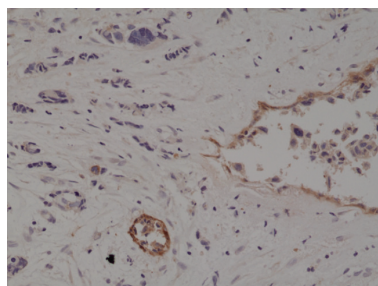
Images



WB of Raji cell lysate using Neprilysin/CD10 (N-Term) Rabbit Monoclonal Antibody (Clone RM337) at a 1:1,000



Immunohistochemical staining of formalin-fixed and paraffin-embedded human kidney tissue using Neprilysin/CD10 (N-Term) Rabbit Monoclonal Antibody (Clone RM337) at a 1:200 dilution.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human breast cancer tissue using Neprilysin/CD10 (N-Term) Rabbit Monoclonal Antibody (Clone RM337) at a 1:200 dilution.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

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Description

Neprilysin, also known as CD10, is a type II transmembrane glycoprotein and zinc-dependent endopeptidase encoded by *MME* in humans.^{1,2} It is composed of an extracellular domain that contains the endopeptidase active site, a transmembrane domain, and a short cytoplasmic tail. Neprilysin is expressed transiently during B cell maturation and is constitutively expressed in a variety of tissues including lung, intestine, kidney, liver, breast, and the CNS. It cleaves a variety of substrates, including enkephalins, substance P, angiotensin, oxytocin, somatostatin, and bombesins, and has roles in CNS development, pain perception, spatial working memory, fetal development, airway inflammation, and stem cell differentiation. *MME* expression is associated with increased 5-year survival rates in pediatric patients with B cell lineage acute lymphoblastic leukemia (ALL) and inversely correlated with poor prognosis in patients with various types of solid tumors.¹ Neprilysin protein levels and enzymatic activity are decreased in postmortem brain tissue from patients with Alzheimer's disease. Cayman's Neprilysin/CD10 (N-Term) Rabbit Monoclonal Antibody (Clone RM337) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

References

1. Maguer-Satta, V., Besançon, R., and Bachelard-Cascales, E. Neutral endopeptidase (CD10): A multifaceted environment actor in stem cells, physiological mechanisms, and cancer. *Stem Cells* **29(3)**, 389-396 (2011).
2. Nalivaeva, N.N., Zhuravin, I.A., and Turner, A.J. Neprilysin expression and functions in development, ageing and disease. *Mech. Ageing Dev.* **192**, 111363 (2020).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM