

### ANPEP/CD13 Antibody (Clone # 505CT12.1.2)

Mouse Monoclonal Antibody Catalog # ABV11332

# **Specification**

### ANPEP/CD13 Antibody (Clone # 505CT12.1.2) - Product Information

Application WB
Primary Accession P15144
Host Mouse
Clonality Monoclonal
Isotype Mouse IgG2a
Calculated MW 109540

# ANPEP/CD13 Antibody (Clone # 505CT12.1.2) - Additional Information

Gene ID 290

Positive Control Western blot: HepG2 cell lysate.

Application & Usage WB: 1:100 - 1:250

**Other Names** 

ANPEP; APN; CD13; PEPN; Aminopeptidase N; Alanyl aminopeptidase, Aminopeptidase M,

Microsomal aminopeptidase

Target/Specificity

ANPEP/CD13

**Antibody Form** 

Liquid

**Appearance** 

Colorless liquid

**Formulation** 

In PBS with 0.09% (W/V) sodium azide.

Handling

The antibody solution should be gently mixed before use.

**Reconstitution & Storage** 

-20 °C

**Background Descriptions** 

## **Precautions**

ANPEP/CD13 Antibody (Clone # 505CT12.1.2) is for research use only and not for use in diagnostic or therapeutic procedures.

# ANPEP/CD13 Antibody (Clone # 505CT12.1.2) - Protein Information



### Name ANPEP

Synonyms APN, CD13, PEPN

#### **Function**

Broad specificity aminopeptidase which plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. Also involved in the processing of various peptides including peptide hormones, such as angiotensin III and IV, neuropeptides, and chemokines. May also be involved the cleavage of peptides bound to major histocompatibility complex class II molecules of antigen presenting cells. May have a role in angiogenesis and promote cholesterol crystallization. May have a role in amino acid transport by acting as binding partner of amino acid transporter SLC6A19 and regulating its activity (By similarity).

#### **Cellular Location**

Cell membrane; Single-pass type II membrane protein. Note=Also found as a soluble form

#### **Tissue Location**

Expressed in epithelial cells of the kidney, intestine, and respiratory tract; granulocytes, monocytes, fibroblasts, endothelial cells, cerebral pericytes at the blood-brain barrier, synaptic membranes of cells in the CNS. Also expressed in endometrial stromal cells, but not in the endometrial glandular cells. Found in the vasculature of tissues that undergo angiogenesis and in malignant gliomas and lymph node metastases from multiple tumor types but not in blood vessels of normal tissues. A soluble form has been found in plasma. It is found to be elevated in plasma and effusions of cancer patients.

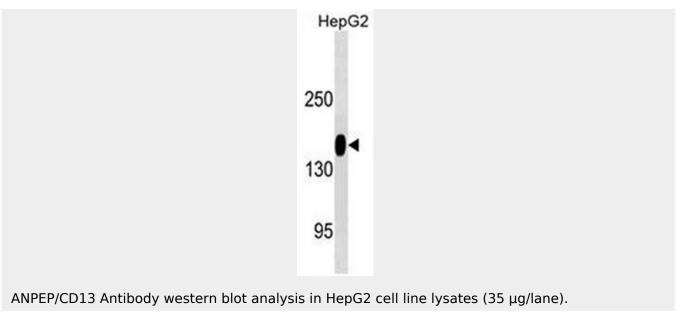
### ANPEP/CD13 Antibody (Clone # 505CT12.1.2) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# ANPEP/CD13 Antibody (Clone # 505CT12.1.2) - Images





## ANPEP/CD13 Antibody (Clone # 505CT12.1.2) - Background

CD13, or aminopeptidase N, is a type II transmembrane glycoprotein that is expressed on most cells of Myeloid origin, including monocytes, basophils, eosinophils, neutrophils and Myeloid leukemias. CD13 is also found on certain epithelial cells, fibroblasts and osteoclasts. CD13 acts as a zinc-binding metalloprotease that plays a role in digestion and may function in the inactivation of some regulatory peptides such as enkephalins. CD13 may play a role in the invasion of cancer cells by enhancing their invasive capacity and metastatic behavior. The activity of CD13 can be inactivated using specific inhibitors that evoke apoptosis of CD13-positive cancer cells. Basic fibroblast growth factor (bFGF) expression upregulates CD13 expression in human melanoma cells by activating both the Myeloid and the epithelial CD13 promoter.