

# ENT1 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP1086b

# **Specification**

ENT1 Antibody (C-term) Blocking Peptide -Product Information

Primary Accession <u>099808</u>

ENT1 Antibody (C-term) Blocking Peptide -Additional Information

### Gene ID 2030

### **Other Names**

Equilibrative nucleoside transporter 1, Equilibrative nitrobenzylmercaptopurine riboside-sensitive nucleoside transporter, Equilibrative NBMPR-sensitive nucleoside transporter, Nucleoside transporter, es-type, Solute carrier family 29 member 1, SLC29A1, ENT1

#### **Target/Specificity**

The synthetic peptide sequence used to generate the antibody <a href=/products/AP1086b>AP1086b</a> was selected from the C-term region of human ENT1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ENT1 Antibody (C-term) Blocking Peptide -

# ENT1 Antibody (C-term) Blocking Peptide -Background

ENT1 is a member of the equilibrative nucleoside transporter family. It is a transmembrane glycoprotein that localizes to the plasma and mitochondrial membranes and mediates the cellular uptake of nucleosides from the surrounding medium. The protein is categorized as an equilibrative (as opposed to concentrative) transporter that is sensitive to inhibition by nitrobenzylthioinosine (NBMPR). Nucleoside transporters are required for nucleotide synthesis in cells that lack de novo nucleoside synthesis pathways, and are also necessary for the uptake of cytotoxic nucleosides used for cancer and viral chemotherapies.

# ENT1 Antibody (C-term) Blocking Peptide -References

Bone,D.B.,Am. J. Physiol. Heart Circ. Physiol. 293 (6), H3325-H3332 (2007)Damaraju,V.L., Am. J. Physiol. Renal Physiol. 293 (1), F200-F211 (2007)Abdulla,P.,Nucleosides Nucleotides Nucleic Acids 26 (1), 99-110 (2007)Sundaram,M., J. Biol. Chem. 276 (48), 45270-45275 (2001)



### **Protein Information**

Name SLC29A1

Synonyms ENT1

### Function

Mediates both influx and efflux of nucleosides across the membrane (equilibrative transporter). It is sensitive (ES) to low concentrations of the inhibitor nitrobenzylmercaptopurine riboside (NBMPR) and is sodium-independent. It has a higher affinity for adenosine. Inhibited by dipyridamole and dilazep (anticancer chemotherapeutics drugs).

### **Cellular Location**

Basolateral cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Predominantly localized in the basolateral membrane in polarized MDCK cells

## **Tissue Location**

Detected in erythrocytes (at protein level). Expressed in heart, brain, mammary gland, erythrocytes and placenta, and also in fetal liver and spleen.

# ENT1 Antibody (C-term) Blocking Peptide -Protocols

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

<u>Blocking Peptides</u>