

**ENT1 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1086b**

**Specification**

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**ENT1 Antibody (C-term) - Product Information**

Application	WB, FC, IHC-P-Leica,E
Primary Accession	<a href="#">O99808</a>
Other Accession	<a href="#">O54698</a> , <a href="#">O9JIM1</a>
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	402-431

**ENT1 Antibody (C-term) - Additional Information**

**Gene ID** 2030

**Other Names**

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

**Target/Specificity**

This ENT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 402-431 amino acids from the C-terminal region of human ENT1.

**Dilution**

WB~~1:1000  
FC~~1:25  
IHC-P-Leica~~1:500  
E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

ENT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ENT1 Antibody (C-term) - Protein Information**

**Name** SLC29A1 ([HGNC:11003](#))

**Synonyms** ENT1

**Function** Uniporter involved in the facilitative transport of nucleosides and nucleobases, and contributes to maintaining their cellular homeostasis (PubMed:[10722669](#), PubMed:[10755314](#), PubMed:[12527552](#), PubMed:[14759222](#), PubMed:[15037197](#), PubMed:[17379602](#), PubMed:[21795683](#), PubMed:[26406980](#), PubMed:[27995448](#), PubMed:[35790189](#), PubMed:[8986748](#)). Functions as a Na(+)-independent transporter (PubMed:[8986748](#)). Involved in the transport of nucleosides such as adenosine, guanosine, inosine, uridine, thymidine and cytidine (PubMed:[10722669](#), PubMed:[10755314](#), PubMed:[12527552](#), PubMed:[14759222](#), PubMed:[15037197](#), PubMed:[17379602](#), PubMed:[26406980](#), PubMed:[8986748](#)). Also transports purine nucleobases (hypoxanthine, adenine, guanine) and pyrimidine nucleobases (thymine, uracil) (PubMed:[21795683](#), PubMed:[27995448](#)). Mediates basolateral nucleoside uptake into Sertoli cells, thereby regulating the transport of nucleosides in testis across the blood-testis barrier (By similarity). Regulates inosine levels in brown adipocytes tissues (BAT) and extracellular inosine levels, which controls BAT-dependent energy expenditure (PubMed:[35790189](#)).

#### Cellular Location

Basolateral cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Localized to the basolateral membrane of Sertoli cells (PubMed:23639800). Localized to the cell membrane of erythrocytes (PubMed:11584005, PubMed:23219802).

#### Tissue Location

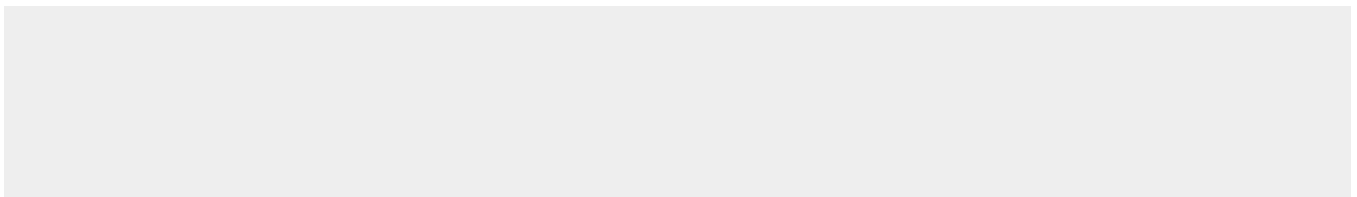
Expressed in testis at the blood-testis barrier (at protein level) (PubMed:23639800). Detected in erythrocytes (at protein level) (PubMed:11584005, PubMed:23219802). Expressed at relatively high levels in cerebral cortex, particularly the frontal and parietal lobes, and the thalamus and basal ganglia (at protein level) (PubMed:11311901). In the midbrain expressed at moderate levels, whereas in the other areas of the brainstem, namely medulla and pons, cerebellum and the hippocampus expressed at lower amounts when compared to the other brain regions (at protein level) (PubMed:11311901) Expressed in Langerhans cells and lymphocytes in the pancreas (at protein level) (PubMed:15501974). Expressed in kidney, in polarized renal epithelial cells (PubMed:12527552). Expressed in adipose tissues (PubMed:35790189). Expressed in placenta (PubMed:8986748). Expressed in small intestine (PubMed:10755314).

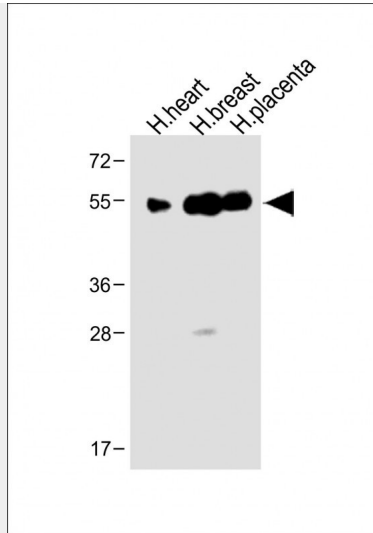
#### ENT1 Antibody (C-term) - Protocols

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

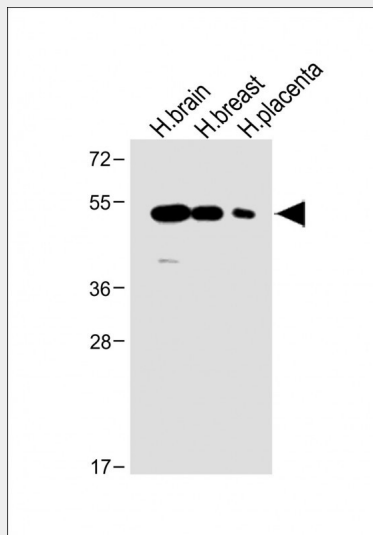
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### ENT1 Antibody (C-term) - Images

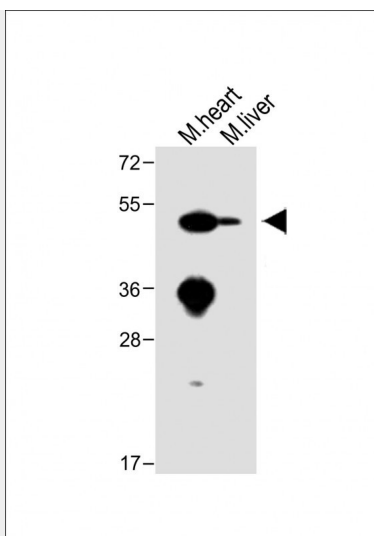




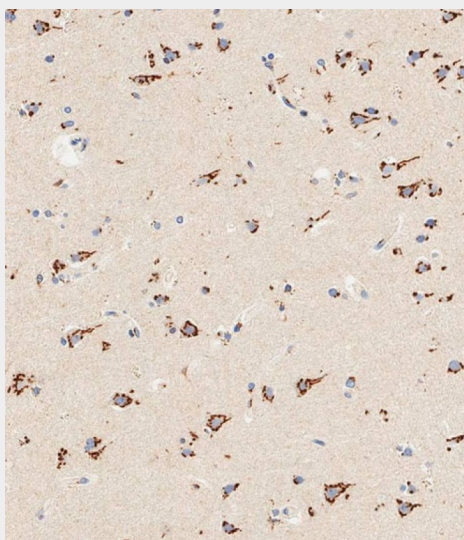
All lanes : Anti-ENT1 Antibody (C-term) at 1:1000 dilution Lane 1: Human heart lysate Lane 2: Human breast lysate Lane 3: Human placenta lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



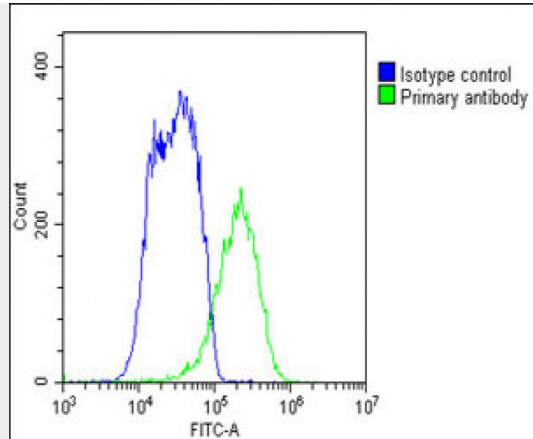
All lanes : Anti-ENT1 Antibody (C-term) at 1:1000 dilution Lane 1: Human brain lysate Lane 2: Human breast lysate Lane 3: Human placenta lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



All lanes : Anti-ENT1 Antibody (C-term) at 1:1000 dilution Lane 1: Mouse heart lysate Lane 2: Mouse liver lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



Immunohistochemical analysis of paraffin-embedded human brain tissue using AP1086b performed on the Leica® BOND RXm. Samples were incubated with primary antibody(1/500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Overlay histogram showing HepG2 cells stained with AP1086B (green line). The cells were fixed with 2% paraformaldehyde 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP1086B, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

#### **ENT1 Antibody (C-term) - 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) - 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)

#### **ENT1 Antibody (C-term) - Citations**

- [Enhancing Extracellular Adenosine Levels Restores Barrier Function in Acute Lung Injury Through Expression of Focal Adhesion Proteins](#)
- [Equilibrative nucleoside transporter 1 \(ENT1\) regulates postischemic blood flow during acute kidney injury in mice.](#)
- [Host-based ribavirin resistance influences hepatitis C virus replication and treatment response.](#)
- [Reduced ribavirin antiviral efficacy via nucleoside transporter-mediated drug resistance.](#)