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ENT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP1086b

Specification

ENT1 Antibody (C-term) - Product Information

Application	**WB, IHC-P-Leica, FC,E**
Primary Accession	Q99808
Other Accession	O54698, Q9JIM1
Reactivity	**Human, Mouse**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Antigen Region	**402-431**

ENT1 Antibody (C-term) - Additional Information

Gene ID 2030

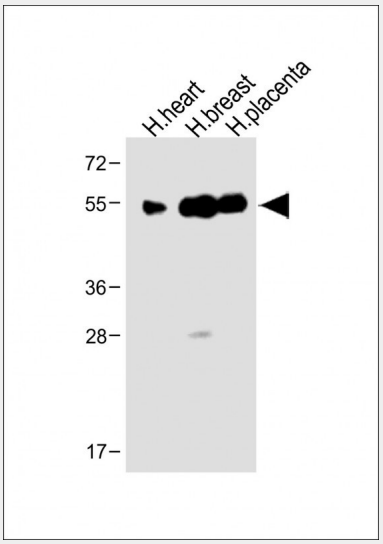
Other Names
Equilibrative nucleoside transporter 1, Equilibrative nitrobenzylmercaptopurine riboside-sensitive nucleoside transporter, Equilibrative NBMPR-sensitive nucleoside transporter, Nucleoside transporter, es-type, Solute carrier family 29 member 1, SLC29A1, ENT1

Target/Specificity
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.

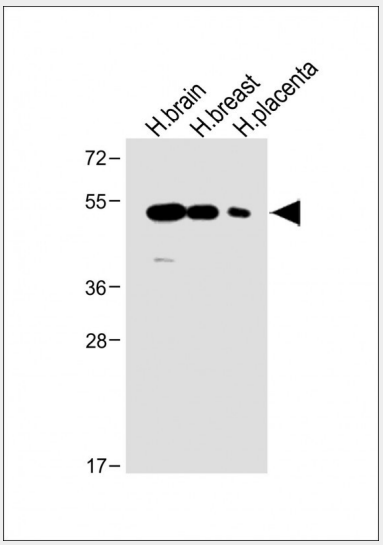
Dilution
WB~~1:1000
IHC-P-Leica~~1:500
FC~~1:25

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



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

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

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

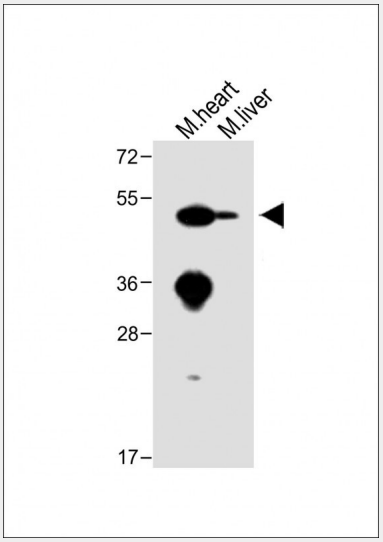
Tissue Location
Detected in erythrocytes (at protein level). Expressed in heart, brain, mammary gland, erythrocytes and placenta, and also in fetal liver and spleen.

ENT1 Antibody (C-term) - Protocols

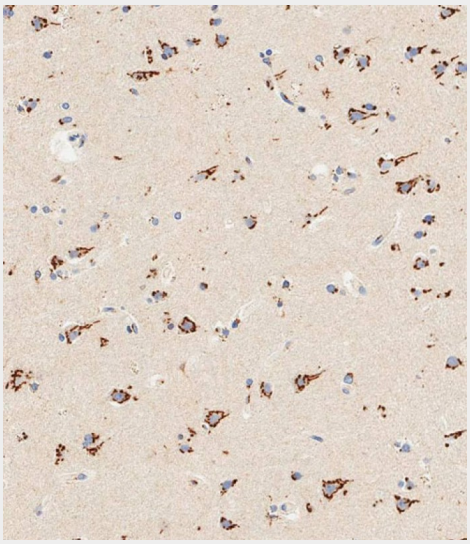
Provided below are standard protocols that you may find useful for product applications.

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

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.

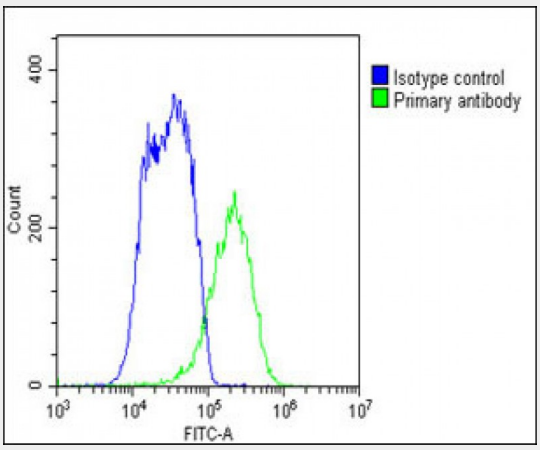


All lanes : Anti-ENT1 Antibody (C-term) at 1:1000 dilution Lane 1: Mouse heart lysate Lane 2: Mouse liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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.

- Cell Culture



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

- 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.