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ENPP3 / CD203c Antibody (Internal)

Rabbit Polyclonal Antibody

Catalog # ALS11172

Specification

ENPP3 / CD203c Antibody (Internal) - Product Information

Application	**IHC**
Primary Accession	O14638
Reactivity	**Human, Monkey, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**100kDa KDa**

ENPP3 / CD203c Antibody (Internal) - Additional Information

Gene ID 5169

Other Names
Ectonucleotide pyrophosphatase/phosphodiesterase family member 3, E-NPP 3, Phosphodiesterase I beta, PD-Ibeta, Phosphodiesterase I/nucleotide pyrophosphatase 3, CD203c, Alkaline phosphodiesterase I, 3.1.4.1, Nucleotide pyrophosphatase, NPPase, 3.6.1.9, ENPP3, PDNP3

Target/Specificity
Human ENPP3. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
ENPP3 / CD203c Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

ENPP3 / CD203c Antibody (Internal) - Protein Information

Name ENPP3 (HGNC:3358)

Function
Hydrolase that metabolizes extracellular nucleotides, including ATP, GTP, UTP and CTP (PubMed:29717535, PubMed:9344668). Limits mast cells and basophils response during inflammation and during the chronic phases of allergic responses by eliminating extracellular ATP, a signaling molecule activating these cells in an autocrine manner. Metabolizes extracellular ATP in the lumen of the small intestine, and thereby prevents ATP-induced apoptosis of intestinal plasmacytoid dendritic cells (By similarity). Has a broad specificity and can also hydrolyze UDP-GlcNAc into UMP and GlcNAc-1-phosphate and potentially several other intracellular nucleotide sugars, including UDP-GalNAc, CMP-NeuAc, GDP-Fuc, and UDP-GlcA. Thereby, could modulate glycan biosynthesis and protein glycosylation

(By similarity). Can hydrolyze extracellular dinucleoside polyphosphates, including the vasoactive adenosine polyphosphates as well (PubMed:12846830). In addition, displays an alkaline phosphodiesterase activity in vitro (PubMed:11342463).

Cellular Location
Cell membrane; Single-pass type II membrane protein. Apical cell membrane; Single-pass type II membrane protein. Secreted Note=Detected at the cell surface of basophils (PubMed:11342463) Detected at the apical plasma membrane of bile duct cells (PubMed:15072822). Located to the apical surface in intestinal and kidney epithelial cells. Secreted in serum, and in lumen of epithelial cells.

Tissue Location
Detected on bile ducts in liver, and in blood serum (at protein level) (PubMed:15072822). Detected in prostate and uterus (PubMed:9344668). Detected on basophils, but not neutrophils (PubMed:11342463).

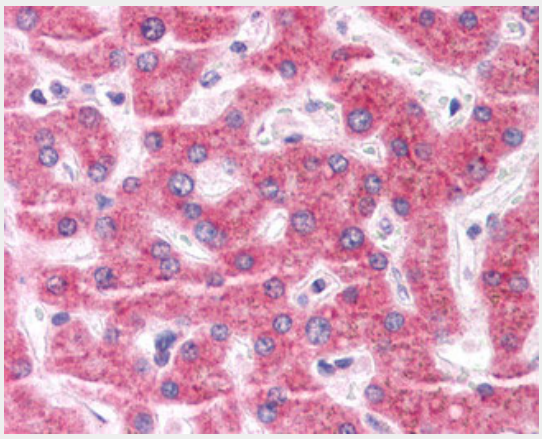
Volume
50 µl

ENPP3 / CD203c Antibody (Internal) - 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

ENPP3 / CD203c Antibody (Internal) - Images



Anti-ENPP3 antibody ALS11172 IHC of human liver.

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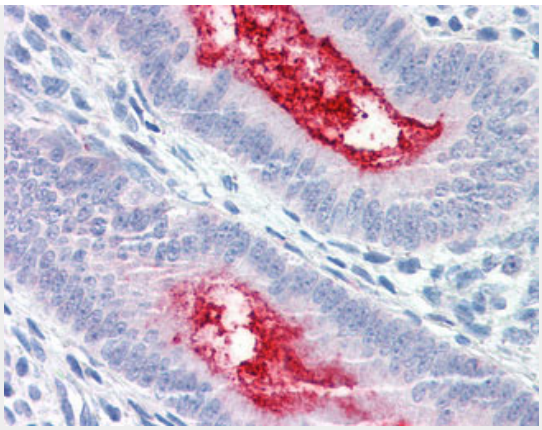

Anti-ENPP3 antibody ALS11172 IHC of human uterus.

ENPP3 / CD203c Antibody (Internal) - Background

Cleaves a variety of phosphodiester and phosphosulfate bonds including deoxynucleotides, nucleotide sugars, and NAD.

ENPP3 / CD203c Antibody (Internal) - References

Piao J.-H.,et al.Genomics 45:412-415(1997).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Mungall A.J.,et al.Nature 425:805-811(2003).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Buehring H.J.,et al.Blood 97:3303-3305(2001).