

CD203c Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP52015

Product Information

Application	WB
Primary Accession	O14638
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	100124

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, Nucleotide pyrophosphatase, NPPase, ENPP3, PDNP3
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C. Stable for 12 months from date of receipt

Protein Information

Name	ENPP3 (HGNC:3358)
Function	Hydrolase that metabolizes extracellular nucleotides, including ATP, GTP, UTP and CTP (PubMed: 29717535 , PubMed: 9344668). Also hydrolyzes extracellular 2',3'-cGAMP (cyclic GMP-AMP), a second messenger that activates TMEM173/STING and triggers type-I interferon production, and is therefore involved in the regulation of innate immune response (PubMed: 38749434). 2',3'-cGAMP appears to be further processed to GMP, AMP and inorganic phosphate (PubMed: 38749434). 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).

Background

Cleaves a variety of phosphodiester and phosphosulfate bonds including deoxynucleotides, nucleotide sugars, and NAD (By similarity).

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.