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ENPP2 / AUTOTAXIN (aa698-712) Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF4029a

Specification

ENPP2 / AUTOTAXIN (aa698-712) Antibody (internal region) - Product Information

Application	**WB**
Primary Accession	Q13822
Other Accession	NP_006200.3, NP_001035181.1, NP_001124335.1, 5168
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**98994**

ENPP2 / AUTOTAXIN (aa698-712) Antibody (internal region) - Additional Information

Gene ID 5168

Other Names
Ectonucleotide pyrophosphatase/phosphodiesterase family member 2, E-NPP 2, 3.1.4.39, Autotaxin, Extracellular lysophospholipase D, LysoPLD, ENPP2, ATX, PDNP2

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ENPP2 / AUTOTAXIN (aa698-712) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

ENPP2 / AUTOTAXIN (aa698-712) Antibody (internal region) - Protein Information

Name ENPP2

Function
Hydrolyzes lysophospholipids to produce the signaling molecule lysophosphatidic acid (LPA) in extracellular fluids (PubMed:15769751, PubMed:26371182, PubMed:27754931, PubMed:14500380, PubMed:<a href="http://www.uniprot.org/citations/12354767"

target="_blank">12354767). Major substrate is lysophosphatidylcholine (PubMed:12176993, PubMed:27754931, PubMed:14500380). Can also act on sphingosylphosphorylcholine producing sphingosine-1-phosphate, a modulator of cell motility (PubMed:14500380). Can hydrolyze, in vitro, bis-pNPP, to some extent pNP-TMP, and barely ATP (PubMed:15769751, PubMed:12176993). Involved in several motility-related processes such as angiogenesis and neurite outgrowth. Acts as an angiogenic factor by stimulating migration of smooth muscle cells and microtubule formation (PubMed:11559573). Stimulates migration of melanoma cells, probably via a pertussis toxin-sensitive G protein (PubMed:1733949). May have a role in induction of parturition (PubMed:12176993). Possible involvement in cell proliferation and adipose tissue development (Probable). Tumor cell motility-stimulating factor (PubMed:1733949, PubMed:11559573). Required for LPA production in activated platelets, cleaves the sn-1 lysophospholipids to generate sn-1 lysophosphatidic acids containing predominantly 18:2 and 20:4 fatty acids (PubMed:21393252). Shows a preference for the sn-1 to the sn-2 isomer of 1-O-alkyl-sn-glycero-3- phosphocholine (lyso-PAF) (PubMed:21393252).

Cellular Location
Secreted

Tissue Location
Detected in blood plasma (at protein level) (PubMed:12176993, PubMed:26371182). Predominantly expressed in brain, placenta, ovary, and small intestine. Expressed in a number of carcinomas such as hepatocellular and prostate carcinoma, neuroblastoma and non-small-cell lung cancer. Expressed in body fluids such as plasma, cerebral spinal fluid (CSF), saliva, follicular and amniotic fluids. Not detected in leukocytes. Isoform 1 is more highly expressed in peripheral tissues than in the central nervous system (CNS) Adipocytes only express isoform 1. Isoform 3 is more highly expressed in the brain than in peripheral tissues.

ENPP2 / AUTOTAXIN (aa698-712) Antibody (internal region) - 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

ENPP2 / AUTOTAXIN (aa698-712) Antibody (internal region) - Images

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AF4029a (0.3 µg/ml) staining of Human Placenta lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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This antibody is expected to recognize iall reported isoforms (NP_006200.3; NP_001035181.1, NP_001124335.1).

ENPP2 / AUTOTAXIN (aa698-712) Antibody (internal region) - References

ATX and LPA receptor 3 are coordinately up-regulated in lipopolysaccharide-stimulated THP-1 cells through PKR and SPK1-mediated pathways. Li S, Xiong C, Zhang J. FEBS Lett. 2012 Mar 23;586(6):792-7. PMID: 22314276