

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	O13822
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: [12354767](http://www.uniprot.org/citations/12354767), PubMed: [14500380](http://www.uniprot.org/citations/14500380), PubMed: [15769751](http://www.uniprot.org/citations/15769751), PubMed: [26371182](http://www.uniprot.org/citations/26371182), PubMed: [27754931](http://www.uniprot.org/citations/27754931))

target="_blank">27754931). Major substrate is lysophosphatidylcholine (PubMed:12176993, PubMed:14500380, PubMed:27754931). 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:12176993, PubMed:15769751). 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:11559573, PubMed:1733949). 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.

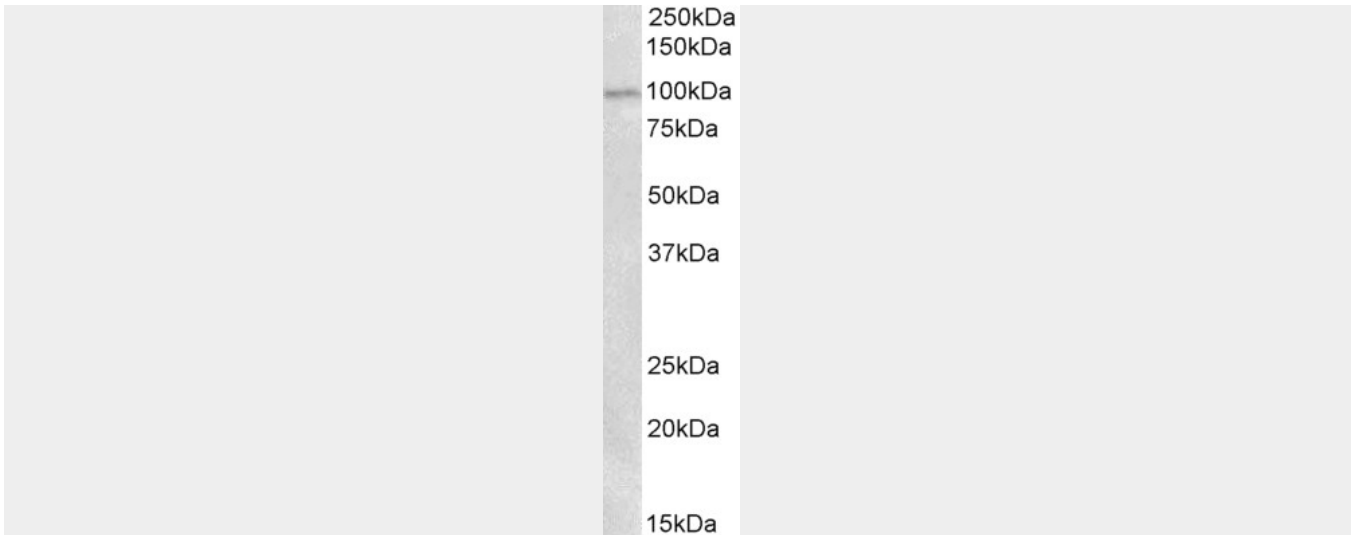
ENPP2 / AUTOTAXIN (aa698-712) Antibody (internal region) - Protocols

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

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

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





AF4029a (0.3 $\mu\text{g/ml}$) staining of Human Placenta lysate (35 μg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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

This antibody is expected to recognize all 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