

# **Autotaxin Polyclonal Antibody**

**Catalog # AP73542** 

# **Specification**

# **Autotaxin Polyclonal Antibody - Product Information**

Application WB
Primary Accession 013822

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal

# **Autotaxin Polyclonal Antibody - Additional Information**

### **Gene ID 5168**

#### **Other Names**

ENPP2; ATX; PDNP2; Ectonucleotide pyrophosphatase/phosphodiesterase family member 2; E-NPP 2; Autotaxin; Extracellular lysophospholipase D; LysoPLD

#### Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.

## **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

# **Storage Conditions**

-20°C

## **Autotaxin Polyclonal Antibody - Protein Information**

# Name ENPP2 (HGNC:3357)

### **Function**

Secreted lysophospholipase D that hydrolyzes lysophospholipids to produce the signaling molecule lysophosphatidic acid (LPA) in extracellular fluids (PubMed:<a

href="http://www.uniprot.org/citations/12354767" target="\_blank">12354767</a>, PubMed:<a href="http://www.uniprot.org/citations/14500380" target="\_blank">14500380</a>, PubMed:<a

href="http://www.uniprot.org/citations/15769751" target="\_blank">15769751</a>, PubMed:<a

 $href="http://www.uniprot.org/citations/26371182" \ target="\_blank">26371182</a>, PubMed:<a href="http://www.uniprot.org/citations/27754931" \ target="\_blank">27754931</a>, lts major$ 

substrate is lysophosphatidylcholine (PubMed:<a

href="http://www.uniprot.org/citations/12176993" target="\_blank">12176993</a>, PubMed:<a href="http://www.uniprot.org/citations/14500380" target="\_blank">14500380</a>, PubMed:<a

href="http://www.uniprot.org/citations/27754931" target="\_blank">27754931</a>). Can also act on sphingosylphosphorylcholine producing sphingosine-1-phosphate, a modulator of cell motility (PubMed:<a href="http://www.uniprot.org/citations/14500380" target="\_blank">14500380</a>). Can hydrolyze, in vitro, bis-pNPP, to some extent pNP-TMP, and barely ATP (PubMed:<a

href="http://www.uniprot.org/citations/12176993" target=" blank">12176993</a>, PubMed:<a



href="http://www.uniprot.org/citations/15769751" target="\_blank">15769751</a>). 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:<a href="http://www.uniprot.org/citations/11559573" target="\_blank">11559573</a>). Stimulates migration of melanoma cells, probably via a pertussis toxin- sensitive G protein (PubMed:<a href="http://www.uniprot.org/citations/1733949" target="\_blank">1733949</a>). May have a role in induction of parturition (PubMed:<a

href="http://www.uniprot.org/citations/12176993" target="\_blank">12176993</a>). Possible involvement in cell proliferation and adipose tissue development (Probable). 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:<a href="http://www.uniprot.org/citations/21393252" target="\_blank">21393252</a>). Shows a preference for the sn-1 to the sn-2 isomer of 1-O-alkyl-sn-glycero-3- phosphocholine (lyso-PAF) (PubMed:<a href="http://www.uniprot.org/citations/21393252" target="\_blank">21393252</a>).

# **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.

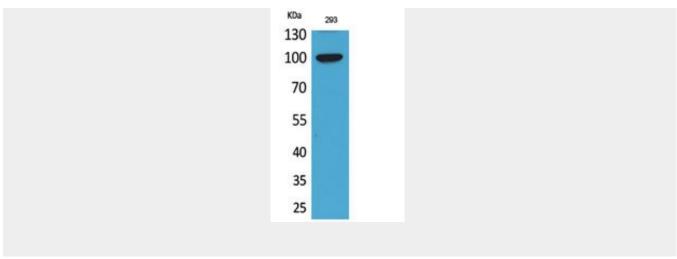
# **Autotaxin Polyclonal Antibody - Protocols**

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

# Autotaxin Polyclonal Antibody - Images





# **Autotaxin Polyclonal Antibody - Background**

Hydrolyzes lysophospholipids to produce the signaling molecule lysophosphatidic acid (LPA) in extracellular fluids (PubMed:15769751, PubMed:26371182, PubMed:27754931). Major substrate is lysophosphatidylcholine (PubMed:12176993, PubMed:27754931). Also can act on sphingosylphosphorylcholine producing sphingosine-1-phosphate, a modulator of cell motility. 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).