



Autotaxin Monoclonal Antibody

Catalog No	YP-mAb-00574
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ENPP2
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human ENPP2. AA range:401-450
Specificity	Autotaxin Monoclonal Antibody detects endogenous levels of Autotaxin protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AUTOTAXIN;ATX;ATX X;E NPP 2;EC:3.1.4.39;ENPP2;Ectonucleotide pyrophosphatase/phosphodiesterase family member 2;PDNP2;E-NPP 2; Extracellular lysophospholipase D;LysoPLD
Observed Band	98kD
Calculated Molecular Weight	98kD
Cell Pathway	Secreted .
Tissue Specificity	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.



Function

catalytic activity: 1-alkyl-sn-glycero-3-phosphoethanolamine + H₂O = 1-alkyl-sn-glycerol 3-phosphate + ethanolamine., cofactor: Binds 2 divalent metal cations per subunit., enzyme regulation: Inhibited by lysophosphatidic acid (LPA) and sphingosine-1-phosphate (S1P). Inhibited by EDTA and EGTA. Activated by cobalt and nickel, inhibited by zinc and manganese., function: Hydrolyzes lysophospholipids to produce lysophosphatidic acid (LPA) in extracellular fluids. Major substrate is lysophosphatidylcholine. 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. 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. Stimulates migr

Background

The protein encoded by this gene functions as both a phosphodiesterase, which cleaves phosphodiester bonds at the 5' end of oligonucleotides, and a phospholipase, which catalyzes production of lysophosphatidic acid (LPA) in extracellular fluids. LPA evokes growth factor-like responses including stimulation of cell proliferation and chemotaxis. This gene product stimulates the motility of tumor cells and has angiogenic properties, and its expression is upregulated in several kinds of carcinomas. The gene product is secreted and further processed to make the biologically active form. Several alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2008],

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Autotaxin Monoclonal Antibody