

Datasheet for ABIN7601410 anti-ENPP1 antibody (AA 347-789)



Overview

Quantity:	100 μg
Target:	ENPP1
Binding Specificity:	AA 347-789
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS)

Product Details	
Purpose:	Anti-ENPP1/PC1 Antibody Picoband®
Immunogen:	E.coli-derived human ENPP1/PC1 recombinant protein (Position: E347-N789).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-ENPP1/PC1 Antibody Picoband® (ABIN7601410). Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	ENPP1
Alternative Name:	ENPP1 (ENPP1 Products)
Background:	Synonyms: Metabotropic glutamate receptor 5, mGluR5, GRM5, GPRC1E, MGLUR5
	Tissue Specificity: Isoform 1 and isoform 2 are detected in bone marrow cells, spermatogonia
	and spermatocytes, but not in round spermatids, elongating spermatids and spermatozoa.
	Isoform 3 is detected in round spermatids, elongating spermatids and spermatozoa, but not in
	spermatogonia and spermatocytes (at protein level). Isoform 1 is widely expressed and
	detected in fetal liver and bone marrow. Isoform 3 is detected in bone marrow cells enriched in
	hematopoietic stem cells.
	Background: Ectonucleotide pyrophosphatase/phosphodiesterase family member 1 (PC-1,
	CD203a) is an enzyme that in humans is encoded by the ENPP1 gene. This gene is a member
	of the ecto-nucleotide pyrophosphatase/phosphodiesterase (ENPP) family. The encoded
	protein is a type II transmembrane glycoprotein comprising two identical disulfide-bonded
	subunits. This protein has broad specificity and cleaves a variety of substrates, including
	phosphodiester bonds of nucleotides and nucleotide sugars and pyrophosphate bonds of
	nucleotides and nucleotide sugars. This protein may function to hydrolyze nucleoside 5'
	triphosphates to their corresponding monophosphates and may also hydrolyze diadenosine
	polyphosphates. Mutations in this gene have been associated with 'idiopathic' infantile arterial
	calcification, ossification of the posterior longitudinal ligament of the spine (OPLL), and insulin
	resistance.
Molecular Weight:	130-150 kDa
Gene ID:	5167
UniProt:	P22413
Pathways:	Regulation of Carbohydrate Metabolic Process
Application Details	
Application Notes:	Western blot, 0.25-0.5 μg/mL, Human
	Immunohistochemistry(Paraffin-embedded Section), 1-2 μg/mL, Human
	Flow Cytometry (Fixed), 1-3 µg/1x10 ⁶ cells, Human
	ELISA, 0.1-0.5 μg/mL, -
	1. Abate, N., Carulli, L., Cabo-Chan, Jr., A., Chandalia, M., Snell, P. G., Grundy, S. M. Genetic
	polymorphism PC-1 K121Q and ethnic susceptibility to insulin resistance. J. Clin. Endocr.
	Metab. 88: 5927-5934, 2003. 2. Bottcher, Y., Korner, A., Reinehr, T., Enigk, B., Kiess, W., Stumvo

Application Details

M., Kovacs, P. ENPP1 variants and haplotypes predispose to early onset obesity and impaired glucose and insulin metabolism in German obese children. J. Clin. Endocr. Metab. 91: 4948-4952, 2006. 3. Buckley, M. F., Goding, J. W. Plasma cell membrane glycoprotein gene Pca-1 (alkaline phosphodiesterase I) is linked to the proto-oncogene Myb on mouse chromosome 10. Immunogenetics 36: 199-201, 1992.

Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 μg/mL.
Concentration:	500 μg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.