

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ACP6 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human ACP6 Glu33-Glu428 Accession # BAA91310
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

ACP6 (Acid Phosphatase 6, lysophosphatidic; also lysophosphatidic acid phosphatase type 6, LPAP and ACPL1) is a 44-47 kDa monomeric member of the histidine acid phosphatase family of proteins. It is widely expressed, being found in almost all tissues, particularly in mitochondria-rich cells. ACP6 has been described as being both secreted and mitochondrial in location, and plays a critical role in the regulation of lysophosphatidic acid (LPA). LPA is the most structurally simple, biologically active phospholipid in nature (mono-[variable length] acyl-phosphoglycerol). It exists both inside and outside the cell, serving intracellularly as a modulator of lipid rafts, and extracellularly as a signaling molecule that promotes cell growth and fibroblast chemotaxis. ACP6 hydrolyzes LPA, generating monoacylglycerol and phosphate. This presumably eliminates its bioactivity. Human ACP6 precursor is 428 amino acids (aa) in length. It contains a putative signal sequence (aa 1-32) plus a 396 aa mature region (aa 33-428) that possesses one histidine phosphatase domain (aa 120-379). There is one isoform variant that contains an 11 aa substitution for aa 261-428. Mature human ACP6 shares 76% aa sequence identity with mouse ACP6.

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