

DESCRIPTION

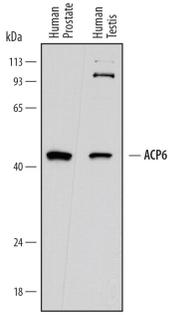
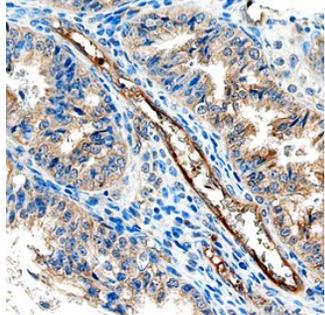
Species Reactivity	Human
Specificity	Detects human ACP6 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human ACP6 Glu33-Glu428 Accession # BAA91310
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human ACP6 by Western Blot. Western blot shows lysates of human prostate tissue and human testis tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human ACP6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7766) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for ACP6 at approximately 44 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>ACP6 in Human Ovarian Cancer Tissue. ACP6 was detected in immersion fixed paraffin-embedded sections of human ovarian cancer tissue using Sheep Anti-Human ACP6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7766) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to endothelial cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.