

DESCRIPTION

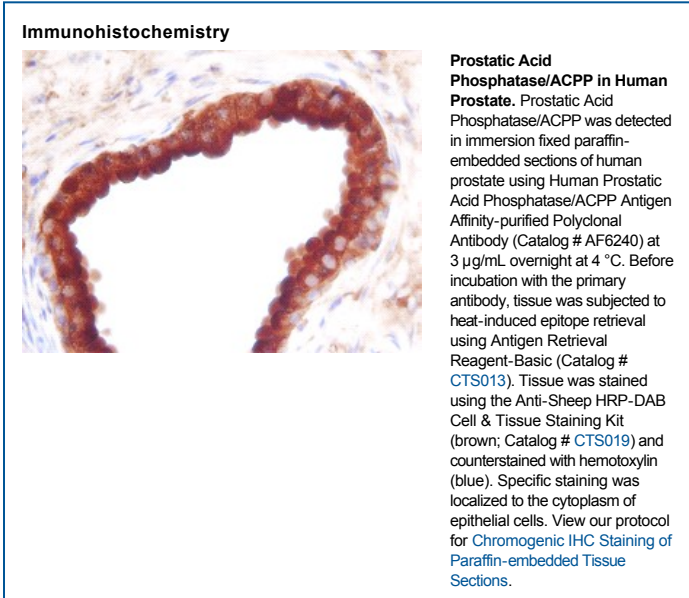
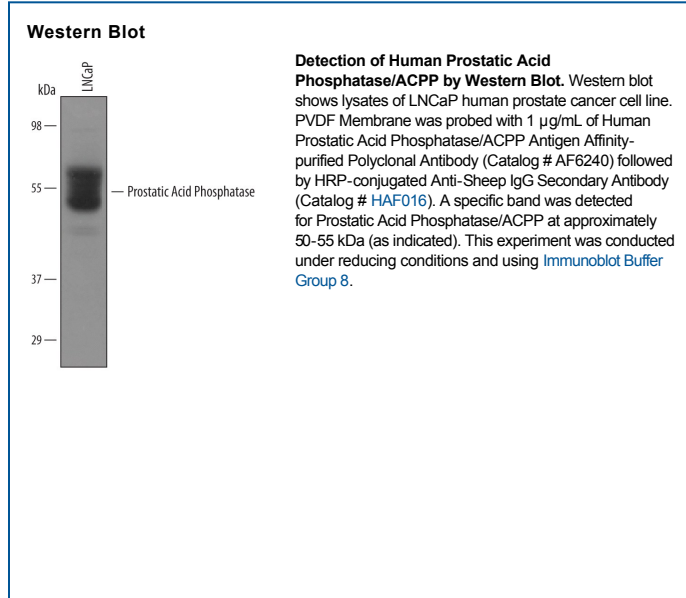
Species Reactivity	Human
Specificity	Detects human Prostatic Acid Phosphatase/ACPP in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Prostatic Acid Phosphatase/ACPP Lys33-Gln379 Accession # P15309
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.

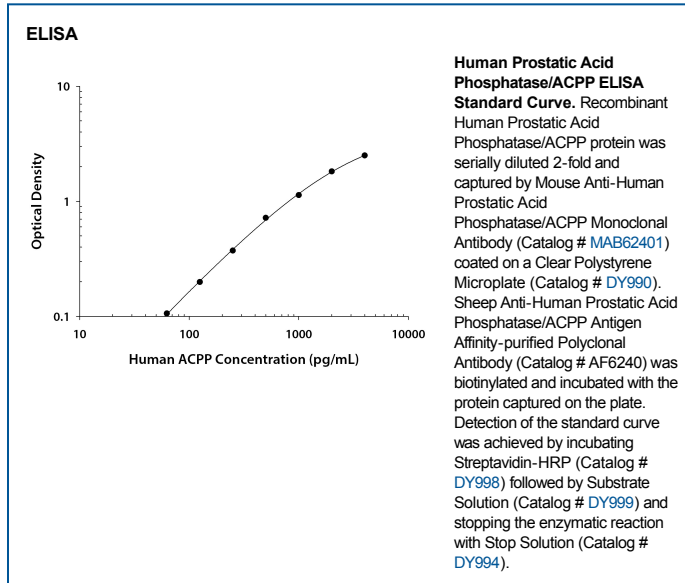
APPLICATIONS

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
ELISA	This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human Prostatic Acid Phosphatase/ACPP Monoclonal Antibody (Catalog # MAB62401). <i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human Prostatic Acid Phosphatase/ACPP DuoSet ELISA Kit (Catalog # DY6240-05) for convenient development of a sandwich ELISA.</i>	

DATA





PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
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

ACPP (Acid phosphatase, prostate; also PAP and ACP3) is a 48-52 kDa glycoprotein member of the histidine acid phosphatase family of enzymes. It exists as a 95-100 kDa nondisulfide-linked homodimer that hydrolyzes phosphate esters under low pH to generate free phosphate. ACPP is expressed by prostate epithelium and pain-detecting spinal cord neurons. In the spinal cord, ACPP dephosphorylates AMP. This generates adenosine which acts as a strong analgesic agent. Mature human ACPP is 354 amino acids (aa) in length (aa 33-386). It contains one histidine phosphatase domain (aa 34-332), plus a nucleophile acceptor site at His44, and a proton donor site at Asp290. There are two potential alternative splice variants. One shows a deletion of aa 153-185, while another is transmembrane (previously called TMPase) and shows a 38 aa substitution for the C-terminal seven amino acids. Over aa 33-379, human ACPP shares 84% aa identity with mouse ACPP.