10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ACP1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9411a

Product Information

Application	WB, IHC-P, FC, IF, E
Primary Accession	P24666
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23949
Calculated MW	18042
Antigen Region	33-61

Additional Information

Gene ID	52
Other Names	Low molecular weight phosphotyrosine protein phosphatase, LMW-PTP, LMW-PTPase, Adipocyte acid phosphatase, Low molecular weight cytosolic acid phosphatase, Red cell acid phosphatase 1, ACP1
Target/Specificity	This ACP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 33-61 amino acids from the N-terminal region of human ACP1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ACP1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ACP1 (HGNC:122)
Function	Acts on tyrosine phosphorylated proteins, low-MW aryl phosphates and natural and synthetic acyl phosphates with differences in substrate specificity

between isoform 1 and isoform 2.

Cellular Location Cytoplasm.

Tissue Location [Isoform 2]: Expressed in T-lymphocytes.

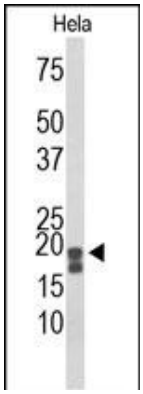
Background

ACP1 belongs to the phosphotyrosine protein phosphatase family of proteins. It functions as an acid phosphatase and a protein tyrosine phosphatase by hydrolyzing protein tyrosine phosphate to protein tyrosine and orthophosphate. This enzyme also hydrolyzes orthophosphoric monoesters to alcohol and orthophosphate. This gene is genetically polymorphic, and three common alleles segregating at the corresponding locus give rise to six phenotypes. Each allele appears to encode at least two electrophoretically different isozymes, Bf and Bs, which are produced in allele-specific ratios.

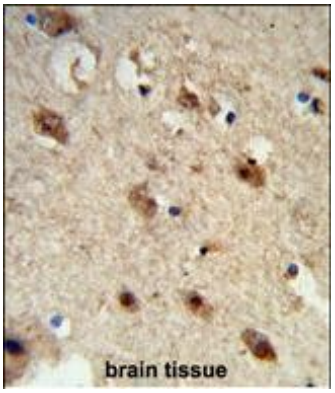
References

Saccucci, P., et al. Med. Sci. Monit. 15 (10), CR511-CR517 (2009) : Shu, Y.H., et al. J. Clin. Endocrinol. Metab. 94(10):4094-4102(2009) Apelt, N., et al. Metab. Clin. Exp. 58(10):1415-1423(2009) Banci, M., et al. Cardiology 113(4):236-242(2009) Rousseff, R.T., et al. Neuropediatrics 39(6):354-356(2008)

Images

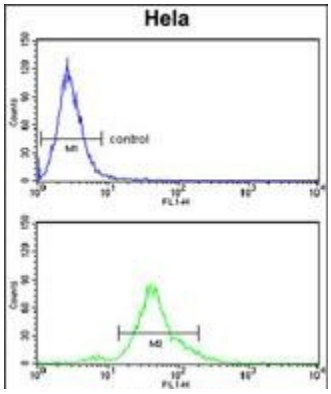


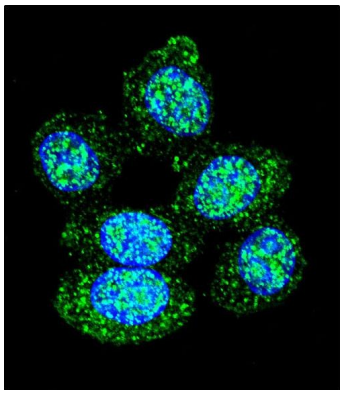
Western blot analysis of ACP1 Antibody (N-term) (Cat. #AP9411a) in Hela cell line lysates (35ug/lane). ACP1 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with ACP1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ACP1 Antibody (N-term) (Cat. #AP9411a) flow cytometry analysis of Hela cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.





Confocal immunofluorescent analysis of ACP1 Antibody (N-term)(Cat#AP9411a) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).