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Acid Phosphatase Rabbit pAb

Catalog # AP99088

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P24666
Other Accession	P24666
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	18042
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Acid Phosphatase
Epitope Specificity	71-158/158
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the low molecular weight phosphotyrosine protein phosphatase family.
SUBUNIT	Isoform 1 interacts with the SH3 domain of SPTAN1. There is no interaction observed for isoforms 2 or 3. Interacts with EPHA2; dephosphorylates EPHA2. Interacts with EPHB1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Phosphatase enzymes catalyse hydrolysis of phosphoric acid esters of various alcohols, e.g. a hexose phosphate, to yield the alcohol and free inorganic phosphate. This may be a way of recycling phosphate in the cell, and the level of phosphate may be elevated under conditions of phosphate starvation (in algae for example). Acid phosphatases have pH optima below 7, whereas alkaline phosphatases are most active above pH 7. Commercial quantities of acid phosphatase are obtained from plant sources e.g. potato and wheat germ, whereas similar quantities of alkaline phosphatase are obtained from animal intestine and bacteria.

Additional Information

Gene ID	52
Other Names	HAAP; LMW-PTP; LMWPTP; 4632432E04Rik; Acp-1; Lmptp; PPAC_HUMAN; ACP1; LMW-PTPase; Adipocyte acid phosphatase; Low molecular weight cytosolic acid phosphatase; Red cell acid phosphatase 1; 3.1.3.48; PPAC_MOUSE; PPAC_RAT; acid phosphatase 1; acid phosphatase 1, soluble; acid phosphatase of erythrocyte; low molecular weight phosphotyrosine protein phosphatase; red cell acid phosphatase
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.