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Polyclonal Antibody to Acid Phosphatase 5, Tartrate Resistant (ACP5)

Acid Phosphatase 5, Tartrate Resistant
Catalog # AP74673

Product Information

Application	WB
Primary Accession	O97860
Reactivity	Rabbit
Host	Guinea Pig
Clonality	Polyclonal
Calculated MW	36624

Additional Information

Gene ID	100008599
Other Names	TRAP; TrATPase; Tartrate Resistant Acid Phosphatase; Type 5 acid phosphatase
Target/Specificity	Oryctolagus cuniculus (Rabbit)
Dilution	WB~~Western blotting: 0.5-2 □g/mL; Immunohistochemistry: 5-20 □g/mL; Immunocytochemistry: 5-20 □g/mL; Optimal working dilutions must be determined by end user.
Format	PBS, pH7.4, containing 0.02% NaN3, 50% glycerol.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	ACP5
Function	Functions as a binuclear Fe(III)-Fe(II) acid phosphatase that hydrolyzes phosphate esters to alcohols and phosphate under acidic conditions (By similarity). Dephosphorylates a broad range of substrates, including adenosine 5'-diphosphate (ADP), adenosine 5'- triphosphate (ATP), as well as larger phosphoproteins such as osteopontin (SPP1), a highly phosphorylated bone matrix protein, bone sialoprotein (IBSP) and synthetic compounds such as para-nitrophenyl phosphate (p-NPP). Through the dephosphorylation of bone matrix proteins, plays a crucial role in normal cartilage mineralization during skeletal development and in maintaining and remodeling bone integrity in adults. Promotes osteoclast migration by dephosphorylating SPP1, which binds osteoclasts to the bone matrix. Also involved in immune

	regulation and macrophage function, contributes to the breakdown of internalized pathogens within lysosomes (By similarity). Regulates immune cell recruitment during infection, partly via interaction with SPP1 (By similarity). May contribute to the removal of mannose-6- phosphate (Man6P) from lysosomal proteins after their delivery to lysosomes, acting in concert with ACP2. The uncleaved form (isoform 5a) functions primarily in immune regulation rather than bone resorption (By similarity).
Cellular Location	Lysosome {ECO:0000250|UniProtKB:Q05117}. Secreted {ECO:0000250|UniProtKB:P13686}. Note=The uncleaved form (isoform 5a) is secreted by macrophage and dendritic cell. The cleaved form (isoform 5b) is secreted by osteoclasts. {ECO:0000250|UniProtKB:P13686}

Images

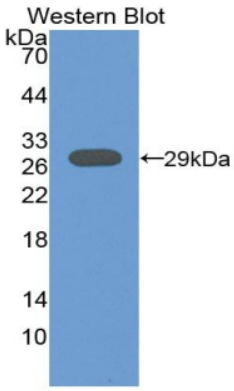


Figure. Western Blot; Sample: Recombinant ACP5, Rabbit.

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