

# Datasheet for ABIN7505753 **ACP5 Protein (AA 1-327) (His tag)**



## Overview

Quantity:	100 μg
Target:	ACP5
Protein Characteristics:	AA 1-327
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ACP5 protein is labelled with His tag.

### **Product Details**

Sequence:	Met 1-Pro 327
Characteristics:	A DNA sequence encoding the Mouse Acp5 protein (Q05117) (Met 1-Pro 327) was expressed with a C-His.
Purity:	> 95 % as determined by reducing SDS-PAGE.

# **Target Details**

Target:	ACP5
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Alternative Name:	Acp5 (ACP5 Products)
Background:	Abbreviation: Acp5
	Target Synonym: Tartrate-resistant acid phosphatase type 5,TR-AP,EC 3.1.3.2,Tartrate-resistant
	acid ATPase,TrATPase,Type 5 acid phosphatase
	Background: Tartrate-resistant acid phosphatase (TRACP) or acid phosphatase 5, tartrate

resistant (ACP5 or TRAP) is a glycosylated monomeric metalloenzyme expressed in mammals. TRACP is associated with osteoblast migration to bone resorption sites, and, once there, TRACP is believed to initiate osteoblast differentiation, activation, and proliferation. TRACP once considered to be just a histochemical marker of osteoclasts is now recognised to be a molecule of widespread occurrence with functions in both the skeleton and the immune system. Two forms of TRACP circulate in human blood, TRACP 5a derived from macrophages and dendritic cells, and TRACP-5b derived from osteoclasts. Recent data have demonstrated the utility of TRACP-5b as a marker of osteoclast number and bone resorption, and serum TRACP-5a as a marker of inflammatory conditions. TRACP is expressed by osteoclasts, macrophages, dendritic cells and a number of other cell types. It has a critical role in many biological processes including skeletal development, collagen synthesis and degradation, the mineralisation of bone, cytokine production by macrophages and dendritic cells, macrophage recruitment, dendritic cell maturation and a role in the development of Th1 responses.

Molecular Weight:

Calculated MW: 35.86 kDa

Observed MW: 38 kDa

UniProt:

Q05117

Pathways:

Transition Metal Ion Homeostasis

## **Application Details**

Restrictions:

For Research Use only

#### Handling

Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4.  Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization.
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.  Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Expiry Date:	12 months