

Datasheet for ABIN6654431
anti-ACP5 antibody



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2 Images

Overview

Quantity:	100 µg
Target:	ACP5
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This ACP5 antibody is un-conjugated
Application:	Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Recombinant full-length human protein was used as the immunogen for the recombinant TRAcP antibody.
Clone:	RACP5-1070
Isotype:	IgG1
Purification:	Purified
Purity:	Protein G affinity chromatography

Target Details

Target:	ACP5
Alternative Name:	TRAcP / TRAP / ACP5 (ACP5 Products)
Background:	It recognizes a protein of 35 kDa, which is identified as tartrate-resistant acid phosphatase

Target Details

(TRAcP). It exists as two isoforms (5a and 5b). This MAb reacts with both the isoforms. Serum TRAcP 5a is secreted by macrophages and dendritic cells and increased in many patients of rheumatoid arthritis. Serum TRAcP 5b is produced from osteoclasts and elevated during bone resorption. TRAcP is an iron containing glycoprotein, which catalyzes the conversion of orthophosphoric monoester to alcohol and orthophosphate. It is the most basic of the acid phosphatases and is the only form not inhibited by L(+)-tartrate. TRAcP is synthesized as a latent proenzyme and is activated by proteolytic cleavage and reduction. Normally, TRAcP is highly expressed by osteoclasts, activated macrophages, neurons and endometrium during pregnancy. Expression of TRAcP is increased in certain pathological conditions such as Leukemic Reticuloendotheliosis (Hairy Cell Leukemia), Gaucher's Disease, HIV-induced Encephalopathy, Osteoclastoma and in osteoporosis and metabolic bone diseases. Anti-TRAcP antibody labels the cells of Hairy Cell Leukemia (HCL) with a high degree of sensitivity and specificity. Other cells stained with this antibody are tissue macrophages and osteoclasts.

Pathways: [Transition Metal Ion Homeostasis](#)

Application Details

Application Notes: Optimal dilution of the recombinant TRAcP antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.\. Immunohistochemistry (FFPE): 0.5-1 µg/mL for 30 min at RT

Restrictions: For Research Use only

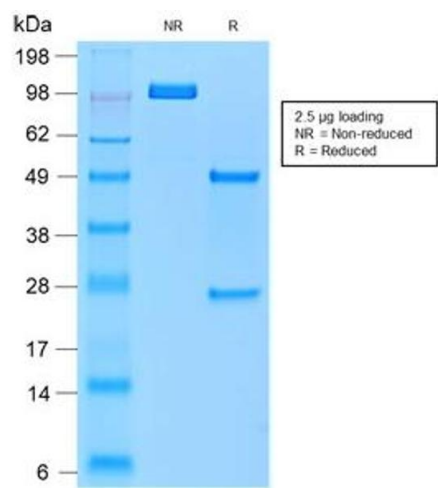
Handling

Buffer: 1 mg/mL in 1X PBS, BSA free, sodium azide free

Preservative: Azide free

Storage: 4 °C,-20 °C

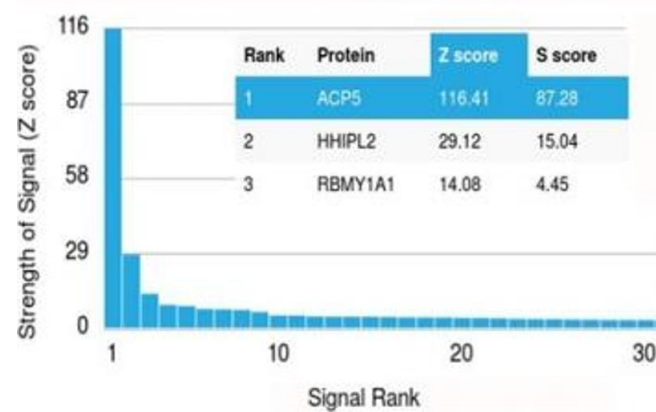
Storage Comment: Store the recombinant TRAcP antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).



SDS-PAGE

Image 1. SDS-PAGE analysis of purified, BSA-free recombinant TRAcP antibody (clone rACP5/1070) as confirmation of integrity and purity.

Human Protein Microarray Specificity Validation



Microarray

Image 2. Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant TRAcP antibody (clone rACP5/1070). These results demonstrate the foremost specificity of the rACP5/1070 mAb.

Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.