

Datasheet for ABIN6940366

Recombinant anti-ACP5 antibody**3** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	ACP5
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This ACP5 antibody is un-conjugated
Application:	Immunohistochemistry (IHC), Staining Methods (StM)

Product Details

Immunogen:	Recombinant full-length human ACP5 protein
Clone:	RACP5-1070
Isotype:	IgG1 kappa
Specificity:	<p>It recognizes a protein of 35 kDa, which is identified as tartrate-resistant acid phosphatase (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</p>

Product Details

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.

Purification: Purified by Protein A/G

Target Details

Target: ACP5

Alternative Name: ACP5 ([ACP5 Products](#))

Molecular Weight: 35kDa

Gene ID: 54

UniProt: [P13686](#)

Pathways: [Transition Metal Ion Homeostasis](#)

Application Details

Application Notes: Positive Control: HepG2, 293T, K562 or RPMI-8226 cells. Spleen from Hairy Cell Leukemia (HCL) patient.
Known Application: Immunohistochemistry (Formalin-fixed) (0.5-1 µg/mL for 30 minutes at RT)(Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes)Optimal dilution for a specific application should be determined.

Restrictions: For Research Use only

Handling

Concentration: 200 µg/mL

Buffer: 10 mM PBS with 0.05 % BSA & 0.05 % azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

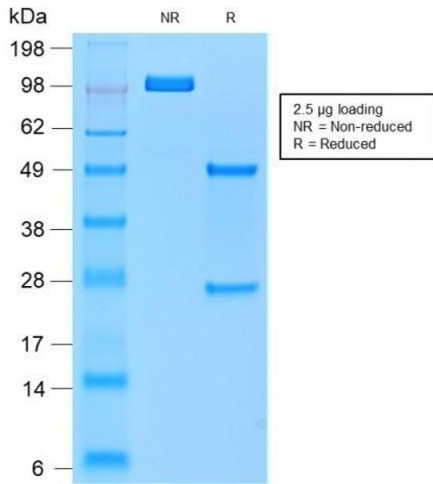
Handling

Storage: 4 °C, -80 °C

Storage Comment: Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

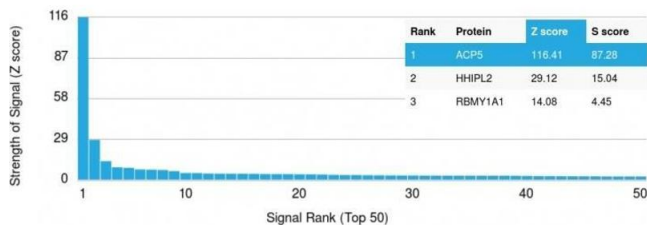
Expiry Date: 24 months

Images



SDS-PAGE

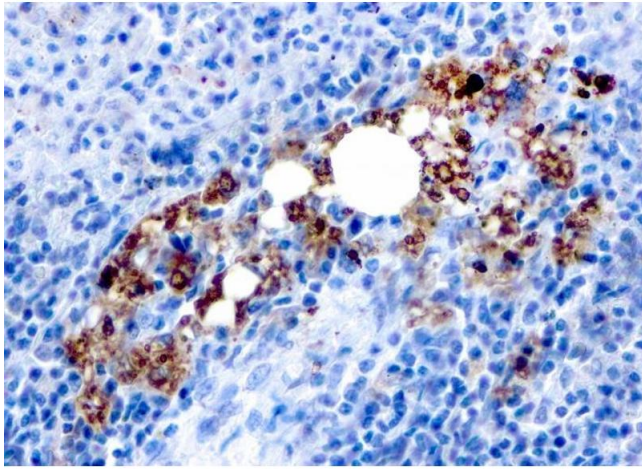
Image 1. SDS-PAGE Analysis of Purified TRAcP Mouse Recombinant Monoclonal Antibody (rACP5/1070). Confirmation of Purity and Integrity of Antibody.



Protein Array

Image 2. Analysis of Protein Array containing more than 19,000 full-length human proteins using TRAcP Mouse Recombinant Monoclonal Antibody (rACP5/1070). Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a

Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.



Immunohistochemistry

Image 3. Formalin-fixed, paraffin-embedded human Spleen stained with TRAcP Mouse Recombinant Monoclonal Antibody (rACP5/1070).