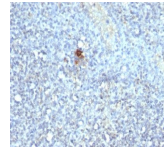


TRAcP Monoclonal Mouse Antibody (ACP5/1070)



Product Description

This antibody 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 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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1070, Anti-TRAcP (ACP5/1070)

Product attributes

Antibody number	#1070
Antibody reactivity (target)	TRAcP
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	ACP5/1070
Isotype	IgG2b, kappa
Molecular weight	35 kDa
Synonyms	Acid phosphatase 5, tartrate resistant, ACP5, serum band 5 tartrate-resistant acid phosphatase, SPENCDI, Tartrate-resistant acid ATPase, Tartrate-resistant acid phosphatase type 5, TR-AP, TRAcP, TRACP5, TRAP, TrATPase, Type 5 acid phosphatase
Human gene symbol	ACP5
Entrez gene ID	54
SwissProt	P13686
Unigene	1211
Immunogen	Recombinant full-length human ACP5 protein
Verified antibody applications	IHC (FFPE) (verified)
Antibody target cellular localization	Lysosomes
Species reactivity	Human, Mouse, Rat
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.5-1 ug/mL. 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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user
Positive control	HepG2, 293T, K562 or RPMI-8226 Cells. Spleen from Hairy Cell Leukemia (HCL) patient.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Metabolism
Cell/tissue expression	Osteoblasts/osteoclasts

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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