

CD13 Monoclonal Mouse Antibody (WM15)

Product Description

Recognizes an integral membrane glycoprotein of 150 kDa, identified as CD13 (also known as aminopeptidase-N). The antibody recognizes an extracellular epitope. The CD13 antigen is present on most cells of myeloid origin including granulocytes, monocytes, mast cells, and GM-progenitor cells. It is also expressed by the majority of AML, CML in myeloid blast crisis, and in a smaller fraction of lymphoid leukemias. CD13 is absent from normal lymphocytes, platelets and erythrocytes. CD13 is also present on fibroblasts; endothelial cells, epithelial cells from renal proximal tubules and intestinal brush border, bone marrow stromal cells, osteoclasts, and cells lining bile duct canaliculi. CD13 is identical to aminopeptidase N (APN), a prominent membrane-bound metalloprotease present on the surface of intestinal brush border and renal tubules. CD13 plays a role in metabolism of biologically active peptides, in phagocytosis, and in bactericidal/tumoricidal activities. It also serves as a receptor for human coronaviruses (HCV). The lineage-restricted pattern of expression of CD13 within the hemopoietic compartment suggests that it may be important in myeloid cell differentiation.

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 <u>CF® Dye Brochure</u> 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 <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0153, Anti-CD13 (WM15)

Call us : 800-304-5357 Email: techsupport@biotium.com

Product attributes

Product attributes			
Antibody number	#0153		
Antibody reactivity (target)	CD13		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	WM15		
Isotype	IgG1, kappa		
Molecular weight	150 kDa		
Synonyms	Alanyl aminopeptidase; Aminopeptidase M; Aminopeptidase N, ANPEP; AP-M; APN; gp150; hAPN; Lap1; Microsomal aminopeptidase; Myeloid plasma membrane glycoprotein CD13 p150; PEPN		
Human gene symbol	ANPEP		
Entrez gene ID	290		
SwissProt	P15144		
Unigene	1239		
Immunogen	Human AML cells		
Antibody target cellular localization	Plasma membrane		
Expected antibody applications	Flow, surface (published for clone), Functional studies (published for clone), IF (published for clone), IP (published for clone), WB (published for clone)		
Species reactivity	Human		
Species reactivity Antibody application notes	Human Higher concentration may be required for direct detection using primary antibody, conjugates than for indirect detection with secondary antibody, Immunofluorescence: 1-2 ug/mL, Immunohistology formalin-fixed 0.5-1 ug/mL, Stalining 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		
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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
BNC74	CF®740	742/767	633-685	775/50	CF®740 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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References

Note: References for this clone sold by other suppliers may be listed for expected applications.

- J Biol Chem (1991) 266(7): 4593-4597. (IP)
 Blood (2000) 95(2):453-460. (Flow, functional studies)
 Mol Carcinogen (2017) 56(5), 1395-1404. (WB, IF)

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