

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 [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 0153, Anti-CD13 (WM15)**

References

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

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

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
Antibody application notes	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, 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	Macrophages in a lymph node/tonsil or brain.
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	Immunology
Cell/tissue expression	Myeloid cells

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

Dye Features

- [CF®405S Features](#)
- [CF®488A Features](#)
- [CF®568 Features](#)
- [CF®594 Features](#)
- [CF®640R Features](#)
- [CF®647 Features](#)

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