

# CD13 Monoclonal Mouse Antibody (B-F10)

## Product Description

Recognizes an integral membrane glycoprotein of 150 kDa, identified as CD13 (also known as aminopeptidase-N). 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](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0343, Anti-CD13 (B-F10)**

## Product attributes

<b>Antibody number</b>	#0343
<b>Antibody reactivity (target)</b>	CD13
<b>Antibody type</b>	Primary
<b>Host species</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Clone</b>	B-F10
<b>Isotype</b>	IgG1, kappa
<b>Molecular weight of antigen</b>	150 kDa
<b>Synonyms</b>	Alanyl aminopeptidase; Aminopeptidase M; Aminopeptidase N; ANPEP; AP-M; APN; gp150; hAPN; Lap1; Microsomal aminopeptidase; Myeloid plasma membrane glycoprotein CD13; p150; PEPN
<b>Human gene symbol</b>	ANPEP
<b>Entrez gene ID</b>	290
<b>SwissProt</b>	P15144
<b>Unigene</b>	1239
<b>Immunogen</b>	KG-1 myeloid cells
<b>Antibody target cellular localization</b>	Plasma membrane
<b>Species reactivity</b>	Human
<b>Expected antibody applications</b>	Flow, surface (published for clone), WB (published for clone)
<b>Antibody application notes</b>	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
<b>Positive control</b>	Macrophages in a lymph node, tonsil or brain.
<b>Shipping condition</b>	Room temperature
<b>Storage Conditions</b>	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
<b>Shelf life</b>	Guaranteed for at least 24 months from date of receipt when stored as recommended
<b>Regulatory status</b>	For research use only (RUO)
<b>Antibody/conjugate formulation</b>	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
<b>Product origin</b>	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
<b>Antibody research areas</b>	Immunology
<b>Cell/tissue expression</b>	Myeloid cells

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNC74	CF®740	742/767	633-685	775/50	<a href="#">CF®740 Features</a>
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	

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

## References

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

1. Clinical Chem (1998) 44:2:215-220. (WB)
2. Clin Pathol (1994) 47:1006-1009. (Flow)