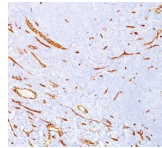


CD34 Monoclonal Mouse Antibody (QBEnd/10)



Product Description

This MAb recognizes a single chain, transmembrane, heavily glycosylated protein of 90-120 kDa, which is identified as CD34. On the basis of differential sensitivity to degradation by specific enzymes, epitopes of monoclonal antibodies to CD34 are classified into three main categories, class I, class II and class III. It is a class II antibody whose epitope is resistant to neuraminidase but sensitive to glycoprotease and chymopapain. CD34 expression is a hallmark for identifying pluripotent hematopoietic stem or progenitor cells. Its expression is gradually lost as lineage committed progenitors differentiate. CD34 is a marker of choice for staining blasts in acute myeloid leukemia. In addition, CD34 is expressed by soft tissue tumors, such as solitary fibrous tumor and gastrointestinal stromal tumor. Its expression is also found in vascular endothelium. Additionally, it appears that proliferating endothelial cells express this molecule more than the non-proliferating endothelial cells. Anti-CD34 labels > 85% of angiosarcoma and Kaposi's sarcoma, but with a lower specificity. 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 0640, Anti-CD34 (QBEnd/10)**

Product attributes

Antibody number	#0640
Antibody reactivity (target)	CD34
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	QBEnd/10
Isotype	IgG1, kappa
Molecular weight	90-110 kDa
Synonyms	Hematopoietic Progenitor Cell Antigen, HPCA1, Mucosialin
Human gene symbol	CD34
Entrez gene ID	947
SwissProt	P28906
Unigene	374990
Immunogen	Detergent solubilized vesicular suspension prepared from human term placenta
Antibody target cellular localization	Plasma membrane
Verified antibody applications	Flow (verified), IHC (FFPE) (verified)
Species reactivity	Cynomolgus monkey, Human, Rhesus monkey
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 0.25-0.5 ug/mL. Staining of formalin-fixed tissues is enhanced by 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. Does not react with rat, sheep, cow or dog; others not known. Optimal dilution for a specific application should be determined by user
Positive control	KG-1 cells, Tonsil, or Angiosarcoma
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	Angiogenesis, Cancer
Cell/tissue expression	Endothelial cells, Hematopoietic stem cells
Tumor expression	Leukemia/lymphoma

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	

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, LI-COR Bioscience.