## **CD34 Monoclonal Mouse Antibody** (ICO-115)



## **Product Description**

This antibody recognizes a carbohydrate epitope on a single chain, transmembrane, heavily glycosylated protein of 90-120 kDa, which is identified as CD34 (VI international workshop on human differentiation antigens). Its 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, it is expressed by soft tissue tumors, such as solitary fibrous tumor and gastrointestinal stromal tumor. CD34 expression is also found in vascular endothelium. Additionally, proliferating endothelial cells overexpress this molecule than the non-proliferating endothelial cells. Anti-CD34 labels > 85% of angiosarcoma and Kaposi's sarcoma, but shows low 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 <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0039, Anti-CD34 (ICO-115)

## Product attributes

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Product attributes			
Antibody number	#0039		
Antibody reactivity (target)	CD34		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	ICO-115		
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	Blast cells of a chronic myeloid leukemia patient		
Antibody target cellular localization	Plasma membrane		
Verified antibody applications	Flow (verified)		
Species reactivity	Human, Rat		
Expected antibody applications	IF, Flow, surface (published for clone), IHC (FFPE) (published for clone), IHC (frozen) (published for clone), WB (published for clone)		
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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, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user		
Antibody application notes  Positive control	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, Flow Cytometry 0.5-1 ug/mllion cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be		
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Positive control Shipping condition	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mlL, Flow Cytometry 0.5-1 ug/mllion cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user  KG-1 cells, Tonsil, or Angiosarcoma  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light,		
Positive control Shipping condition Storage Conditions	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mlL, Flow Cytometry 0.5-1 ug/mlL, Optimal dilution for a specific application should be determined by user  KG-1 cells, Tonsil, or Angiosarcoma  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when		
Positive control Shipping condition Storage Conditions Shelf life	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mlL, Flow Cytometry 0.5-1 ug/mlL or a specific application should be determined by user  KG-1 cells, Tonsil, or Angiosarcoma  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended		
Positive control Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate	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., Flow Cytometry 0.5-1 ug/ml. Western blotting 0.5-1 ug/ml., Optimal dilution for a specific application should be determined by user  KG-1 cells, Tonsil, or Angiosarcoma  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended  For research use only (RUO)  Conjugates: 0.1 mg/ml. in PBS/0.05% BSA, Purified: 0.2 mg/ml. in PBS/0.05% BSA, Purified: 0.2 mg/ml. in PBS/0.05% BSA, Purified: 0.2 mg/ml. in PBS/0.05% BSA/0.05% aside, Purified; BSA-free: 1 mg/ml. in		
Positive control Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate formulation	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., Flow Cytometry 0.5-1 ug/ml., Determined by user  KG-1 cells, Tonsil, or Angiosarcoma  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended  For research use only (RUO)  Conjugates: 0.1 mg/mL in PBS/0.05% 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, Purffied, BSA-free: 1 mg/mL in PBS without azide		
Positive control Shipping condition Storage Conditions Shelf life Regulatory status Antibody/conjugate formulation Antibody research areas	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mlL, Flow Cytometry 0.5-1 ug/mlL or a specific application should be determined by user  KG-1 cells, Tonsil, or Angiosarcoma  Room temperature  Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  Guaranteed for at least 24 months from date of receipt when stored as recommended  For research use only (RUO)  Conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA.0.05% azide, Purified: 0.2 mg/mL in PBS without azide  Angiogenesis, Cancer  Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in		

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.

- 1. J Biol Regulators Homeostatic Agents (2001) 15(1):1-13. (IHC, FFPE; IHC, frozen; WB)
- 2. Am J Physiol (2004) 287(6), H2670-H2676. (Flow)