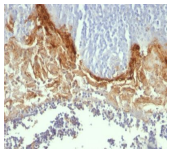
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CD104 / Integrin beta 4 Monoclonal Mouse Antibody (UM-A9)



Product Description

CD104 is beta 4 integrin. It is primarily expressed in epithelial cells. Together with alpha 6 integrin, it is the cell surface receptor for laminin, where it mediates cell adhesion. Mutations in this gene are associated with epidermolysis bullosa with pyloric atresia.

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 0449, Anti-CD104 (UM-A9)

Product attributes

Antibody number	#0449
Antibody reactivity (target)	CD104, integrin beta 4
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	UM-A9
Isotype	IgG2a, kappa
Molecular weight of antigen	205 kDa
Synonyms	CD104; Integrin beta 4; ITGB4; GP150
Human gene symbol	ITGB4
Entrez gene ID	3691
SwissProt	P16144
Unigene	632226
Immunogen	Human squamous cell carcinoma (UM-SCC1)
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Expected antibody applications	Flow, surface (published for clone), Functional studies (published for clone), IF (published for clone), IP (published for clone)
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, Biological blockade partially blocks laminin binding, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	A431 cells, squamous cell carcinoma, colon or placenta
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	Cancer, Immunology
Product origin	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.
Cell/tissue expression	Epithelial cells

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	

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. Cancer Res (1991) 51(9):2395-402. (IP, functional studies)
2. Cancer Res (1997) 57(1), 38-42. (IP, Flow, IF)