## **Cytokeratin 14 Monoclonal Mouse Antibody** (LL002)



## **Product Description**

Cytokeratin 14 (CK14) belongs to the type I (or A or acidic) subfamily of low molecular weight keratins and exists in combination with keratin 5 (type II or B or basic). CK14 is found in basal cells of squamous epithelia, some glandular epithelia, myoepithelium, and mesothelial cells. Anti-CK14 is useful in differentiating squamous cell carcinomas from poorly differentiated epithelial tumors. Anti-CK14 is one of the specific basal markers for distinguishing between basal and non-basal subtypes of breast carcinomas. Anti-CK14 is also a good marker for differentiation of intraductal from invasive salivary duct carcinoma by the positive staining of basal cells surrounding the in-situ neoplasm as well as for differentiation of benign prostate from prostate carcinoma. Furthermore, this antibody has been useful in separating oncocytic tumors of the kidney from its renal mimics, and in identifying metaplastic carcinomas of the breast. 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 0499, Anti-Cytokeratin 14 (LL002)

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<b>Product attributes</b>			
Antibody number	#0499		
Antibody reactivity	Cytokeratin 14		
(target) Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	LL002		
Isotype	IgG3		
Molecular weight	~50 kDa		
Synonyms	CK-14; Dowling Meara; ebs3; ebs4; Epidermolysis Bullosa Simplex; k14; Keratin 14; Keratin Type I Cytoskeletal 14; Koebner; krt14; NFJ		
Human gene symbol	KRT14		
Entrez gene ID	3861		
SwissProt	P02533		
Unigene	6545380		
Immunogen	A synthetic peptide of 15 amino acid from the C-terminus of human keratin 14.		
Antibody target cellular	Cytoskeleton		
Verified antibody applications	Flow (intracellular) (verified), IF (verified), IHC (FFPE) (verified)		
Species reactivity	Human, Mouse, Rat		
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, Immunohisology formalin-fixed 0.5-1.0 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	A431 cells. Skin or Squamous cell carcinoma		
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, Cytoskeleton		
Cell/tissue expression	Epithelial cells		
Tumor expression	Breast cancer, Prostate cancer, Squamous cell carcinoma		

Antibody # prefix BNC04	Conjugation CF®405S	Ex/Em (nm) 404/431	Laser line 405	Detection channel DAPI (microscopy), AF405	Dye Features 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,	N/A	N/A	N/A	

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