Cytokeratin, LMW Monoclonal Mouse Antibody (AE-1)



Product Description

This MAb recognizes the 56.5 kDa (CK10); 50 kDa (CK14); 50 kDa (CK15); 48 kDa (CK16); 40 kDa (CK19) keratins of the acidic (Type I or LMW) subfamily. Twenty human keratins are resolved with two-dimensional gel electrophoresis into acidic (pI 6.0) subfamilies. The acidic keratins have molecular weights (MW) of 56.5, 55, 51, 50, 50′, 48, 46, 45, and 40 kDa. MAb AE3 recognizes the 65-67, 64, 59, 58, 56, and 52 kDa keratins of basic subfamily. Many studies have shown the usefulness of keratins as markers in cancer research and tumor diagnosis. AE1/AE3 is a broad spectrum anti pan-keratin antibody cocktail, which differentiates epithelial tumors from non-epithelial tumors e.g. squamous vs. adenocarcinoma of the lung, liver carcinoma, breast cancer, and esophageal cancer.

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 0253, Anti-Cytokeratin, LMW (AE-1)

Droduct attributes

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Product attributes			
Antibody number	#0253		
Antibody reactivity (target)	Cytokeratin, LMW		
Antibody type	Primary		
Host species	Mouse		
Clonality	Monoclonal		
Clone	AE-1		
Isotype	IgG1, kappa		
Molecular weight	40-56.5 kDa		
Synonyms	K1B; KRT1B; Keratin, type II cytoskeletal 1b; K77; CK-1B; Keratin 1B; Keratin-77; Cytokeratin-1B; Type-II Keratin Kb39		
Human gene symbol	KRT77		
Entrez gene ID	374454		
SwissProt	Q7Z794		
Unigene	334989		
Immunogen	Human epidermal keratin		
Antibody target cellular localization	Cytoskeleton		
Verified antibody applications	IHC (FFPE) (verified), WB (verified)		
Species reactivity	Chicken, Cow, Dog, Human, Monkey, Mouse, Rabbit, Rat, Turtle		
Expected antibody applications	Flow (intracellular) (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: 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/mlillion cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user		
Positive control	Skin, Squamous cell carcinoma (SCC)		
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		
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.		

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.

Ann N Y Acad Sci (1986) 468: 302-15. (Flow)

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