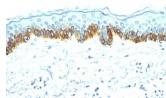


# Cytokeratin, LMW Monoclonal Mouse Antibody (AE-1)



## Product Description

This MAbs 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](mailto: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)**

## 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/million 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.
Cell/tissue expression	Epidermal cells, Epithelial cells

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNC74	CF®740	742/767	633-685	775/50	<a href="#">CF®740 Features</a>
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.

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

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Product link: <https://biotium.com/product/monoclonal-anti-cytokeratin-lmw-ae-1/>