Mitochondrial Marker Monoclonal Mouse Antibody (AE-1)



Product Description

This MAb recognizes a 60 kDa antigen associated with the mitochondria in human cells. It is a part of a new panel of reagents, which recognizes subcellular organelles or compartments of human cells. These markers may be useful in identification of these organelles in cells, tissues, and biochemical preparations. It recognizes an antigen associated with the mitochondria in human cells only. It can be used to stain the mitochondria in cell or tissue preparations and can be used as a mitochondrial marker in subcellular fractions. It produces a spaghetti-like pattern in normal and malignant cells and may be used to stain mitochondria of cells in fixed or frozen tissue sections. It can also be used with paraformaldehyde fixed frozen tissue or cell preparations. This MAb is an excellent marker for human cells in xenographic model research. It reacts specifically with human cells, including neurons and embryonic stem cells.

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 0905, Anti-Mitochondrial Marker (AE-1)

Product attributes

Call us: 800-304-5357

Product attributes				
Antibody number	#0905			
Antibody reactivity (target)	Mitochondrial Marker			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	AE-1			
Isotype	IgG1, kappa			
Molecular weight	60 kDa			
Synonyms	Not Known			
Entrez gene ID	Not Known			
SwissProt	Not Known			
Unigene	Not Known			
Immunogen	Semi-purified mitochondrial preparation			
Antibody target cellular localization	Mitochondria			
Verified antibody applications	IF (verified), IHC (FFPE) (verified), WB (verified)			
Species reactivity	Human			
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, Does not react with mouse or rat, others not known, Immunohistology formalin-fixed 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 10-20 min followed by cooling at RT for 20 minutes, ELISA For coating, order Ab without BSA, Western blotting 0.25-0.5 ug/mL, Optimal dilution for a specific application should be determined by user			
Positive control	HeLa or HepG2 cells. Hepatic 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/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide			
Antibody research areas	Organelle markers			
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	

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.

This datasheet was generated on December 12, 2025 at 05:58:37 AM. Visit product page to check for updated information before use. Product link: https://biotium.com/product/monoclonal-anti-mitochondrial-marker-ae-1/