Band 3 Monoclonal Mouse Antibody (Q1/156)



Product Description

Band 3, also designated AE1, is an erythrocyte membrane glycoprotein that contributes to cell stuctural integrity and mediates exchange of chloride and bicarbonate across the phospholipid bilayer. The diverse functions of the approximately 900 amino acid protein are mediated by two distinct domains. The amino-terminal domain, also known as cdb3 for cytoplasmic domain of erthrocyte membrane band 3, acts as an attachment site for the erythrocyte skeleton by binding ankyrin. The carboxy-terminal, membrane-associated domain carries out exchange transport of anions. Degradation of band 3 can generate an aging antigen known as senescent cell antigen, or SCA, which is expressed on old cells and marks them for removal by the immune system. An isoform of band 3, which lacks the first 65 amino acids and does not bind ankryin, is expressed in kidney.

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 2826, Anti-Band 3 (Q1/156)

Product attributes

Call us: 800-304-5357

Product attributes					
Antibody number	#2826				
Antibody reactivity (target)	Band 3				
Antibody type	Primary				
Host species	Mouse				
Clonality	Monoclonal				
Clone	Q1/156				
Isotype	IgG1, kappa				
Molecular weight	95 kDa				
Synonyms	Band 3 anion transport protein; AE1; Anion exchange protein 1; Solute carrier family 4 member 1; CD233; Diego blood group; Swann blood group; Waldner blood group; Wright blood group				
Human gene symbol	SLC4A1				
Entrez gene ID	6521				
SwissProt	P02730				
Unigene	210751; 443948				
Immunogen	Human fetal liver cells.				
Antibody target cellular localization	Plasma membrane				
Species reactivity	Human				
Antibody application notes	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Optimal dilution and staining procedure for a specific application should be determined by user, Recommended starting concentrations for titration are 1-2 ug/mL for most applications, or 1 ug/million cells/100 uL for flow cytometry				
Positive control	Red blood cell lysate; Human colon and lung tissue.				
Shipping condition	Room temperature				
Storage Conditions	Store at 2 to 8 $^{\circ}$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}$ C				
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, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide				
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended				
Antibody research areas	Ion channels				
Product origin	duct 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.				

Email: techsupport@biotium.com

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 July 14, 2025 at 01:04:23 PM. Visit product page to check for updated information before use. Product link: https://biotium.com/product/band-iii-monoclonal-mouse-antibody-q1-156/