Aldo-keto Reductase Family 1 Member B1 Monoclonal Mouse Antibody (CPTC-AKR1B1-2)



Product Description

Aldo-keto Reductase Family 1 Member B1 (AKR1B1), also known as aldose reductase or aldehyde reductase, is a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. This protein catalyzes the reduction of a number of aldehydes, including the aldehyde form of glucose, and is thereby implicated in the development of diabetic complications by catalyzing the reduction of glucose to sorbitol. It has also been shown to have decreased expression in adrenocortical cancer, and possibly play a role in adrenal tumorigenesis. It has been suggested that AKR1B1 could be investigated as a marker of malignancy for adrenal tumor diagnosis.

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 2592, Aldo-keto Reductase Family 1 Member B1 Monoclonal Mouse Antibody (CPTC-AKR1B1-2)

Product attributes

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Product attributes				
research-areas	Metabolism			
Antibody number	#2592			
Antibody reactivity (target)	Aldo-keto Reductase Family 1 Member B1			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	CPTC-AKR1B1-2			
Isotype	IgG1, kappa			
Molecular weight	37 kDa			
Synonyms	Aldo-keto reductase family 1 member B1; AKR1B1; Aldehyde Reductase 1; Aldose reductase; Lii5-2 CTCL tumor antigen; low Km aldose reductase			
Human gene symbol	AKR1B1			
Entrez gene ID	231			
SwissProt	P15121			
Unigene	521212			
Immunogen	Recombinant full-length human AKR1B1 protein			
Verified antibody applications	IF (verified), IHC (FFPE) (verified), WB (verified)			
Antibody target cellular localization	Cytoplasmic			
Species reactivity	Human			
Positive control	549, 293T, A431, HeLa, HepG2, MOLT4 and Raji whole cell lysates; HeLa cells; Human colon carcinoma 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-free: 1 mg/mL in PBS without azide			
Validated in protein array	Monospecific			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
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.			

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	

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