Alkaline Phosphatase Monoclonal Mouse Antibody (V17.1)

Product Description

This antibody reacts with tissue non-specific alkaline phosphatase. There are at least four distinct but related alkaline phosphatases: intestinal, placental, placental-like, and liver/bone/kidney (tissue non-specific). The first three are located together on chromosome 2, while the tissue non-specific form is located on chromosome 1. The product of this gene is a membrane bound glycosylated enzyme that is not expressed in any particular tissue and is, therefore, referred to as the tissue-nonspecific form of the enzyme. The exact physiological function of the alkaline phosphatases is not known. A proposed function of this form of the enzyme is matrix mineralization; however, mice that lack a functional form of this enzyme show normal skeletal development. This enzyme has been linked directly to hypo-phosphatasia, a disorder that is characterized by hypercalcemia and includes skeletal defects. The character of this disorder can vary, however, depending on the specific mutation since this determines age of onset and severity of symptoms. Alternatively spliced transcript variants, which encode the same protein, have been identified for this gene.

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 0141, Anti-Alkaline Phosphatase (V17.1)

Product attributes

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Product attributes				
Antibody number	#0141			
research-areas	Developmental biology, Metabolism			
Antibody reactivity (target)	Alkaline Phosphatase			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	V17.1			
Isotype	IgG1, kappa			
Molecular weight	55 kDa			
Synonyms	Alkaline phosphatase tissue non-specific; Alkaline phosphatase liver/bone/kidney; Alkaline phosphatase biomineralization associated; TNAP; TNALP; ALPL			
Human gene symbol	ALPP			
Entrez gene ID	248			
SwissProt	P05186; P05187; P09923 & P10696			
Unigene	284255; 333509; 370099 & 75431			
Immunogen	Bovine intestinal alkaline phosphatase			
Verified antibody applications	IHC (FFPE) (verified)			
Antibody target cellular localization	Plasma membrane			
Species reactivity	Cow, 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, Immunohistology (frozen) 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/mllilion cells/0.1 mL, Optimal dilution for a specific application should be determined by user			
Positive control	Intestine			
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	Developmental biology, Metabolism			
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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