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Eosinophil Peroxidase Monoclonal Mouse Antibody (EPO104)

Product Description

Peripheral blood granulocytes are classified into neutrophils, basophils and eosinophils according to the staining characteristics of their cytoplasmic granules. Granule proteins are released by physiologic and pharmacologic stimuli and play important roles in both normal and pathological host immune responses. Eosinophil major basic protein and eosinophil peroxidase (EPX) are granule proteins specific to the eosinophil. AHE-1 recognizes human EPX, a granule protein specific to eosinophils. It does not cross-react with eosinophil major basic protein, elastase, cathepsin G, esterase N, thrombin, plasmin, kallikrein, lactoferrin, or transferrin. This MAb stains eosinophils only and does not stain other peripheral blood cells, including platelets, neutrophils, monocytes, lymphocytes or red blood cells. Human EPX gene product can form a tetramer of two light chains and two heavy chains. Other peroxidase family members include myeloperoxidase (MPO), lactoperoxidase (LPO), and thyroid peroxidase (TPO).

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 0104, Anti-Eosinophil Peroxidase (EPO104)

Product attributes

Antibody number	#0104
Antibody reactivity (target)	Eosinophil Peroxidase
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	EPO104
Isotype	IgG1, kappa
Molecular weight of antigen	70 kDa (55 kDa-Heavy Chain; 15 kDa-Light Chain)
Synonyms	Eosinophil peroxidase heavy chain; EPER; EPO; EPP; EPX; EPX PEN; PERE
Human gene symbol	EPX
Entrez gene ID	8288
SwissProt	P11678
Unigene	279259
Immunogen	Human eosinophils from a patient with hypereosinophilic syndrome
Antibody target cellular localization	Vesicular
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	MCF-7 cells. Tonsil
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	Immunology
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	Eosinophils

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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