## Perforin-1 Monoclonal Mouse Antibody (PRF1/2470)



## **Product Description**

Perforin is a pore-forming protein that leads to osmotic lysis of the target cells and subsequently enables granzymes to enter the target cells and activate apoptosis. Perforin has structural and functional similarities to complement component 9 (C9). Like C9, this protein creates transmembrane tubules and is capable of lysing non-specifically a variety of target cells. It is one of the main cytolytic proteins of cytolytic granules, and is known to be a key effector molecule for T-cell- and natural killer-cell-mediated cytolysis. Defects in this gene cause familial hemophagocytic lymphohisticocytosis type 2 (HPLH2), a rare and lethal autosomal recessive disorder of early childhood. The expression of perforin is reportedly upregulated in activated CD8 T-cells, natural killer cells and some CD4 T-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 <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2470, Anti-Perforin-1 (PRF1/2470)

## Product attributes

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Product attributes				
Antibody number	#2470			
Antibody reactivity (target)	Perforin-1			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	PRF1/2470			
Isotype	IgG2c, kappa			
Molecular weight	75 kDa			
Synonyms	Cytolysin; FLH2; HPLH2; Lymphocyte pore-forming protein; PRF1 (pore forming protein 1); Perforin-1; PFP; PGFL; PIGF; PIGF-2; PLGF			
Human gene symbol	PRF1			
Entrez gene ID	5551			
SwissProt	P14222			
Unigene	2200			
Immunogen	Recombinant human Perforin-1 protein fragment (around aa 413-552) (exact sequence is proprietary)			
Verified antibody applications	IHC (FFPE) (verified)			
Antibody target cellular localization	Secreted (extracellular)			
Species reactivity	Human			
Positive control	HDLM-2 cells. Human spleen tissue (IHC).			
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/0.05% azide, Purified, 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.			
Cell/tissue expression	NK cells, T-cells			

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,	N/A	N/A	N/A	

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