

## Perforin-1 Monoclonal Mouse Antibody (PRF1/2468)



## **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 lymphohistiocytosis 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 <u>CF® Dye Brochure</u> 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 <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 2468, Anti-Perforin-1 (PRF1/2468)

Call us : <u>800-304-5</u> Product attributes	357 Email: techsupport@biotium.com				
Antibody number	#2468				
Antibody reactivity (target)	Perforin-1				
Antibody type	Primary				
Host species	Mouse				
Clonality	Monoclonal				
Clone	PRF1/2468				
Isotype	IgG2b, 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)				
Antibody target cellular localization	Secreted (extracellular)				
Species reactivity	Human				
Antibody application notes	For coating for ELISA, order Ab without BSA, Higher concentration may be required for direct detection using primar 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	HDLM-2 Cells. Spleen				
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				
Validated in protein array	Monospecific				
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.				

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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