

# 36-3001: Anti-Perforin-1 (Pore Forming Protein) (Apoptosis Marker) Monoclonal Antibody(Clone: PRF1/2470)

Clonality :	Monoclonal
Clone Name :	PRF1/2470
Application :	IHC
Reactivity :	Human
Gene :	PRF1
Gene ID :	5551
Uniprot ID :	P14222
Alternative Name :	Cytolysin; FLH2; HPLH2; Lymphocyte pore-forming protein; PRF1 (pore forming protein 1); Perforin-1; PFP; PGFL; PIGF; PIGF-2; PLGF
lsotype :	Mouse IgG2c, kappa
Immunogen Information	Recombinant human Perforin-1 protein fragment (around aa 413-552) (exact sequence is proprietary)

## 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.

#### **Product Info**

Amount :	20 μg / 100 μg
Content :	200 $\mu$ g/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

## **Application Note**

Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 & degC followed by cooling at RT for 20 minutes),

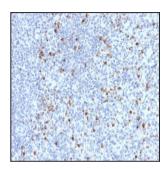


Fig. 1: Formalin-fixed, paraffin-embedded human Spleen stained with Perforin-1 Monospecific Mouse Monoclonal Antibody (PRF1/2470).

For Research Use Only. Not for use in diagnostic/therapeutics procedures.

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kDa		NR	R	
250				
150 —		-		
100 —				
75 —	-			2ug loading NR=Non-
50	-		-	reduced
37 —				R=reduced
25	_			
20 —				
15				
10				

Fig. 2: SDS-PAGE Analysis Purified Perforin-1 Monospecific Mouse Monoclonal Antibody (PRF1/2470). Confirmation of Integrity and Purity of Antibody.

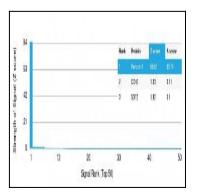


Fig. 3: Analysis of Protein Array containing more than 19,000 full-length human proteins using Perforin-1 Monospecific Mouse Monoclonal Antibody (PRF1/2470). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.