

**Anti-Perforin 1 Antibody**  
**Mouse monoclonal antibody to Perforin 1**  
**Catalog # AP61623****Specification**

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**Anti-Perforin 1 Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">P14222</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	61377

**Anti-Perforin 1 Antibody - Additional Information****Gene ID** 5551**Other Names**

PFP; Perforin-1; P1; Cytolysin; Lymphocyte pore-forming protein; PFP

**Target/Specificity**

Recognizes endogenous levels of Perforin 1 protein.

**Dilution**

IHC~~1:100~500

**Format**

Mouse IgG. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C.Stable for 12 months from date of receipt

**Anti-Perforin 1 Antibody - Protein Information****Name** PRF1**Synonyms** PFP**Function**

Pore-forming protein that plays a key role in granzyme- mediated programmed cell death, and in defense against virus-infected or neoplastic cells (PubMed:<a href="http://www.uniprot.org/citations/20889983" target="\_blank">20889983</a>, PubMed:<a href="http://www.uniprot.org/citations/21037563" target="\_blank">21037563</a>, PubMed:<a href="http://www.uniprot.org/citations/24558045" target="\_blank">24558045</a>, PubMed:<a href="http://www.uniprot.org/citations/9058810" target="\_blank">9058810</a>, PubMed:<a href="http://www.uniprot.org/citations/9164947" target="\_blank">9164947</a>). Plays an important role in killing other cells that are recognized as non-self by the immune system, e.g. in transplant rejection or some forms of autoimmune disease (PubMed:<a

href="http://www.uniprot.org/citations/9058810" target="\_blank">9058810</a>). Can insert into the membrane of target cells in its calcium-bound form, oligomerize and form large pores (PubMed:<a href="http://www.uniprot.org/citations/20889983" target="\_blank">20889983</a>, PubMed:<a href="http://www.uniprot.org/citations/21037563" target="\_blank">21037563</a>). Promotes cytolysis and apoptosis of target cells by mediating the passage and uptake of cytotoxic granzymes (PubMed:<a href="http://www.uniprot.org/citations/20038786" target="\_blank">20038786</a>, PubMed:<a href="http://www.uniprot.org/citations/20225066" target="\_blank">20225066</a>, PubMed:<a href="http://www.uniprot.org/citations/24558045" target="\_blank">24558045</a>, PubMed:<a href="http://www.uniprot.org/citations/32299851" target="\_blank">32299851</a>). Facilitates the delivery of cationic cargo protein, while anionic or neutral proteins are not delivered efficiently (PubMed:<a href="http://www.uniprot.org/citations/24558045" target="\_blank">24558045</a>). Perforin pores allow the release of mature caspase-7 (CASP7) into the extracellular milieu (By similarity).

### Cellular Location

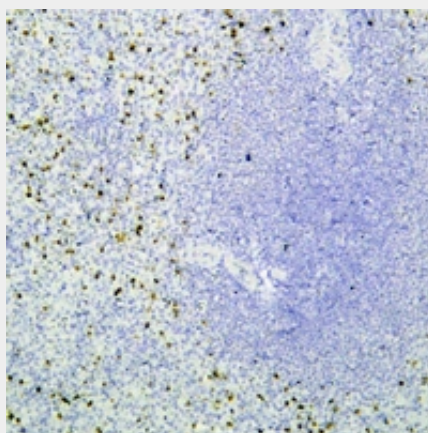
Cytolytic granule. Secreted. Cell membrane; Multi-pass membrane protein. Endosome lumen. Note=Stored in cytolytic granules of cytolytic T-lymphocytes and secreted into the cleft between T- lymphocyte and target cell (PubMed:20038786). Inserts into the cell membrane of target cells and forms pores (PubMed:20889983). Membrane insertion and pore formation requires a major conformation change (PubMed:20889983). May be taken up via endocytosis involving clathrin-coated vesicles and accumulate in a first time in large early endosomes (PubMed:20038786).

### Anti-Perforin 1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-Perforin 1 Antibody - Images



Immunohistochemical analysis of Perforin 1 staining in human spleen formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room

temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

**Anti-Perforin 1 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within human Perforin 1. The exact sequence is proprietary.