

**Perforin Antibody (Clone 6G9)**  
**Mouse Monoclonal Antibody**  
**Catalog # ABV10153****Specification**

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**Perforin Antibody (Clone 6G9) - Product Information**

Application	IHC, IF, FC, IP
Primary Accession	<a href="#">P14222</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG2b
Calculated MW	61377

**Perforin Antibody (Clone 6G9) - Additional Information****Gene ID** 5551

Application & Usage	Immunoprecipitation (2-8 µg/ml), Flow cytometry (2-8 µg/ml), Immunohistochemistry (2-8 µg/ml for both frozen and paraffin sections), Immunocytochemistry (2-8 µg/ml),. However, the optimal conditions should be determined individually. Recognizes the 70 kDa perforin in human and primate.
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**Other Names**

Perforin-1, P1, Cytolysin, Lymphocyte pore-forming protein, PFP, PRF1, PFP

**Target/Specificity**

Perforin

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (1 mg/ml) in PBS containing 1 mg/ml BSA and 1.5 mM thimerosal and 50% glycerol.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions**

## Precautions

Perforin Antibody (Clone  $\delta$ G9) is for research use only and not for use in diagnostic or therapeutic procedures.

## Perforin Antibody (Clone $\delta$ G9) - 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/9058810" target="\_blank">9058810</a>, PubMed:<a href="http://www.uniprot.org/citations/9164947" target="\_blank">9164947</a>, PubMed:<a href="http://www.uniprot.org/citations/20889983" target="\_blank">20889983</a>, PubMed:<a href="http://www.uniprot.org/citations/24558045" target="\_blank">24558045</a>, PubMed:<a href="http://www.uniprot.org/citations/21037563" target="\_blank">21037563</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 neural 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).

## Perforin Antibody (Clone $\delta$ G9) - 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](#)

**Perforin Antibody (Clone  $\delta$ G9) - Images****Perforin Antibody (Clone  $\delta$ G9) - Background**

Human perforin (cytolysin) is believed to be one of the major effector molecules used by cytotoxic T cells and NK cells to mediate targeted cell lysis. Perforin expression is constitutive on NK cells, but increases in resting XD8+ cytotoxic cells upon activation.