10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Perforin Antibody (Clone δG9)

Mouse Monoclonal Antibody
Catalog # ABV10153

Specification

Perforin Antibody (Clone δG9) - Product Information

Application	**IHC, IF, FC, IP**
Primary Accession	P14222
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG2b**
Calculated MW	**61377**

Perforin Antibody (Clone δG9) - 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.**

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 δG9) is for research use only and not for use in diagnostic or therapeutic procedures.

Perforin Antibody (Clone δG9) - 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:9058810, PubMed:9164947, PubMed:20889983, PubMed:24558045, PubMed:21037563). 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:9058810). Can insert into the membrane of target cells in its calcium-bound form, oligomerize and form large pores (PubMed:20889983, PubMed:21037563). Promotes cytolysis and apoptosis of target cells by mediating the passage and uptake of cytotoxic granzymes (PubMed:20038786, PubMed:20225066, PubMed:24558045, PubMed:32299851). Facilitates the delivery of cationic cargo protein, while anionic or neural proteins are not delivered efficiently (PubMed:24558045). 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 δG9) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety

- Cell Culture

Perforin Antibody (Clone δG9) - Images

Perforin Antibody (Clone δG9) - 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.