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

Anti-Perforin 1 Antibody

Catalog # AP61623

Product Information

Application	IHC
Primary Accession	P14222
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	61377

Additional Information

Gene ID	5551
Other Names	PFP; Perforin-1; P1; Cytolysin; Lymphocyte pore-forming protein; PFP
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human Perforin 1. The exact sequence is proprietary.
Dilution	IHC~~1:100~500
Format	Mouse IgG. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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:20889983, PubMed:21037563, PubMed:24558045, PubMed:9058810, PubMed:9164947). 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).

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