

Anti-Perforin 1 Antibody

Mouse monoclonal antibody to Perforin 1 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 0.09% (W/V)

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: <u>20889983</u>, PubMed: <u>21037563</u>, PubMed: <u>24558045</u>,

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).

Background

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

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