

APC Mouse Anti-Human Perforin

Purified APC-conjugated Recombinant Mouse Monoclonal Antibody

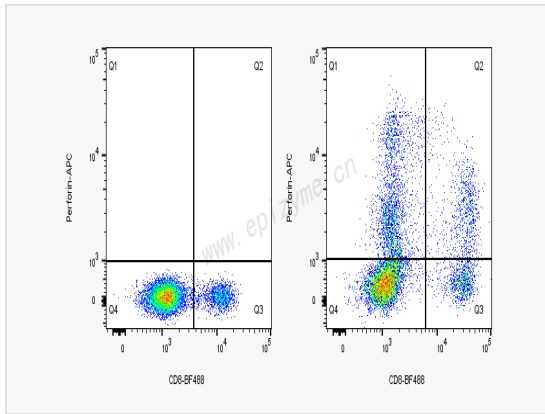
Catalog # F101715

Product Information

Application	FC
Recommended Usage	5 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood.
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone No.	55K74B83
Isotype	IgG2b, κ
Label	APC (Ex/Em: 651/660 nm)
Immunogen	Recombinant protein of human Perforin
Format	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA.
Storage	Shipped on wet ice. Store undiluted between 2°C and 8°C and protected from prolonged exposure to light. Do not freeze.
Precautions	APC Mouse Anti-Human Perforin [55K74B83] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	Cytolysin; FLH2; HPLH2; Lymphocyte pore-forming protein; P1; PERF_HUMAN; perforin 1 (pore forming protein); Perforin 1; Perforin-1; PFP; PGFL; PIGF; PIGF-2; PLGF; Pore forming protein; prf1; SHGC-10760.
Uniprot ID	P14222
Gene ID	5551
Background	This gene encodes a protein with structural similarities to complement component C9 that is important in immunity. This protein forms membrane pores that allow the release of granzymes and subsequent cytolysis of target cells. Whether pore formation occurs in the plasma membrane of target cells or in an endosomal membrane inside target cells is subject to debate. Mutations in this gene are associated with a variety of human disease including diabetes, multiple sclerosis, lymphomas, autoimmune lymphoproliferative syndrome (ALPS), aplastic anemia, and familial hemophagocytic lymphohistiocytosis type 2 (FHL2), a rare and lethal autosomal recessive disorder of early childhood. [provided by RefSeq, Aug 2017]
Cellular Location	Cytolytic granule. Secreted. Cell membraneMulti-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).
Tissue Location	Group enriched (Bone marrow, Lung, Lymphoid tissue)



Human peripheral blood lymphocytes were first stained for surface CD8 using BF488-conjugated antibody (F100306). Following surface staining, cells were fixed and permeabilized using fixation buffer and intracellular staining permeabilization wash buffer, respectively. Subsequently, intracellular staining was performed with either APC-conjugated anti-perforin antibody (F101715) (right panel) or CD8-BF488 (F100306) alone as a control (left panel).