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Perforin 1 Polyclonal Antibody

Catalog # AP73975

Product Information

Application	WB, IHC
Primary Accession	P14222
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61377

Additional Information

Gene ID	5551
Other Names	Perforin-1 (P1) (Cytolysin) (Lymphocyte pore-forming protein) (PFP)
Dilution	WB~~WB 1:500-2000, IHC 1:50-200, ELISA 1:10000-20000 IHC~~WB 1:500-2000, IHC 1:50-200, ELISA 1:10000-20000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

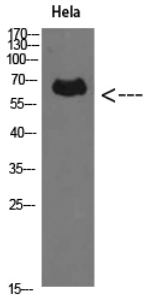
Name	PRF1
Synonyms	PFP
Function	Pore-forming protein that plays a key role in granzyme- mediated programmed cell death, and in defense against virus-infected or neoplastic cells (PubMed:20889983, PubMed:21037563, PubMed:24558045, PubMed:9058810, PubMed:9164947). Plays an important role in killing other 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).

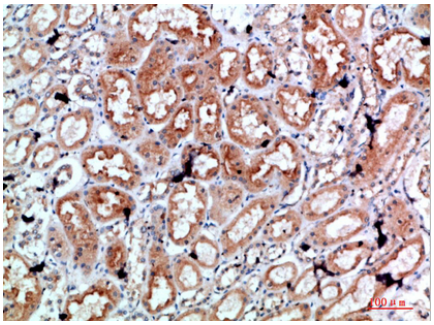
Background

Plays a key role in secretory granule-dependent cell death, and in defense against virus-infected or neoplastic cells. 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. Can insert into the membrane of target cells in its calcium-bound form, oligomerize and form large pores. Promotes cytolysis and apoptosis of target cells by facilitating the uptake of cytotoxic granzymes.

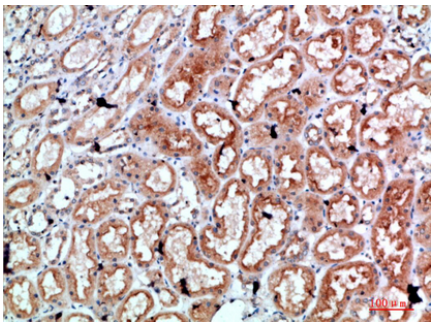
Images



Western Blot analysis of Hela cells using Perforin 1 Polyclonal Antibody diluted at 1:500. Secondary antibody was diluted at 1:20000

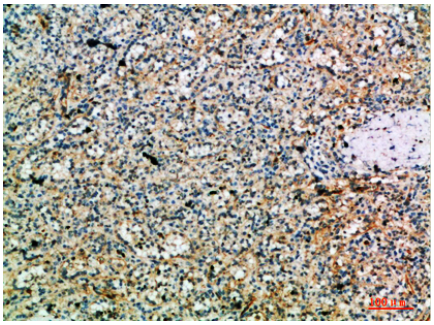


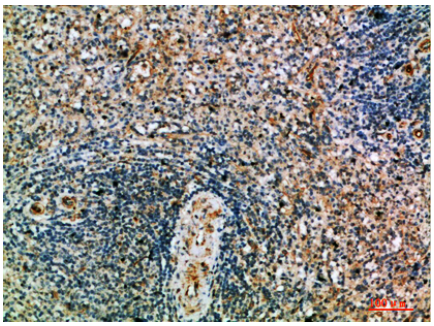
Immunohistochemical analysis of paraffin-embedded human-kidney, antibody was diluted at 1:200



Immunohistochemical analysis of paraffin-embedded human-kidney, antibody was diluted at 1:200

Immunohistochemical analysis of paraffin-embedded human-spleen, antibody was diluted at 1:200





Immunohistochemical analysis of paraffin-embedded human-spleen, antibody was diluted at 1:200