

## **Perforin 1 Polyclonal Antibody**

Catalog No: YT5792

**Reactivity:** Human; Rat; Mouse;

**Applications:** WB;IHC;ELISA

Target: Perforin

**Fields:** >>Apoptosis;>>Natural killer cell mediated cytotoxicity;>>Type I diabetes

mellitus;>>Autoimmune thyroid disease;>>Allograft rejection;>>Graft-versus-host

disease;>>Viral myocarditis

Gene Name: PRF1

Protein Name: Perforin 1

Human Gene Id: 5551

**Human Swiss Prot** 

No:

Mouse Gene Id: 18646

**Mouse Swiss Prot** 

No:

Immunogen: The antiserum was produced against synthesized peptide derived from the C-

terminal region of human PRF1. AA range:451-500

**Specificity:** Perforin 1 Polyclonal Antibody detects endogenous levels of Perforin 1

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

P14222

P10820

**Dilution:** WB 1:500-2000, IHC 1:50-200, ELISA 1:10000-20000

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 61kD

Cell Pathway: Natural killer cell mediated cytotoxicity; Type I diabetes mellitus; Autoimmune

thyroid disease; Allograft rejection; Graft-versus-host disease; Viral myocarditis;

**Background:** The protein encoded by this gene has structural and functional similarities to

complement component 9 (C9). Like C9, this protein creates transmembrane tubules and is capable of lysing non-specifically a variety of target cells. This protein is one of the main cytolytic proteins of cytolytic granules, and it is known to be a key effector molecule for T-cell- and natural killer-cell-mediated cytolysis. Defects in this gene cause familial hemophagocytic lymphohistiocytosis type 2 (HPLH2), a rare and lethal autosomal recessive disorder of early childhood. Alternative splicing results in multiple transcript variants encoding the same

protein. [provided by RefSeq, Jul 2008],

**Function:** disease:Defects in PRF1 are the cause of familial hemophagocytic

lymphohistiocytosis type 2 (FHL2) [MIM:603553]; also known as HPLH2. Familial hemophagocytic lymphohistiocytosis (FHL) is a genetically heterogeneous, rare autosomal recessive disorder. It is characterized by immune dysregulation with hypercytokinemia and defective natural killer cell function. The clinical features of the disease include fever, hepatosplenomegaly, cytopenia, hypertriglyceridemia, hypofibrinogenemia, and neurological abnormalities ranging from irritability and hypotonia to seizures, cranial nerve deficits, and ataxia. Hemophagocytosis is a prominent feature of the disease, and a non-malignant infiltration of macrophages and activated T lymphocytes in lymph nodes, spleen, and other organs is also

found., function: In the presence of calcium, perforin polymerizes into

transmembrane tubules and is capable of lys

Subcellular Location:

Cytolytic granule . Secreted. Cell membrane ; Multi-pass membrane protein . Endosome lumen . Stored in cytolytic granules of cytolytic T-lymphocytes and secreted into the cleft between T-lymphocyte and target cell (PubMed:20038786).

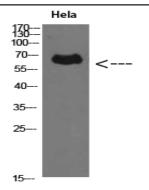
Inserts into the cell membrane of target cells and forms pores

(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

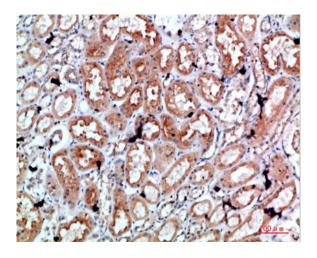
endosomes (PubMed:20038786). .

**Expression:** Liver, Natural killer cell, Spleen,

## **Products Images**



Western Blot analysis of Hela cells using Perforin 1 Polyclonal Antibody diluted at 1:500. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



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