

Product datasheet

Human Perforin ELISA Set (without plates) ab83709

[1 Image](#)

Overview

Product name	Human Perforin ELISA Set (without plates)
Sample type	Cell culture supernatant, Other biological fluids
Assay type	Sandwich (quantitative)
Sensitivity	< 40 pg/ml
Range	62.5 pg/ml - 2000 pg/ml
Assay duration	Multiple steps standard assay
Species reactivity	Reacts with: Human
Product overview	Abcam's Perforin Human <i>in vitro</i> ELISA Set is designed for the quantitative measurement of Perforin in cell culture supernatants and buffered solutions.

The Perforin ELISA Set includes both the capture and the detection antibodies as well as Horse-Radish peroxidase conjugated Streptavidin (HRP-Strep) and TMB which are the reagents used in the colour development step. This ELISA set is intended to measure Perforin in cell -culture supernatants, as well as in serum samples*. The enclosed procedures provide general guidelines for ELISA preparation. This procedure may need some optimization depending on the plastic, matrix, standard range.

*Special note for serum & plasma quantification: high and non linear detection level is found in human serum and plasma samples. The high signal appears not dependant to the antibody pairs but probably to the matrix and/ or perforin interaction with other molecules. Consequently serum and plasma quantification is under the scientist responsibility and specific investigations. Remark: no detection signal was found in fetal calf serum, rat, mouse and horse serum

Sensitivity: < 40 pg/ml

Tested applications	Suitable for: Sandwich ELISA
Platform	Reagents

Properties

Storage instructions	Store at +4°C. Please refer to protocols.
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Components	Identifier	5 x 96 tests	10 x 96 tests
Detection biotinylated anti-Perforin antibody		1 x 0.55ml	2 x 0.55ml
Perforin Capture Antibody		1 x 0.5ml	2 x 0.5ml
PRF1 Standard (Lyophilized)	Yellow	5 vials	10 vials
Ready-to-use TMB		2 vials	4 vials
Streptavidin-HRP		1 vial	2 vials

Relevance

Perforin is one of the major cytolytic proteins of cytolytic granules. One of the main pathways of lymphocyte mediated cytotoxicity entails the secretion onto target membranes of cytotoxic granules contained in cytotoxic effector lymphocytes of T cell or NK cell type. Perforin is a cytotoxic mediator and is stored in and released by cytoplasmic granules. Perforin is involved in the killing mediated by cytotoxic lymphocytes, which represents an important mechanism in the immune defense against tumors and virus infections. Human perforin is a 555 amino acid protein with a 21 amino acid signal peptide. It has a molecular weight of 70 to 75 kDa. Perforin is a pore forming protein with a mechanism of transmembrane channel formation similar to C9 and homology between perforin and C9 has been demonstrated at their respective functionally conserved regions. Studies show that perforin is expressed only in killer cell lines and not in helper T lymphocytes or other tumor cells tested.

Cellular localization

Cell Membrane and Cytoplasmic

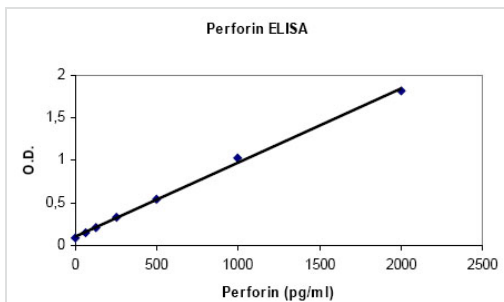
Applications

Our [Abpromise guarantee](#) covers the use of **ab83709** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration.

Images



Perforin Standard curve ranging from 62.5 to 2000 pg/mL

Human Perforin ELISA Set (ab83709)

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