

Human Granzyme B ELISPOT Set ab46581

Overview

Product name	Human Granzyme B ELISPOT Set
Sample type	Suspension cells
Assay type	Sandwich (qualitative)
Assay duration	Multiple steps standard assay
Species reactivity	Reacts with: Human
Product overview	<p>The Human Granzyme B ELISPOT Set is designed to enumerate Granzyme B producing cells in a single cell suspension. This method has the advantage of requiring a minimum of in-vitro manipulations allowing Granzyme B production analysis as close as possible to in-vivo conditions in a highly specific way. This technique is designed to determine the frequency of Granzyme B producing cells under a given stimulation, and the follow-up of such frequency during a treatment and/or a pathological state. Elispot assay constitutes an ideal tool in the TH1 / TH2 response, vaccine development, viral infection monitoring and treatment, cancerology, infectious diseases, autoimmune diseases and transplantation.</p> <p>This ELISPOT assay is based on sandwich immuno-enzyme technology. Cell secreted cytokines or soluble molecules are captured by coated antibodies avoiding diffusion in supernatant, protease degradation or binding on soluble membrane receptors. After cell removal, the captured cytokines are revealed by tracer antibodies and appropriate conjugates.</p> <p>Principal:</p> <p>After cell stimulation, locally produced cytokines are captured by a specific monoclonal antibody. After cell lysis, trapped cytokine molecules are revealed by a secondary biotinylated detection antibody, which is in turn recognised by streptavidin conjugated to alkaline phosphatase. PVDF-bottomed-well plates are then incubated with BCIP/NBT substrate. Colored "purple" spots indicate cytokine production by individual cells.</p> <p>Recognizes natural human Granzyme B.</p>
Tested applications	Suitable for: ELISpot
Platform	Reagents

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

Components	5 x 96 tests	10 x 96 tests	15 x 96 tests	20 x 96 tests
Bovine Serum Albumin	1 x 1g	2 x 1g	3 x 1g	4 x 1g
Dry Skimmed milk	1 x 1g	2 x 1g	3 x 1g	4 x 1g
Biotinylated detection antibody	1 vial	2 vials	3 vials	4 vials
Granzyme B Capture Antibody	1 x 500µl	2 x 500µl	3 x 500µl	4 x 500µl
Ready-to-use BCIP/NBT substrate buffer	1 x 50ml	2 x 50ml	3 x 50ml	4 x 50ml
Streptavidin - Alkaline Phosphatase conjugated	1 x 50µl	2 x 50µl	3 x 50µl	4 x 50µl

Relevance

Cytolytic T lymphocytes and natural killer cells share the remarkable ability to recognize, bind, and lyse specific target cells. They are thought to protect their host by lysing cells bearing on their surface 'nonself' antigens, usually peptides or proteins resulting from infection by intracellular pathogens. Granzyme B is crucial for the rapid induction of target cell apoptosis by CTL in cell-mediated immune response.

Cellular localization

Cytoplasmic granule. Cytoplasmic granules of cytolytic T-lymphocytes and natural killer cells

Applications**The Abpromise guarantee**

Our **Abpromise guarantee** covers the use of ab46581 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
ELISpot		Use at an assay dependent dilution.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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