abcam

Product datasheet

Human IL-17A + Interferon gamma FLUOROSPOT Set ab105253

1 Image

Overview

Product name Human IL-17A + Interferon gamma FLUOROSPOT Set

Detection method Fluorescent

Sample type Suspension cells

Assay type Sandwich (qualitative)

Assay duration Multiple steps standard assay

Product overview

ab105253 is designed to enumerate cytokine producing cells in a single cell suspension. This method has the advantage of requiring a minimum of in vitro manipulations allowing cytokine production analysis as close as possible to in vivo conditions in a highly specific way. This technique is designed to determine the frequency of cytokine producing cells under a given stimulation, and the follow-up of such frequency during a treatment and/or a pathological state. Fluorospot assay constitutes an ideal tool in the TH1 / TH2 response, vaccine development, viral infection monitoring and treatment, oncology, infectious diseases, autoimmune diseases and transplantation.

This Kit is based on sandwich immune-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.

After cell stimulation, locally produced cytokines are captured by Interferon gamma and IL-17A specific monoclonal antibodies. After cell lysis, trapped cytokine molecules are revealed by a secondary anti- Interferon gamma FITC conjugated antibody and a biotinylated anti- IL-17A antibody. Those are in turn recognised by anti-FITC green fluorescent dye and streptavidin-phycoerythrin conjugates. PVDF-bottomed-well plates are then read under a UV light beam. Green fluorescent spots indicate Interferon gamma production while IL-17A is revealed by red spots. Yellow spots will indicate dual cytokine producing cells.

See Figure 1 for visual scheme.

ab105253 provides enough reagents for 5 plates. Plates are provided, non sterile.

Store kit reagents between 4°C, except Plates and Fluorescence buffer which should be stored at

Notes

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room temperature.

If not used within a short period of time, reconstituted Detection Antibodies should be aliquoted and stored at -20°C. In these conditions the reagent is stable for at least one year.

For optimal performance prepare Anti FITC-green fluorescence conjugate / Steptavidin-phycoerythrin immediately prior to use.

Tested applications

Suitable for: FluroSpot

Platform

Microplate

Properties

Storage instructions

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

Components	5 x 96 tests
96 PVDF-bottomed-well plates.	5 units
Anti-FITC antibody green fluorescence conjugate.	1 vial
Biotinylated detection antibody for IL-17A (resuspend in 0.55mL)	1 vial
Bovine Serum Albumin	1 x 1g
Capture antibody for IL-17A	1 x 0.5ml
Human IFN Gamma Capture antibody	1 x 0.5ml
FITC conjugated detection antibody for IFNg (resuspend in 0.55mL)	1 vial
Streptavidin-phycoerythrin conjugate.	1 vial

Relevance

Interferon gamma: Produced by lymphocytes activated by specific antigens or mitogens. IFN-gamma, in addition to having antiviral activity, has important immunoregulatory functions. It is a potent activator of macrophages, it has antiproliferative effects on transformed cells and it can potentiate the antiviral and antitumor effects of the type I interferons. IL-17A: Induces stromal cells to produce proinflammatory and hematopoietic cytokines. Enhances the surface expression of the intracellular adhesion molecule-1 (ICAM-1) in fibroblasts.

Cellular localization

Secreted

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab105253 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
FluroSpot		Use at an assay dependent dilution.

Images

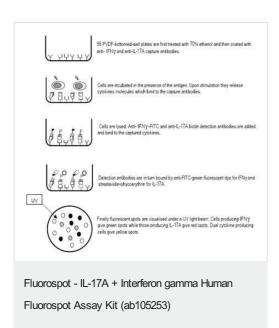


Figure 1: Procedure Summary

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