

### Human IL-10 + IL-2 FLUOROSPOT Set ab48460

#### Overview

---

**Product name** Human IL-10 + IL-2 FLUOROSPOT Set

**Detection method** Fluorescent

**Sample type** Suspension cells

**Assay type** Sandwich (qualitative)

**Assay duration** Multiple steps standard assay

**Species reactivity** **Reacts with:** Human

**Product overview** The ELISPOT assay 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. Elispot 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 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.

#### Principle of Method

After cell stimulation, locally produced cytokines are captured by IL-10 and IL-2 specific monoclonal antibodies. After cell lysis, trapped cytokine molecules are revealed by a secondary anti- IL-10 FITC conjugated antibody and a biotinylated anti-IL-2 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 IL-10 production while IL-2 is revealed by red spots. Yellow spots will indicate dual cytokine producing cells.

**Tested applications** **Suitable for:** FluroSpot

**Platform** Microplate

#### Properties

**Storage instructions** Store at +4°C. Please refer to protocols.

Components	5 x 96 tests	10 x 96 tests
96 PVDF-bottomed-well plates.	5 units	10 units
Anti-FITC antibody green fluorescence conjugate.	1 vial	2 vials
Biotinylated detection antibody for IL-2 (resuspend in 0.55mL).	1 vial	2 vials
Bovine Serum Albumin	1 x 1g	2 x 1g
Human IL-10 Capture antibody	1 x 500µl	2 x 500µl
Capture antibody for IL-2	1 x 500µl	2 x 500µl
FITC conjugated detection antibody for IL-10(resuspend in 0.55mL).	1 vial	2 vials
Streptavidin-phycoerythrin conjugate.	1 vial	2 vials

**Relevance** IL-2 is produced by T-cells in response to antigenic or mitogenic stimulation, this protein is required for T-cell proliferation and other activities crucial to regulation of the immune response. Can stimulate B-cells, monocytes, lymphokine-activated killer cells, natural killer cells, and glioma cells. IL-10 inhibits the synthesis of a number of cytokines, including IFN-gamma, IL-2, IL-3, TNF and GM-CSF produced by activated macrophages and by helper T-cells.

**Cellular localization** Secreted

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab48460 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
<b>FluroSpot</b>		Use at an assay dependent dilution.

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

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors