

Product datasheet

Cytokine Array - Human Cytokine Antibody Array (Membrane, 23 Targets) ab133996

[7 References](#) [3 Images](#)

Overview

Product name	Cytokine Array - Human Cytokine Antibody Array (Membrane, 23 Targets)
Sample type	Cell culture supernatant, Saliva, Milk, Urine, Serum, Plasma, Cell culture extracts, Other biological fluids, Whole Blood, Tissue Extracts, Cell Lysate, Cell culture media
Assay type	Semi-quantitative
Species reactivity	Reacts with: Human
Product overview	ab133996 is for simultaneous detection of 23 Human Cytokines. Suitable for all sample types.

Targets: G-CSF, GM-CSF, GRO (alpha, beta & gamma), GRO-alpha, IL-1alpha, IL-2, IL-3, IL-5, IL-6, IL-7, IL-8, IL-10, IL-13, IL-15, IFN-gamma, MCP-1, MCP-2, MCP-3, MIG, RANTES, TGF-beta1, TNF-alpha, TNF-beta

Cytokine arrays are an antibody-pair-based assay, analogous to ELISA, but using a membrane as a substrate rather than a plate. Capture antibodies are supplied arrayed/spotted on a membrane with each pair of spots representing a different analyte. Sample is added (0.2-1ml of 1 sample to each membrane), and then paired biotinylated detector antibodies and streptavidin HRP. The cytokine array is analyzed using the same methods as a chemiluminescent western blot. Comparison between samples can be by eye or using densitometry software for a semi-quantitative comparison.

[Learn more about membrane antibody arrays](#)

Notes

If you are interested in this cytokine array, arrays [ab133997](#), [ab169804](#), [ab134003](#), [ab133998](#) and [ab169817](#) may also be of interest.

A table listing all of our mouse membrane antibody cytokine arrays and other arrays and the analytes they measure is available [here](#).

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

Tested applications

Suitable for: Multiplex Protein Detection

Properties

Storage instructions

Store at -20°C. Please refer to protocols.

Components	1 x 4 Membranes	1 x 8 Membranes
1,000X HRP-Conjugated Streptavidin	1 x 50µl	1 x 50µl
1X Blocking Buffer	1 x 25ml	2 x 25ml
20X Wash Buffer I	1 x 10ml	1 x 20ml
20X Wash Buffer II	1 x 10ml	1 x 20ml
2X Cell Lysis Buffer	1 x 10ml	1 x 16ml
8-Well Incubation Tray (with Lid)	1 unit	1 unit
Biotin-Conjugated Anti-Cytokines	2 vials	4 vials
Cytokine Antibody Array Membranes	4 units	8 units
Detection Buffer C	1 x 1.5ml	1 x 2.5ml
Detection Buffer D	1 x 1.5ml	1 x 2.5ml

Applications

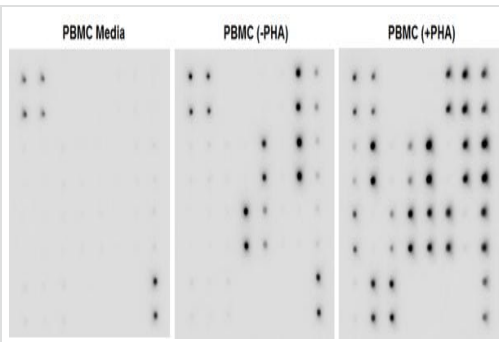
The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab133996 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
Multiplex Protein Detection		Use at an assay dependent concentration.

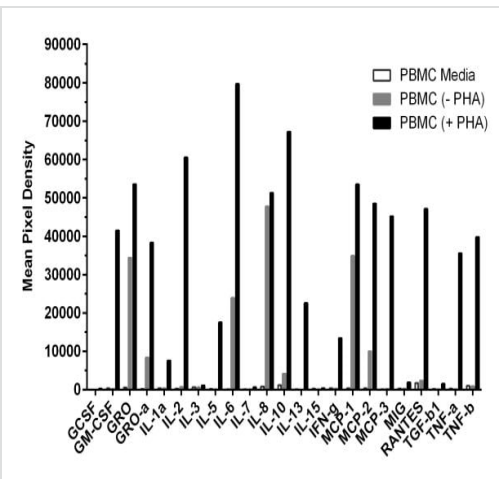
Images



Multiplex Protein Detection - Human Cytokine
Antibody Array - Membrane (23 Targets) (ab133996)

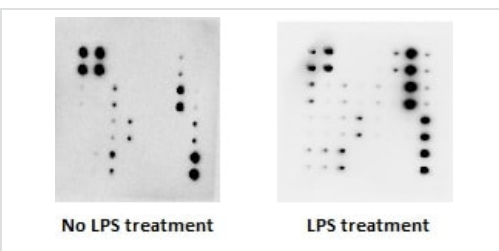
Human peripheral blood cells (1×10^6 cells/mL) were cultured in RPMI media supplemented with 10% fetal calf serum, 100 U/mL penicillin, and 100 mg/mL streptomycin sulfate.

Cells were cultured unstimulated or stimulated with 10 μ g/mL PHA. Conditioned media was harvested after 48 hours, aliquoted and assayed using ab133996. Media alone was used as a negative control.



Quantification of Human Cytokine Antibody Array

Cells were cultured unstimulated or stimulated with 10 μ g/mL PHA. Conditioned media was harvested after 48 hours, aliquoted and assayed using ab133996. Media alone was used as a negative control. Samples were incubated on the human cytokin antibody arrays and results were quantified using the ULTRAQuant software.



Human Cytokine Antibody Array - Membrane (23 Targets) (ab133996)

This image is courtesy of an anonymous Abreview.

Abreview rating 4/5 stars. Review from Abcam user community. Verified customer. Submitted Oct 2 2014.

The human cytokine antibody array containing 23 target proteins was used to determine the effect of lipopolysaccharide (LPS) on the induction of cytokine production in macrophages. One million macrophage cells were plated in two sets and used in the study, one set was treated with PBS alone while the other set is treated with LPS at 1 μ g/mL for 24 h. After 24 h of LPS treatment, both sets of macrophages were harvested using the provided cell lysis buffer and the cells were mechanically disrupted using a 20-gauge needle. Disrupted cell lysates were centrifuged and the supernatant was collected. The protein concentration of the supernatant was determined and 200 μ g of proteins diluted in the blocking buffer was applied into previously blocked membranes and stored overnight at 4 $^{\circ}$ C. The remainder of the experiment was performed

using the manufacturer's instructions where all remaining incubations were performed at room temperature for 2 h. After incubation and washing steps, the proteins were detected using the provided detection reagents and photographed in a blot imaging system. Membranes were exposed for 15 s.

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