abcam

Product datasheet

Cytokine Array - Human Cytokine Antibody Array (Membrane, 60 targets) ab169817

2 References 2 Images

Overview

Product name Cytokine Array - Human Cytokine Antibody Array (Membrane, 60 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 ab169817 is for the simultaneous detection of 60 Human Cytokines. Suitable for all sample types.

Targets: Angiogenin, BDNF, BLC, BMP-4, BMP-6, CK beta 8-1, CNTF, EGF, Eotaxin-1, Eotaxin-2, Eotaxin-3, FGF-6, FGF-7, Flt-3 Ligand, Fractalkine, GCP-2, GDNF, GM-CSF, I-309, IFN-gamma, IGFBP-1, IGFBP-2, IGFBP-4, IGF-1, IL-10, IL-13, IL-15, IL-16, IL-1 alpha, IL-1 beta, IL-1 ra, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, Leptin, Light, MCP-1, MCP-2, MCP-3, MCP-4, M-CSF, MDC, MIG, MIP-1 delta, MIP-3 alpha, NAP-2, NT-3, PARC, PDGF-BB, RANTES, SCF, SDF-1, TARC, TGF beta 1, TGF beta 3, 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

If you are interested in this cytokine array, arrays <u>ab133997</u> and <u>ab133998</u> may also be of interest.

A table listing all of our human membrane antibody cytokine arrays and other arrays and the analytes they measure is available <u>here</u>.

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

Notes

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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 x 2 Membranes
1,000X HRP-Conjugated Streptavidin	1 x 50µl	1 x 50µl	1 x 50µl
1X Blocking Buffer	1 x 25ml	2 x 25ml	1 x 25ml
20X Wash Buffer I	1 x 10ml	1 x 20ml	1 x 10ml
20X Wash Buffer II	1 x 10ml	1 x 20ml	1 x 10ml
2X Cell Lysis Buffer	1 x 10ml	1 x 16ml	1 x 10ml
8-Well Incubation Tray (with Lid)	1 unit	1 unit	1 unit
Biotinylated Antibody Cocktail (C6)	2 vials	4 vials	2 vials
Detection Buffer C	1 x 1.5ml	1 x 2.5ml	1 x 1.5ml
Detection Buffer D	1 x 1.5ml	1 x 2.5ml	1 x 1.5ml
Human Cytokine Antibody Array Membranes (C6)	4 units	8 units	2 units

Applications

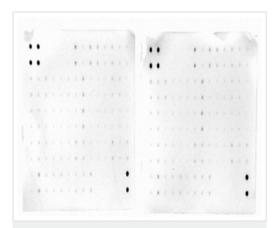
The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab169817 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 Array (ab169817)

This image is courtesy of an Abreview submitted by Nicole Blanchette.

Left image: Conditioned media from MCF-7 cells cultured in 2D; right image: Conditioned media from MCF-7 cells cultured in 3D"

The array was used to examine the potential differences in cytokine profile expression in 2D and 3D culture breast cancer cells (MCF-7), which may account for the significant upregulation of hepcidin (an iron export regulatory protein) observed in 3D culture.

Experiments were performed according to the manufacturer's instructions for the array, using cell lysate and conditioned media. Samples and biotin-conjugated anti-cytokines were incubated overnight at 4°C. Since many cytokines were detected at low levels when imaged, a comparison between 2D and 3D culture was not conclusive. Conditioned media and cell lysates yielded similar results."

Rating: 4/5. Product is recommended to anyone seeking information on production of a broad range of cytokines. Product is very easy to use.

Verified user: Nicole Blanchette, Graduate Assistant, Molecular Biology & Biophysics, UConnHealth, Farmington, CT, USA.

Conditioned Media from iPSC-derived Media only control
Astrocytes (15s exposure) (15s exposure)

Ab169817 Human Cytokine Antibody Array

Multiplex Protein Detection - Human Cytokine Array

- Membrane (60 targets) (ab169817)

This image is courtesy of an anonymous Abreview.

Left image: Conditioned media from iPSC-derived astrocytes; right image: Media only control.

Samples were incubated overnight at 4C as recommended and included the large volume wash. Images were captured using CCD camera for the exposure times indicated on the image.

Rating 5/5. Simple, sensitive and accurate method to detect multiple cytokines and growth factors from a single sample. The membranes were also consistent across the batch which allowed me to test several samples in parallel. Highly recommended.

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

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