Cytokine Array – Human Cytokine Antibody Array (Membrane, 42 Targets) ab133997

Overview

Product name: Cytokine Array – Human Cytokine Antibody Array (Membrane, 42 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: ab133997 is a cytokine array to be used for the simultaneous detection of 42 Human cytokines. It is suitable for all sample types.

Targets: ENA-78, GCSF, GM-CSF, GRO, GRO-alpha, I-309, IL-1alpha, IL-1beta, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-10, IL-12 p40/p70, IL-13, IL-15, IFN-gamma, MCP-1, MCP-2, MCP-3, MCSF, MDC, MG, MIP-1delta, RANTES, SCF, SDF-1, TARC, TGF-beta1, TNF-alpha, TNF-betabeta, EGF, IGF-I, Angiogenin, Oncostatin M, Thrombopoietin, VEGF-A, PDGF BB, Leptin

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 cytokine arrays and other membrane antibody arrays

Notes: If you are interested in this cytokine array, cytokine array ab133998, ab133996, ab169817, ab134003, ab134000, ab169804 and ab169805 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 here.

Tested applications: Suitable for: Multiplex Protein Detection

Properties
Storage instructions
Store at -20°C. Please refer to protocols.

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

Applications

Our Abpromise guarantee covers the use of ab133997 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiplex Protein Detection</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
</tr>
</tbody>
</table>

Images

Human peripheral blood cells (1x10⁶ 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 mg/mL PHA. Conditioned media was harvested after 48 hours, aliquoted and assayed using ab133997. Media alone was used as a negative control.
The antibody array was used to determine the change in expression of cytokines related to cell proliferation.

One million Human breast cancer cells (MCF7) were cultured in a 10mm dish for 48 hours (in 8ml of RPMI-1640 medium) and were then treated with 5 mM Compound X (not disclosed) for 48 hours. The Abcam protocol was followed for the rest of the procedure. 1 mL of supernatant of culture medium was used for sample incubation (4°C overnight).

Rating: 4.5/5

Cells were cultured unstimulated or stimulated with 10 mg/mL PHA. Conditioned media was harvested after 48 hours, aliquoted and assayed using ab133997. Media alone was used as a negative control. Mean pixel density was quantified using CCD camera software analysis.

Human serum from a pooled donor (n=50) sample was diluted to 50% and assayed using ab133997.
Human serum from a pooled donor \((n=50)\) sample was diluted to 50% and assayed using ab133997. Mean pixel density was quantified using CCD camera software analysis.

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

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