

## Product datasheet

# Human Growth Factor Antibody Array - Membrane (41 Targets) ab134002

[21 References](#) [6 Images](#)

### Overview

<b>Product name</b>	Human Growth Factor Antibody Array - Membrane (41 Targets)
<b>Sample type</b>	Cell culture supernatant, Saliva, Milk, Urine, Serum, Plasma, Cell culture extracts, Other biological fluids, Whole Blood, Tissue Extracts, Cell Lysate, Cell culture media
<b>Assay type</b>	Semi-quantitative
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Product overview</b>	ab134002 is for simultaneous detection of 41 Human Growth Factors. Suitable for all sample types.

**Targets:** Amphiregulin, bFGF, EGF, EGF R, FGF-4, FGF-6, FGF-7, GCSF, GDNF, GM-CSF, HB-EGF, HGF, IGFBP-1, IGFBP-2, IGFBP-3, IGFBP-4, IGFBP-6, IGF-I, IGF-I SR, IGF-II, M-CSF, M-CSF R, beta-NGF, NT-3, NT-4, PDGF Ra, PDGF R $\beta$ , PDGF-AA, PDGF-AB, PDGF-BB, PLGF, SCF, SCF R, TGF-alpha, TGF-beta, TGF-beta2, TGF-beta3, VEGF-A, VEGF R2, VEGF R3, VEGF-D

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, array [ab133998](#) 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](#).**

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.

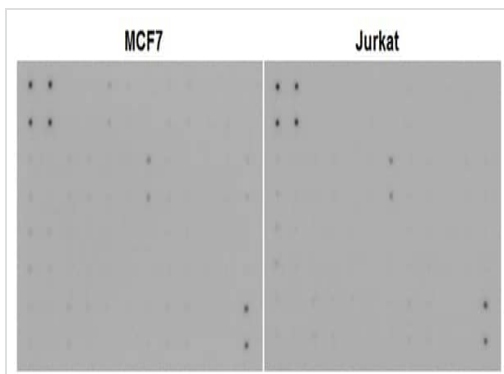
Components	1 x 4 Membranes	1 x 8 Membranes
1,000X HRP-Conjugated Streptavidin	1 x 50µl	1 x 50µl
20X Wash Buffer I	1 x 10ml	1 x 20ml
20X Wash Buffer II	1 x 10ml	1 x 20ml
2X Cell Lysis Buffer	1 x 10ml	1 x 16ml
8-Well Incubation Tray (with Lid)	1 unit	1 unit
Biotin-Conjugated Anti-Cytokines	2 vials	4 vials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

**Applications****The Abpromise guarantee**Our **Abpromise guarantee** covers the use of ab134002 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>Multiplex Protein Detection</b>		Use at an assay dependent concentration.

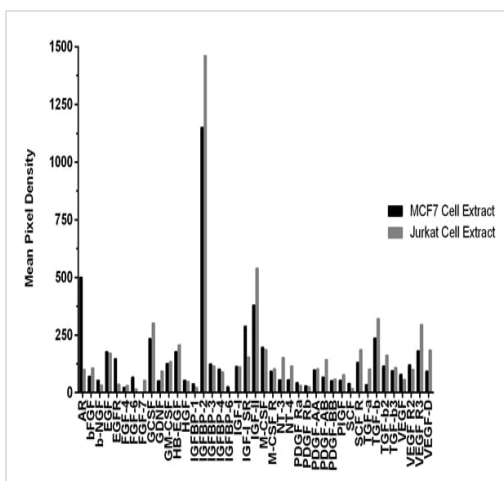
**Images**



Multiplex Protein Detection - Human Growth Factor  
Antibody Array - Membrane (41 Targets) (ab134002)

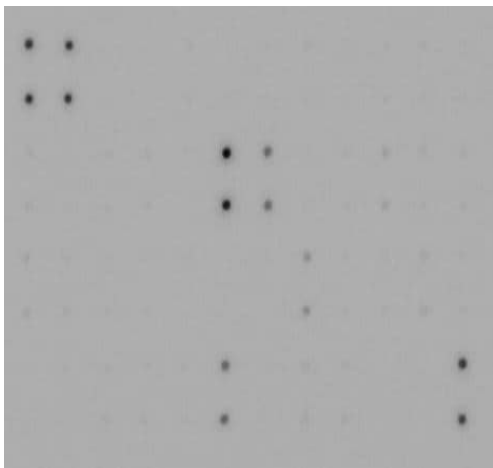
MCF7 cells (Human breast adenocarcinoma) were seeded at  $1 \times 10^6$  cells/mL and cultured in EMEM media supplemented with 10% fetal calf serum, 100 U/mL penicillin, and 100  $\mu$ g/mL streptomycin sulfate. Jurkat cells (Human T lymphocytes) were seeded at  $1 \times 10^6$  cells/mL and cultured in RPMI media supplemented with 10% fetal calf serum, 100 U/mL penicillin, and 100  $\mu$ g/mL streptomycin sulfate.

Cells were cultured for 48 hours, washed and harvested. Cell and tissue extracts were prepared and 250  $\mu$ g of total protein was assayed using ab134002.



Quantification of Human Growth Factor Antibody  
Array

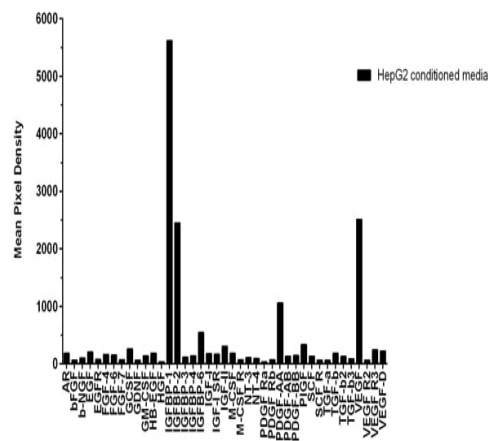
Cells were cultured for 48 hours, washed and harvested. Cell and tissue extracts were prepared and 250  $\mu$ g of total protein was assayed using ab134002. Mean pixel density was quantified using CCD camera software analysis.



Multiplex Protein Detection - Human Growth Factor  
Antibody Array - Membrane (41 Targets) (ab134002)

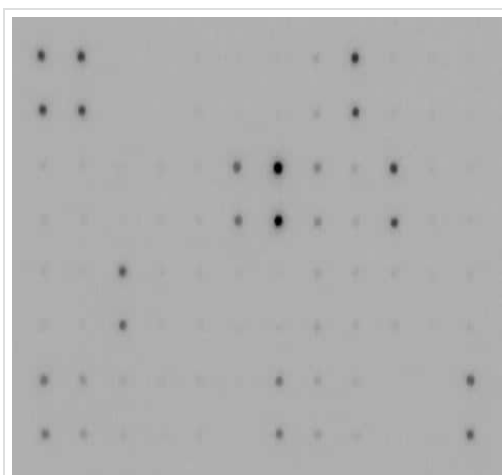
HepG2 cells (Human hepatocellular carcinoma) were seeded at  $1 \times 10^6$  cells/mL and cultured in EMEM media supplemented with 10% fetal calf serum, 100 U/mL penicillin, and 100  $\mu$ g/mL streptomycin sulfate.

Conditioned media was harvested after 48 hours, aliquoted and assayed using ab134002.



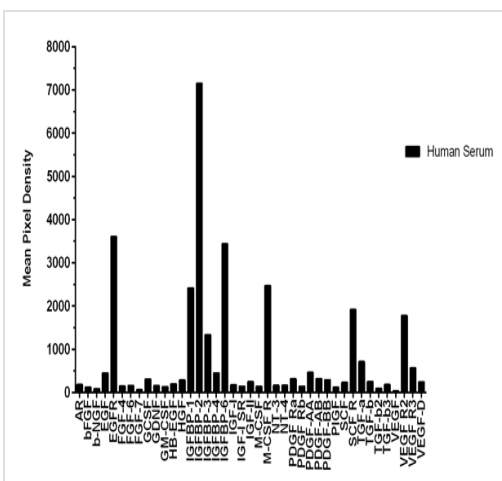
Quantification of Human Growth Factor Antibody  
Array

Conditioned media was harvested after 48 hours, aliquoted and assayed using ab134002. Mean pixel density was quantified using CCD camera software analysis.



Multiplex Protein Detection - Human Growth Factor  
Antibody Array - Membrane (41 Targets) (ab134002)

Human serum from a pooled donor (n=50) sample was diluted to 25% and assayed using ab134002.



Quantification of Human Growth Factor Antibody  
Array

Human serum from a pooled donor (n=50) sample was diluted to 25% and assayed using ab134002. 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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