Datasheet for ABIN4956021

Human Obesity Array Q3 (3)

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Overview

Quantity:	50 samples
Reactivity:	Human
Method Type:	Sandwich ELISA
Application:	Antibody Array (AA), Multiplex ELISA (mpELISA)

Product Details

Purpose:	Quantibody® Human Obesity Array 3 Kit. Detects 40 Human Adipokines. Suitable for all liquid sample types.
Sample Type:	Cell Culture Supernatant, Cell Lysate, Plasma, Serum, Tissue Lysate
Analytical Method:	Quantitative
Detection Method:	Fluorometric
Specificity:	Adiponectin (ACRP30), Adipsin (Complement Factor D), AgRP, ANGPTL4, BDNF, Chemerin, CRP (C-Reactive Protein), Growth Hormone, IFN-gamma, IGFBP-1, IGFBP-2, IGF-1, IL-10, IL-12 p40, IL-12 p70, IL-1 beta (IL-1 F2), IL-1 ra (IL-1 F3), IL-6, IL-8 (CXCL8), Insulin, Leptin, Lipocalin-2 (NGAL), MSP alpha/beta, Osteoprotegerin (TNFRSF11B), PAI-1, PDGF-BB, Pepsinogen 1, Pepsinogen 2, Procalcitonin, Prolactin, RANTES (CCL5), RBP4, Resistin, SAA (Serum Amyloid A), TGF beta 1, Thrombospondin 1, TNF RI (TNFRSF1A), TNF RII (TNFRSF1B), TNF alpha, VEGF-A
Characteristics:	• Running an array is like running dozens of ELISAs simultaneously. • Quantibody arrays are stunningly simple to use, read, and analyze. • Each panel can quantify up to 40 different biomarkers simultaneously, and individual panels can be multiplexed to quantify as many as 660 different biomarkers at one time. • The entire process can be completed in just 4-6 hours.

Product Details

- More cost-effective than traditional ELISA
- High specificity and system reproducibility
- Suitable for diverse sample types
- Low sample volume requirement: 50 µL or less
- Well-suited for high throughput assays

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- High specificity and system reproducibility
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- Get results same day (6-hour processing time)
- Well-suited for high throughput assays
- Q Analyzer software provides one-step computation

Components:	Glass Chip with antibody arrays Sample Diluent Lyophilized protein standard mix Detection antibody cocktail Streptavidin-Fluorescent dye Wash buffer
Material not included:	Distilled or deionized water Small plastic boxes or containers Pipettors, pipette tips and other common lab consumables Orbital shaker or oscillating rocker Aluminum foil Gene microarray scanner or similar laser fluorescence scanner

Application Details

Application Notes:	Completely cover array area with sample or buffer during incubation. Avoid foaming during incubation steps. Perform all incubation and wash steps under gentle rocking or rotation. Cover the incubation chamber with adhesive film during incubation, particularly when incubation is more than 2 hours or <70 µL of sample or reagent is used. Several incubation steps such as step 6 (blocking), step 7 (sample incubation), step 10 (detection antibody incubation), or step 13 (Cy3 equivalent dyestreptavidin incubation) may be done overnight at 4 °C. Please make sure to cover the incubation chamber tightly to prevent evaporation.
Comment:	The Quantibody arrays are quantitative multiplex ELISA arrays featuring fluorescent detection.

Application Details

	The antibodies are spotted on glass slide solid supports and require a laser scanner for data collection. Cytokine standards are provided with the array for calculation of target protein concentrations. All Quantibody arrays feature the sandwich immunoassay principle, utilizing an immobilized capture antibody along with a corresponding biotinylated detection antibody.
Sample Volume:	100 µL
Plate:	Glass Slide
Protocol:	1. Each Quantibody array starts with a single glass microscope slide, which acts as a support for the array. Slides are segmented using a rubber gasket. Up to 8 samples may assayed using a single slide. 2. Antibodies against a variety of different antigens (up to 40 biomarkers per slide) are printed onto the glass slide. Replicates are included, saving you both time and precious sample volume. 3. The end-user adds either known concentration standards (included) or aqueous sample to each well on the slide. Antibodies on the slide capture antigen off from the sample or standard. 4. The end-user adds a detection mix containing paired antibodies (compatible with the primaries pre-coated on the slide) conjugated to a fluorescent dye for detection. 5. Fluorescent signal from each spot is read using a laser slide scanner. The intensity from each spot is compared to the standard curve, and a quantitative expression profile for relevant biomarkers is established.
Restrictions:	For Research Use only

Handling

Handling Advice:	Do not touch the surface of the slides, as the microarray slides are very sensitive. Hold the slides by the edges only. Handle all buffers and slides with powder free gloves. Handle glass slide/s in clean environment. The Quantibody slides do not have bar codes. To help distinguish one slide from another, transcribe the slide serial number from the slide bag to the back of the slide with an ultra-fine point permanent marker. Please Note:Red permanent marker can significantly interfere with fluorescent signal detection. We recommend marking your slides with a green, blue or black ultra-fine point permanent marker. Please write the number on the very bottom edge of the slide. Do not write on the arrayed well areas.
Storage:	-20 °C
Storage Comment:	For best results, store the entire kit frozen at -20°C upon arrival. Stored frozen, the kit will be stable for at least 6 months which is the duration of the product warranty period. Once thawed,

Handling

store array slide(s), standard mix, detection antibody cocktail, and Cy3-Conjugated Streptavidin at -20°C and all other reagents undiluted at 4°C for no more than 3 months.

Publications

Product cited in:

Himburg, Doan, Quarmyne, Yan, Sasine, Zhao, Hancock, Kan, Pohl, Tran, Chao, Harris, Chute: " Dickkopf-1 promotes hematopoietic regeneration via direct and niche-mediated mechanisms." in: **Nature medicine**, Vol. 23, Issue 1, pp. 91-99, (2017) (PubMed).

Kurtz, Elkins: "Correlates of Vaccine-Induced Protection against Mycobacterium tuberculosis Revealed in Comparative Analyses of Lymphocyte Populations." in: **Clinical and vaccine immunology : CVI**, Vol. 22, Issue 10, pp. 1096-108, (2015) (PubMed).

Boldrin, Neal, Zammit, Muntoni, Morgan: "Donor satellite cell engraftment is significantly augmented when the host niche is preserved and endogenous satellite cells are incapacitated." in: **Stem cells (Dayton, Ohio)**, Vol. 30, Issue 9, pp. 1971-84, (2012) (PubMed).

Images

Each antibody is printed in quadruplicate horizontally												
	1	2	3	4	1	2	3	4	1	2	3	4
A	POS1				POS2				Adiponectin			
B	Adipsin				AgRP				ANGPTL4			
C	BDNF				Chemerin				CRP			
D	Growth Hormone				IFN-gamma				IGFBP-1			
E	IGFBP-2				IGF-1				IL-10			
F	IL-12 p40				IL-12 p70				IL-1 beta			
G	IL-1 ra				IL-6				IL-8			
H	Insulin				Leptin				Lipocalin-2			
I	MSP alpha/beta				Osteoprotegerin				PAI-1			
J	PDGF-BB				Pepsinogen 1				Pepsinogen 2			
K	Procalcitonin				Prolactin				RANTES			
L	RBP4				Resistin				SAA			
M	TGF beta 1				Thrombospondin 1				TNF RI			
N	TNF RII				TNF alpha				VEGF-A			

Image 1.