Human Aquaporin 4,AQP-4 ELISA Kit

Product Code	CSB-E08254h
Abbreviation	AQP4
Protein Biological Process 1	Transport
Target Name	aquaporin 4
Uniprot No.	P55087
Alias	HMIWC2, MGC22454, MIWC, aquaporin type4|aquaporin-4|mercurial-insensitive water channel
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Transport
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.156 ng/mL-10 ng/mL
Sensitivity	0.039 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Signal Transduction
Quality Control	A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm. An incubator can provide stable incubation conditions up to 37°C±5° Centrifuge Vortex Squirt bottle, manifold dispenser, or automated microplate washer Absorbent paper for blotting the microtiter plate 50-300ul multi-channel micropipette Pipette tips Single-channel micropipette with different ranges 100ml and 500ml graduated cylinders Deionized or distilled water Timer Test tubes for dilution
Gene Names	AQP4
Tag Info	quantitative

Protein Description	Sandwich
Component	A micro ELISA plate ---The 96-well plate has been pre-coated with an anti-Human AQP-4 antibody. Two vials lyophilized standard ---Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve. One vial Biotin-labeled AQP-4 antibody (100 x concentrate) (120 μl/bottle) ---Act as the detection antibody. One vial HRP-avidin (100 x concentrate) (120 μl/bottle) ---Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic. One vial Biotin-antibody Diluent (15 ml/bottle) ---Dilute the Biotin-antibody. One vial HRP-avidin Diluent (15 ml/bottle) ---Dilute the HRP-avidin solution. One vial Sample Diluent (50 ml/bottle) ---Dilute the sample to an appropriate concentration. One vial Wash Buffer (25 x concentrate) (20 ml/bottle) ---Wash away unbound or free substances. One vial TMB Substrate (10 ml/bottle) ---Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue. One vial Stop Solution (10 ml/bottle) ---Stop the color reaction. The solution color immediately turns from blue to yellow. Four Adhesive Strips (For 96 wells) ---Cover the microplate when incubating. An instruction manual
Description	This Human AQP4 ELISA Kit was designed for the quantitative measurement of Human AQP4 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.156 ng/mL-10 ng/mL and the sensitivity is 0.039 ng/mL.
Target Details	This gene encodes a member of the aquaporin family of intrinsic membrane proteins that function as water-selective channels in the plasma membranes of many cells. The encoded protein is the predominant aquaporin found in brain. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.
Product Precision	Intra-assay Precision (Precision within an assay): CV%<8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV%<10% Three samples of known concentration were tested in twenty assays to assess.
Linearity	To assess the linearity of the assay, samples were spiked with high concentrations of human AQP-4 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	96
	Range %	92-103
1:2	Average %	87
	Range %	82-93
1:4	Average %	92
	Range %	87-96

	1:8	Average %	90
		Range %	88-93

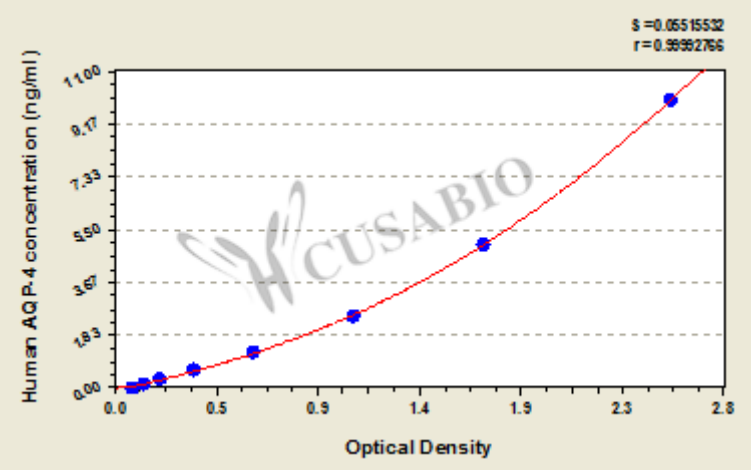
Recovery

The recovery of human AQP-4 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	98	90-106
EDTA plasma (n=4)	92	85-99

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
10	2.568	2.555	2.562	2.472
5	1.725	1.678	1.702	1.612
2.5	1.113	1.101	1.107	1.017
1.25	0.647	0.639	0.643	0.553
0.625	0.381	0.356	0.369	0.279
0.312	0.218	0.209	0.214	0.124
0.156	0.147	0.137	0.142	0.052
0	0.092	0.088	0.090	?

Msds

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