



Human Annexin ?(ANX-?) ELISA Kit

Product Code	CSB-E12155h
Abbreviation	ANXA1
Target Name	annexin A1
Uniprot No.	P04083
Alias	ANX1, LPC1, OTTHUMP00000021475 annexin I annexin I (lipocortin I) lipocortin I Annexin 1 Annexin ? ANX-?
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.312 ng/mL-20 ng/mL
Sensitivity	0.078 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°C. 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	ANXA1
Tag Info	quantitative
Protein Description	Sandwich
Component	A micro ELISA plate --- The 96-well plate has been pre-coated with an anti-human ANXA1 antibody.This dismountable microplate can be divided into 12 x 8 strip plates.



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 ANXA1 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 incubation. An instruction manual

Description

The ELISA Kit is designed for quantitatively measuring human ANXA1 levels in samples, including serum, plasma, or tissue homogenates. It uses the sandwich enzyme immunoassay technique in combination with the enzyme-substrate chromogenic reaction to quantify the analyte in the sample. The color develops positively to the amount of ANXA1 in samples. The color intensity is measured at 450 nm via a microplate reader.

ANXA1 is a calcium-dependent phospholipid-binding protein with a phospholipase A2 inhibitory activity. ANXA1 exerts multiple roles in important biological processes such as cell differentiation, proliferation, plasma membrane repair, epithelial repair, and cell apoptosis. In normal health conditions, ANXA1 plays a major protective role in the brain through the promotion of blood-brain-barrier (BBB) integrity. Several studies have indicated a role for ANXA1 in neurological diseases, including Alzheimer's disease (AD) and stroke. Studies have also shown that ANXA1 is involved in multiple anti-inflammatory processes, including regulation of neutrophil migration, macrophage phagocytosis, and induction of changes in cell polarity of microglial cells after ischemia-like injury in vitro.

Target Details

Annexin I belongs to a family of Ca(2+)-dependent phospholipid binding proteins which have a molecular weight of approximately 35,000 to 40,000 and are preferentially located on the cytosolic face of the plasma membrane. Annexin I protein has an apparent relative molecular mass of 40 kDa, with phospholipase A2 inhibitory activity. Since phospholipase A2 is required for the biosynthesis of the potent mediators of inflammation, prostaglandins and leukotrienes, annexin I may have potential anti-inflammatory activity.

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 ANX-? 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 %	85
	Range %	81-93
1:2	Average %	95
	Range %	90-100
1:4	Average %	98
	Range %	91-106
1:8	Average %	92
	Range %	80-98

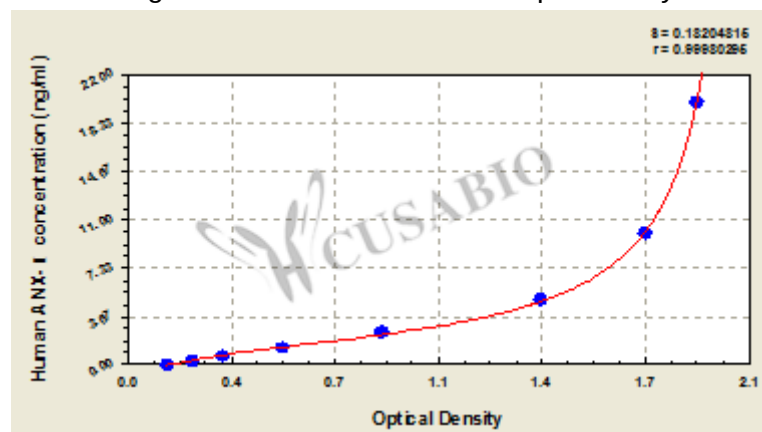
Recovery

The recovery of human ANX-? 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)	92	80-110
EDTA plasma (n=4)	96	91-101

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
20	1.958	1.872	1.915	1.772
10	1.794	1.696	1.745	1.602
5	1.405	1.384	1.395	1.252
2.5	0.887	0.839	0.863	0.720
1.25	0.534	0.524	0.529	0.386
0.625	0.342	0.319	0.331	0.188
0.312	0.236	0.219	0.228	0.085
0	0.149	0.137	0.143	?

Msds

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