

Human FABP-1 ELISA Kit ab222875

1 Image

Overview

Product name Human FABP-1 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Overall				4.5%

Inter-assay

Sample	n	Mean	SD	CV%
Overall				9.8%

Sample type Cell culture supernatant, Saliva, Milk, Serum, Hep Plasma, EDTA Plasma, Cit plasma, Cerebral Spinal Fluid

Assay type Sandwich (quantitative)

Sensitivity 1 ng/ml

Range 1.563 ng/ml - 50 ng/ml

Recovery = 97 %

Assay time 4h 00m

Assay duration Multiple steps standard assay

Species reactivity

Reacts with: Human

Does not react with: Rabbit, Cow

Product overview

Human FABP-1 ELISA (Enzyme-Linked Immunosorbent Assay) kit (ab222875) is designed for the quantitative measurement of human FABP-1 protein in plasma, serum, saliva, milk, cerebral spinal fluid and cell culture samples.

The assay employs a quantitative sandwich enzyme immunoassay technique that measures human FABP-1 in approximately 4 hours. A polyclonal antibody specific for human FABP-1 has been pre-coated onto a 96-well microplate with removable strips. FABP-1 in standards and samples is sandwiched by the immobilized antibody and a biotinylated polyclonal antibody specific for human FABP-1, which is recognized by a streptavidin-peroxidase conjugate. All unbound material is washed away and a

peroxidase enzyme substrate is added. The color development is stopped and the intensity of the color is measured.

The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

Notes Mitochondrial glutamate oxaloacetate transaminase 2 (FABP-1), also called mitochondrial aspartate aminotransferase (mAspAT) and fatty acid-binding protein, belongs to the class-I pyridoxal-phosphate-dependent aminotransferase family. GOT is a pyridoxal phosphate-dependent enzyme, which exists in cytoplasmic GOT1 and inner-membrane mitochondrial FABP-1 forms. GOT plays a role in amino acid metabolism and in the urea and tricarboxylic acid cycles. The two enzymes show close homology. FABP-1 is a dimer containing two identical subunits, each 45 kDa with about 401 amino acids. FABP-1 acetylation stimulates the malate-aspartate NADH shuttle activity and oxidative protection. It is also involved in cell proliferation and energy production.

Platform Pre-coated microplate (12 x 8 well strips)

Properties

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

Components	1 x 96 tests
100X Streptavidin-Peroxidase Conjugate	1 x 80µl
10X Diluent N Concentrate	1 x 30ml
1X Standard Diluent	1 x 2ml
20X Wash Buffer Concentrate	2 x 30ml
30X Biotinylated Human FABP-1	1 x 120µl
Anti-Human FABP-1 coated Microplate (12 x 8 wells)	1 unit
Chromogen Substrate	1 x 8ml
Human FABP-1 Standard	1 vial
Sealing Tapes	3 units
Stop Solution	1 x 12ml

Function Plays a key role in amino acid metabolism. Important for metabolite exchange between mitochondria and cytosol. Facilitates cellular uptake of long-chain free fatty acids.

Sequence similarities Belongs to the class-I pyridoxal-phosphate-dependent aminotransferase family.

Cellular localization Mitochondrion matrix. Cell membrane. Exposure to alcohol promotes translocation to the cell membrane.

Images



Example of human FABP-1 standard curve. Background-subtracted data are graphed.

Human FABP-1 standard curve

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