

# Human Monocarboxylate transporter 1 (SLC16A1) ELISA Kit



Catalog No: #EK7306

Orders: order@signalwayantibody.com

Package Size: #EK7306-1 48T #EK7306-2 96T

Support: tech@signalwayantibody.com

## Description

|                    |   |
|--------------------|---|
| Product Name       | Human Monocarboxylate transporter 1 (SLC16A1) ELISA Kit   |
| Brief Description  | ELISA Kit   |
| Applications       | ELISA   |
| Species Reactivity | Human (Homo sapiens)  |
| Other Names        | FLJ36745; HHF7; MCT; MCT1; MGC44475; monocarboxylate transporter 1 solute carrier family 16 (monocarboxylic acid transporters); member 1 solute carrier family 16; member 1   |
| Accession No.      | P53985  |
| Uniprot            | P53985  |
| GeneID             | 6566;   |
| Storage            | The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.<br><br>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C). |

## Application Details

Detect Range:0.312-20 ng/mL

Sensitivity:0.116 ng/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

Detection Method: Sandwich Test principle: This assay employs a two-site sandwich ELISA to quantitate SLC16A1 in samples. An antibody specific for SLC16A1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any SLC16A1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SLC16A1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of SLC16A1 bound in the initial step. The color development is stopped and the intensity of the color is measured.

Product Overview: SLC16A1 mediates the movement of lactate and pyruvate across cell membranes. Import and export of these substrates by tissues such as erythrocytes, muscle, intestine, and kidney are ascribed largely to the action of a proton-coupled MCT. The corresponding cDNA was isolated by an expression cloning strategy and found to encode a protein with 12 putative membrane-spanning regions. The cloned mutant 'mevalonate transporter' differed from its wildtype progenitor by 1 amino acid in the tenth membrane-spanning region, which changed a phenylalanine (wildtype) to a cysteine (mutant). The finding that the wildtype cDNA did not elicit increased mevalonate transport in transfected cells suggested that the wildtype protein is a transporter for a molecule other than mevalonate.

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Note: This product is for in vitro research use only