



Rabbit Anti-MCT1 antibody

SL10249R

Product Name:	MCT1
Chinese Name:	单羧酸Transporter-1抗体
Alias:	monocarboxylate transporter 1; Malignant T cell amplified sequence 1; MCT 1; MCT1; MCTS 1; MCTS1; Oncogene MCT 1; Oncogene MCT1; SLC16A1; FLJ36745; HHF7; MCT; MGC44475; monocarboxylate transporter; Monocarboxylate transporter isoform 1; Monocarboxylic acid transporter 1; SLC16A1; SLC16A1 protein; Solute carrier family 16 (monocarboxylic acid transporters) member 1; Solute carrier family 16 member 1 (monocarboxylic acid transporter 1); Solute carrier family 16 member 1; MOT1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	55kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MCT1:251-350/500<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed

The protein encoded by this gene is a proton-linked monocarboxylate transporter that catalyzes the movement of many monocarboxylates, such as lactate and pyruvate, across the plasma membrane. Mutations in this gene are associated with erythrocyte lactate transporter defect. Alternatively spliced transcript variants have been found for this gene.[provided by RefSeq, Oct 2009]

Function:

Proton-linked monocarboxylate transporter. Catalyzes the rapid transport across the plasma membrane of many monocarboxylates such as lactate, pyruvate, branched-chain oxo acids derived from leucine, valine and isoleucine, and the ketone bodies acetoacetate, beta-hydroxybutyrate and acetate.

Subcellular Location:

Cell membrane; Multi-pass membrane protein.

Tissue Specificity:

Widely expressed in normal and in cancer cells.

DISEASE:

Defects in SLC16A1 are the cause of symptomatic deficiency in lactate transport (SDLT) [MIM:245340]; also known as erythrocyte lactate transporter defect. Deficiency of lactate transporter may result in an acidic intracellular environment created by muscle activity with consequent degeneration of muscle and release of myoglobin and creatine kinase. This defect might compromise extreme performance in otherwise healthy individuals.

Defects in SLC16A1 are the cause of familial hyperinsulinemic hypoglycemia type 7 (HHF7) [MIM:610021]; also known as exercise-induced hyperinsulinemic hypoglycemia. HHF7 is a dominantly inherited hypoglycemic disorder characterized by inappropriate insulin secretion during anaerobic exercise or on pyruvate load.

Similarity:

Belongs to the major facilitator superfamily. Monocarboxylate porter (TC 2.A.1.13) family.

SWISS:

P53985

Gene ID:

6566

Database links:

[Entrez Gene: 6566](#)Human

[Entrez Gene: 20501](#)Mouse

[Omim: 600682](#)Human

Product Detail:

[SwissProt: P53985](#)Human

[SwissProt: P53986](#)Mouse

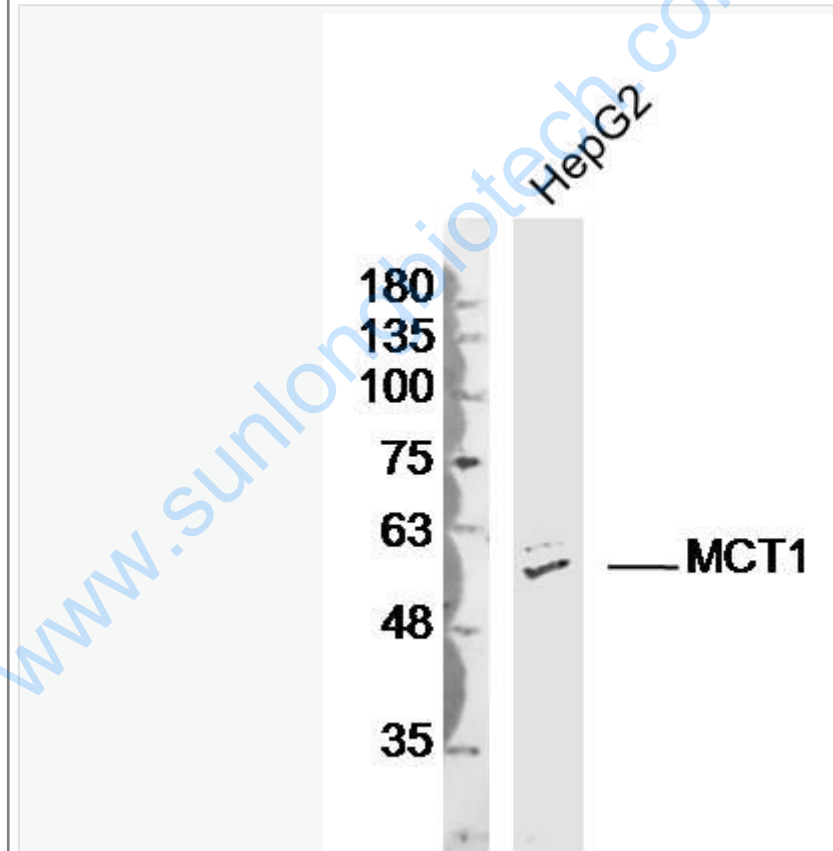
[Unigene: 75231](#)Human

[Unigene: 9086](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



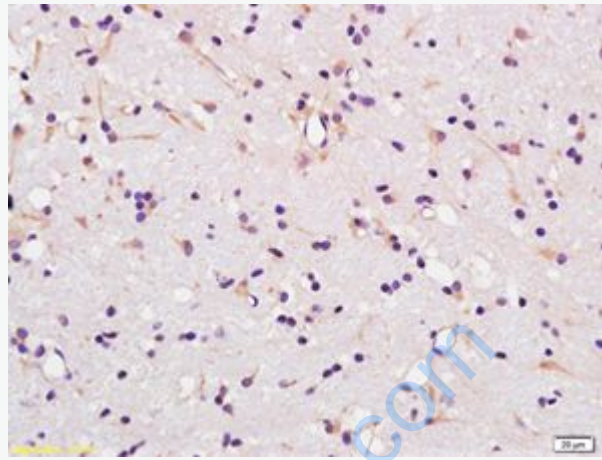
Sample: HepG2 (Human) cell Lysate at 40 ug

Primary: Anti-MCT1(SL10249R) at 1/300 dilution

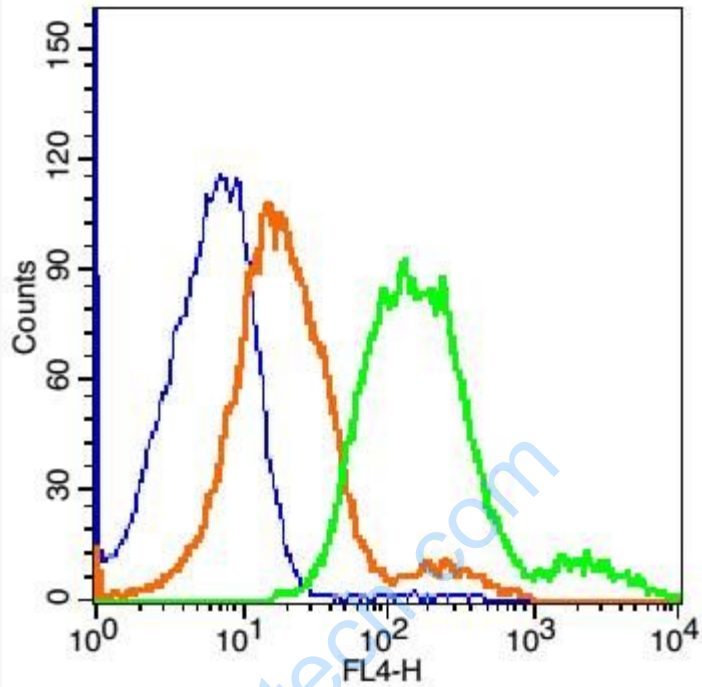
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55kD

Observed band size: 55kD



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MCT1) Polyclonal Antibody, Unconjugated (SL10249R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control: MCF7 Cells(blue).

Primary Antibody: Rabbit Anti-MCT1/AF647 Conjugated antibody (SL10249R),

Dilution: 1 μ g in 100 μ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG/FITC(orange) ,used under the same conditions.