

Product datasheet for AP01483PU-N

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OriGene Technologies, Inc.

SLC16A3 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: WE

Recommended Dilution: Western Blot: 1/500-1/1000.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Specificity: This antibody detects endogenous levels of MCT4 protein. (region surrounding Phe265)

Formulation: Phosphate buffered saline (PBS), pH~7.2 with 0.05% Sodium Azide as preservative

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).

Concentration: 1.0 mg/ml

Purification: Affinity Chromatography using epitope-specific immunogen.

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: ~49 kDa

Gene Name: solute carrier family 16 member 3

Database Link: Entrez Gene 9123 Human

<u>015427</u>



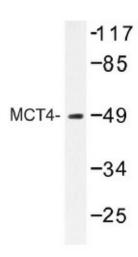
Background:

Monocarboxylates, such as lactate and pyruvate, play an integral role in cellular metabolism. Lactic acid is produced in large quantities as a result of glycolysis, which provides the majority of ATP to cells under normal physiological conditions. However, accumulation of lactic acid leads to a decrease in intracellular pH and cessation of glycolysis. In order for glycolysis to continue at a high rate, lactic acid must be transported out of the cell. This transport process is carried out by a family of monocarboxylate transporters (MCTs),which function as proton symports and are stereoselective for L-lactate. The MCT family consists of at least eight members, MCT1-8, which contain between 10-12 transmembrane-helical (TM) domains, with the amino and carboxy termini located in the cytoplasm. MCT1 is widely expressed and is the major form of MCTs in tumor cells and erythrocytes. MCT2 is highly expressed in liver and testis, while MCT3 and MCT4 are predominantly expressed in skeletal muscle.

Synonyms:

MCT3, MCT 3, MCT4, MCT 4, Monocarboxylate transporter 3, Monocarboxylate transporter 4

Product images:



Western blot (WB) analysis of MCT4 antibody (Cat.-No.: AP01483PU-N) in extracts from LOVO cells.