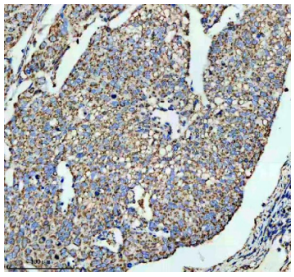
SLC16A1 Antibody / Monocarboxylate transporter 1 / MCT1 [clone 20S76] (RQ8882)

Catalog No.	Formulation	Size
RQ8882	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

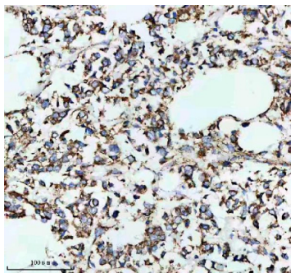
Recombinant RABBIT MONOCLONAL

Bulk quote request

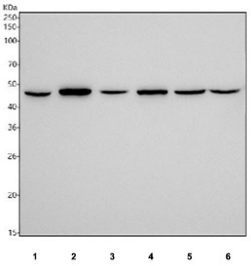
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	20S76
Purity	Affinity chromatography
UniProt	P53985
Localization	Cell membrane
Applications	Western blot: 1:500-1:2000 Immunohistochemistry (FFPE): 1:50-1:200
Limitations	This SLC16A1 antibody is available for research use only.



IHC staining of FFPE human cervical cancer tissue with SLC16A1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human breast cancer tissue with SLC16A1 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) K562, 2) A431, 3) HepG2, 4) 293T, 5) PC-3 and 6) SiHa cell lysate with SLC16A1 antibody. Predicted molecular weight ~54 kDa and ~46 kDa (two isoforms).

Description

SLC16A1 (also called Monocarboxylate transporter 1 and MCT1) is a 12-transmembrane monocarboxylate/proton symporter that mediates bidirectional transport of lactate, pyruvate, and ketone bodies across the plasma membrane. Coupled to H^+ gradients and aided by the chaperone basigin/CD147, SLC16A1 maintains cellular redox balance, supports glycolysis-oxidative coupling between cells, and contributes to pH homeostasis in metabolically active tissues.

SLC16A1 is broadly expressed, with high levels in skeletal muscle, cardiac muscle, erythrocytes, endothelium, and select immune and epithelial cells. Its activity underlies lactate shuttle biology and metabolic symbiosis, making it a useful readout in studies of exercise physiology, hypoxia responses, and metabolic remodeling under defined experimental conditions.

The **SLC16A1 antibody** enables specific detection of endogenous MCT1 in applications such as western blot, immunofluorescence, immunohistochemistry, and flow cytometry. Researchers use the SLC16A1 antibody from NSJ Bioreagents to quantify protein abundance, map membrane localization, and monitor pathway modulation following genetic or pharmacologic perturbation. With high specificity and consistent performance, the SLC16A1 antibody supports rigorous analysis of monocarboxylate transport, cellular metabolism, and pH regulation.

Application Notes

Optimal dilution of the SLC16A1 antibody should be determined by the researcher.

Immunogen

A peptide sequence specific to Monocarboxylate transporter 1 protein was used as the immunogen for the SLC16A1 antibody.

Storage

The SLC16A1 antibody can be stored at -20oC.

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