10320 Camino Santa Fe, Suite G
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SLC16A3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12397b

Specification

SLC16A3 Antibody (C-term) - Product Information

Application	**IHC-P-Leica, WB,E**
Primary Accession	O15427
Other Accession	O35910, P57787, NP_001035887.1, NP_001035888.1
Reactivity	**Human, Mouse, Rat**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**433-462**

SLC16A3 Antibody (C-term) - Additional Information

Gene ID 9123

Other Names
Monocarboxylate transporter 4, MCT 4, Solute carrier family 16 member 3, SLC16A3, MCT4

Target/Specificity
This SLC16A3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 433-462 amino acids from the C-terminal region of human SLC16A3.

Dilution
IHC-P-Leica~~1:500
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SLC16A3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC16A3 Antibody (C-term) - Protein Information

Name SLC16A3

Synonyms MCT3 {ECO:0000303|PubMed:9425115}, MCT4

Function Proton-dependent transporter of monocarboxylates such as L- lactate and pyruvate (PubMed:11101640, PubMed:23935841, PubMed:31719150). Plays a predominant role in L-lactate efflux from highly glycolytic cells (By similarity).

Cellular Location
Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein. Note=Plasma membrane localization is dependent upon the BSG/MCT4 interaction (PubMed:10921872). Basolateral sorting signals (BLSS) in C-terminal cytoplasmic tail ensure its basolateral expression in polarised epithelial cells (PubMed:21199217)

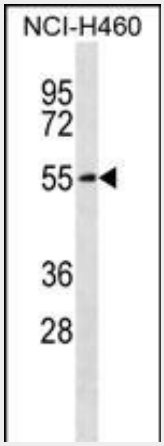
Tissue Location
Highly expressed in skeletal muscle.

SLC16A3 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC16A3 Antibody (C-term) - Images



SLC16A3 Antibody (C-term) (Cat. #AP12397b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the SLC16A3 antibody detected the SLC16A3 protein (arrow).

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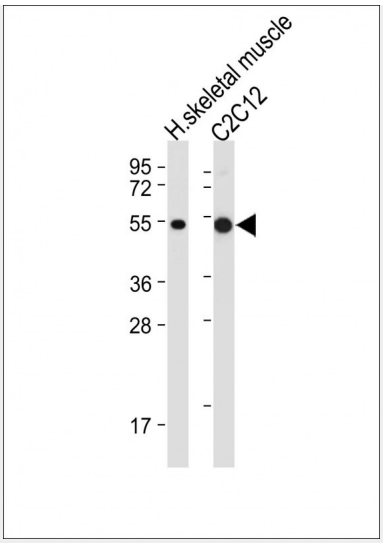
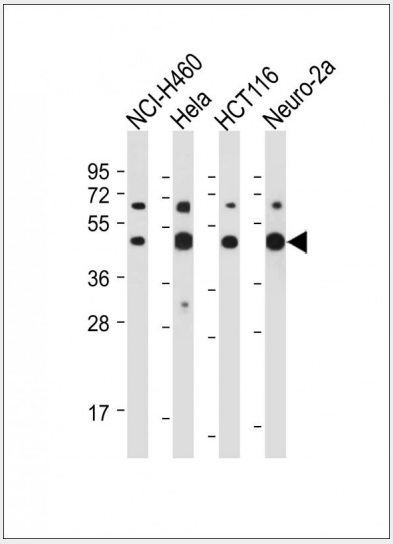


All lanes : Anti-SLC16A3 Antibody (C-term) at 1:2000 dilution Lane 1: Human skeletal muscle tissue lysate Lane 2: C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 49 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-SLC16A3 Antibody (C-term) at 1:1000-1:2000 dilution Lane 1: NCI-H460 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: HCT116 whole cell lysate Lane 4: Neuro-2a whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 49 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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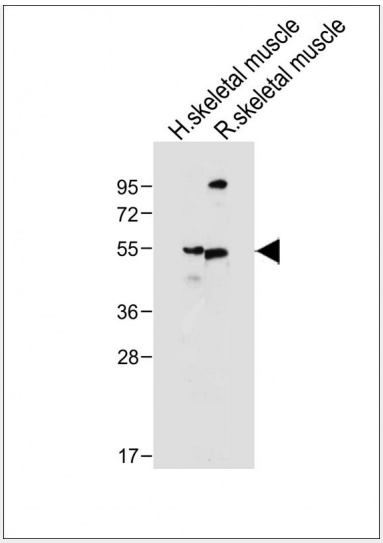
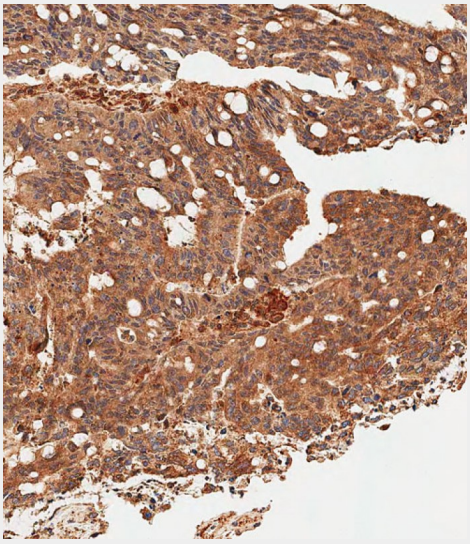


All lanes : Anti-SLC16A3 Antibody (C-term) at 1:1000 dilution Lane 1: Human skeletal muscle tissue lysate Lane 2: Rat skeletal muscle tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 49 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded Human colon carcinoma tissue using AP12397b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

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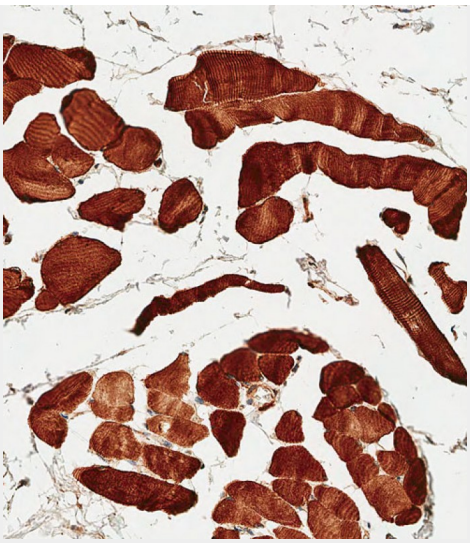

Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue using AP12397b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

SLC16A3 Antibody (C-term) - Background

Lactic acid and pyruvate transport across plasma membranes is catalyzed by members of the proton-linked monocarboxylate transporter (MCT) family, which has been designated solute carrier family-16. Each MCT appears to have slightly different substrate and inhibitor specificities and transport kinetics, which are related to the metabolic requirements of the tissues in which it is found. The MCTs, which include MCT1 (SLC16A1; MIM 600682) and MCT2 (SLC16A7; MIM 603654), are characterized by 12 predicted transmembrane domains (Price et al., 1998 [PubMed 9425115]).

SLC16A3 Antibody (C-term) - References

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Vellonen, K.S., et al. Eur J Pharm Sci 39(4):241-247(2010)
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Wang, Q., et al. Drug Metab. Dispos. 35(8):1393-1399(2007)
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