10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# SLC16A3 Antibody (C-term)

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP12397b**

## Specification

### SLC16A3 Antibody (C-term) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P-Leica,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**
WB~~1:1000
IHC-P-Leica~~1:500

**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)

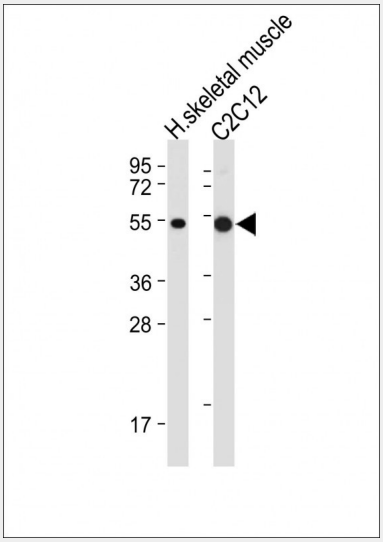
**Tissue Location**
Highly expressed in skeletal muscle.

## SLC16A3 Antibody (C-term) - Protocols

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

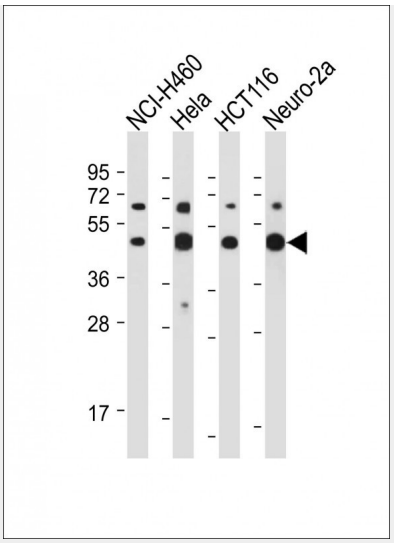
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## SLC16A3 Antibody (C-term) - Images

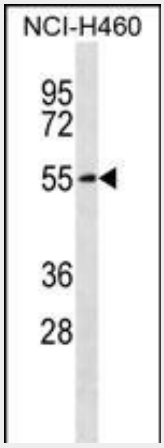



All lanes : Anti-SLC16A3 Antibody (C-term) at 1:2000 dilution Lane 1: Human skeletal muscle tissue lysate Lane 2: C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 49 kDa Blocking/Dilution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

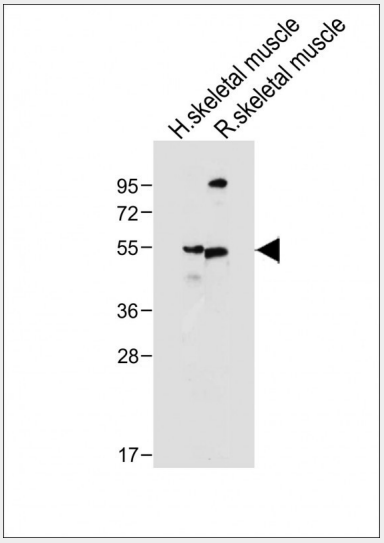
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All lanes : Anti-SLC16A3 Antibody (C-term) at 1:1000-1:2000 dilution Lane 1: NCI-H460 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: HCT116 whole cell lysate Lane 4: Neuro-2a whole cell lysate Lysates/proteins at 20 µg per lane. Secondary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

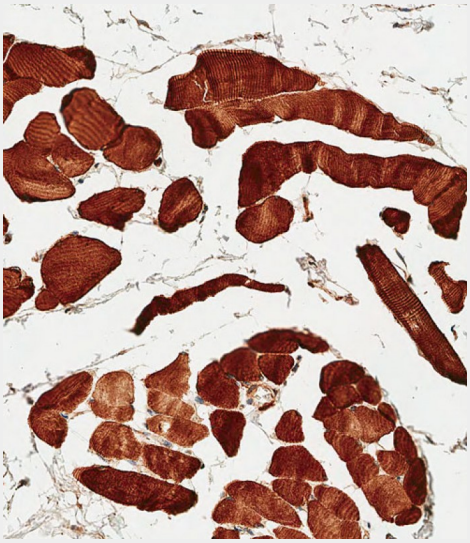



SLC16A3 Antibody (C-term) (Cat. #AP12397b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the SLC16A3 antibody detected the SLC16A3 protein (arrow).

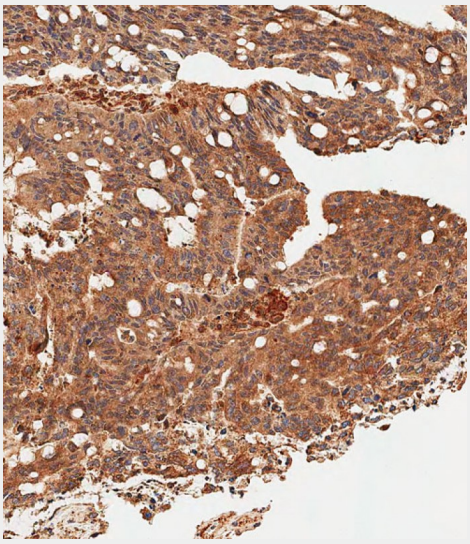


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All lanes : Anti-SLC16A3 Antibody (C-term) at 1:1000 dilution Lane 1: Human skeletal muscle tissue lysate Lane 2: Rat skeletal muscle tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at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



Immunohistochemical analysis of paraffin-embedded Human 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.



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.

**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**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Vellonen, K.S., et al. Eur J Pharm Sci 39(4):241-247(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Wang, Q., et al. Drug Metab. Dispos. 35(8):1393-1399(2007)
Olsen, J.V., et al. Cell 127(3):635-648(2006)