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SLC16A10 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13235B

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q8TF71
Other Accession	NP_061063.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33083
Calculated MW	55493
Antigen Region	301-329

Additional Information

Gene ID	117247
Other Names	Monocarboxylate transporter 10, MCT 10, Aromatic amino acid transporter 1, Solute carrier family 16 member 10, T-type amino acid transporter 1, SLC16A10, MCT10, TAT1
Target/Specificity	This SLC16A10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 301-329 amino acids from the C-terminal region of human SLC16A10.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	SLC16A10 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC16A10
Synonyms	MCT10, TAT1 {ECO:0000303|PubMed:11827462

Function	Sodium- and proton-independent thyroid hormones and aromatic acids transporter (PubMed:11827462, PubMed:18337592, PubMed:28754537). Mediates both uptake and efflux of 3,5,3'-triiodothyronine (T3) and 3,5,3',5'-tetraiodothyronine (T4) with high affinity, suggesting a role in the homeostasis of thyroid hormone levels (PubMed:18337592). Responsible for low affinity bidirectional transport of the aromatic amino acids, such as phenylalanine, tyrosine, tryptophan and L-3,4- dihydroxyphenylalanine (L-dopa) (PubMed:11827462, PubMed:28754537). Plays an important role in homeostasis of aromatic amino acids (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:Q91Y77}; Multi-pass membrane protein
Tissue Location	Strongly expressed in kidney and skeletal muscle and at lower level in placenta and heart

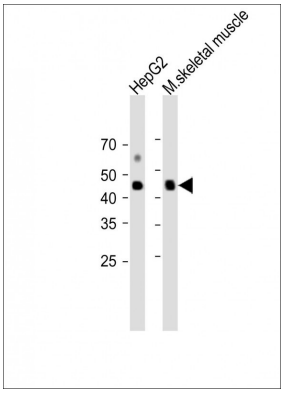
Background

SLC16A10 is a member of a family of plasma membrane amino acid transporters that mediate the Na(+)-independent transport of aromatic amino acids across the plasma membrane.

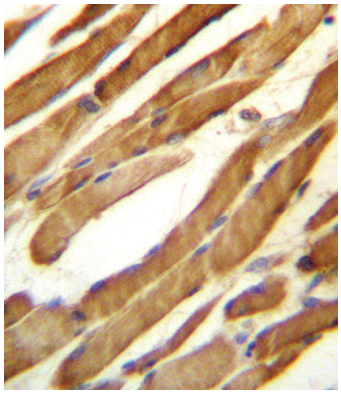
References

Loubiere, L.S., et al. Placenta 31(4):295-304(2010)
Friesema, E.C., et al. Mol. Endocrinol. 22(6):1357-1369(2008)
Broer, S. Physiol. Rev. 88(1):249-286(2008)
Park, S.Y., et al. Arch. Pharm. Res. 28(4):421-432(2005)
Halestrap, A.P., et al. Pflugers Arch. 447(5):619-628(2004)

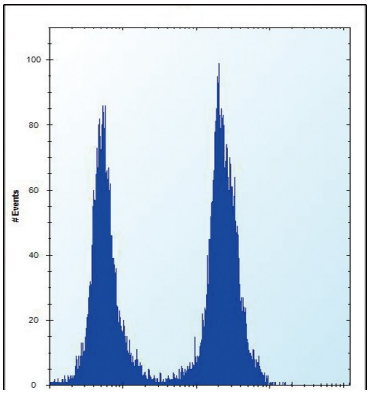
Images



All lanes: Anti-SLC16A10 Antibody (C-term) at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Mouse skeletal muscle lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 45 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



SLC16A10 Antibody (C-term) (Cat. #AP13235b)immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of SLC16A10 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



SLC16A10 Antibody (C-term) (Cat. #AP13235b) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.