For Research Use Only

MCT1 Polyclonal antibody

Catalog Number:20139-1-AP Featured Product 72 Publications

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Basic Information

Catalog Number:
20139-1-AP

Size:
150ul , Concentration: 700 µg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG14098

GenBank Accession Number:
BC026317

GeneID (NCBI):
6566

UNIPROT ID:
P53985

Full Name:
solute carrier family 16, member 1 (monocarboxylic acid transporter 1)

Calculated MW:
500 aa, 54 kDa

Observed MW:
38-45 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:1000-1:4000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:300-1:1200
IF/ICC 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse

Cited Species:
human, mouse, rat, bovine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : 4T1 cells, HeLa cells, mouse brain tissue, mouse liver tissue

IP : Raji cells,

IHC : human colon cancer tissue, human cervical cancer tissue, human breast cancer tissue

IF/ICC : HepG2 cells,

Background Information

MCT1, the SLC16A1 gene product, is a trans-membrane symporter involved in lactate and pyruvate transportation. It plays an important role in lactic acid transport and H+ clearance in cancer cells. MCT overexpression had been observed in various cancers and may play an important role in tumorigenesis. Two isoforms of MCT1 exist due to the alternative splicing, with predicted MW of 54 kDa and 46 kDa, respectively. While western blot analysis detected MCT1 at an apparent molecular mass of 40-50 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Yantuanjin Ma	36372042	Placenta	IHC
Xiaoxin Zhang	33204328	Theranostics	WB,IHC
Akihiro Ryuge	34676828	JCI Insight	WB,IF

Storage

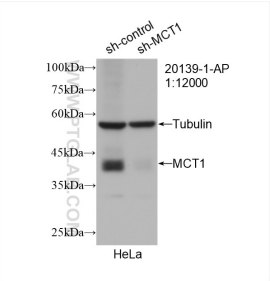
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

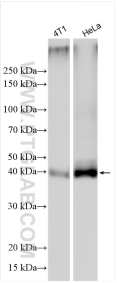
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

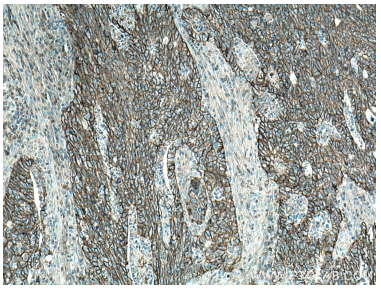
Selected Validation Data



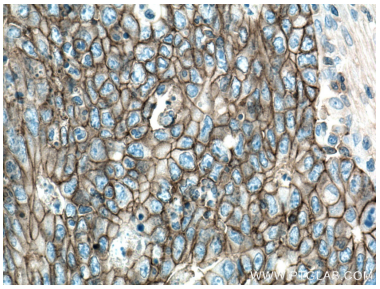
WB result of MCT1 antibody (20139-1-AP; 1:12000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MCT1 transfected HeLa cells.



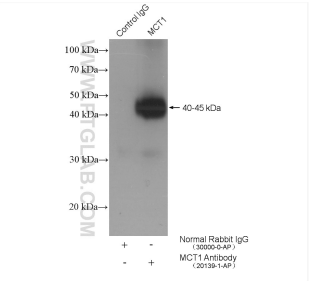
Various lysates were subjected to SDS PAGE followed by western blot with 20139-1-AP (MCT1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



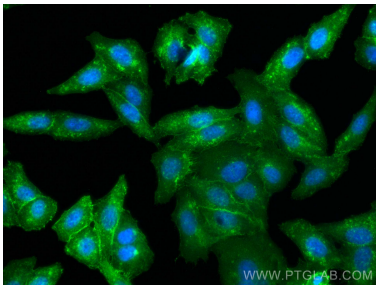
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 20139-1-AP (MCT1 antibody) at dilution of 1:600 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 20139-1-AP (MCT1 antibody) at dilution of 1:600 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-MCT1 (IP:20139-1-AP, 4ug; Detection:20139-1-AP 1:300) with Raji cells lysate 3600 ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MCT1 antibody (20139-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).