

For Research Use Only

# MCT1 Polyclonal antibody

Catalog Number: 20139-1-AP

Featured Product

90 Publications



## Basic Information

### Catalog Number:

20139-1-AP

### Concentration:

700 ug/ml

### 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 1:600-1:2000

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP

### 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 breast cancer  
tissue, human cervical cancer tissue

IF/ICC: HeLa 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<sup>+</sup> 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, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

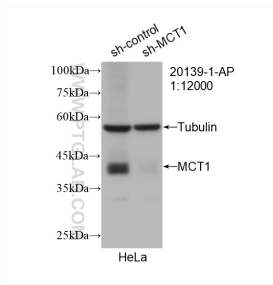
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

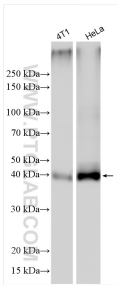
W: [ptgcn.com](http://ptgcn.com)

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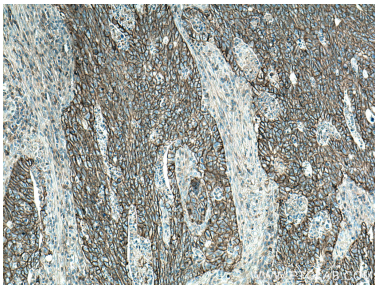
Selected Validation Data



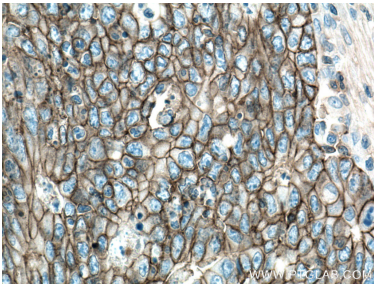
WB result of MCT1 antibody (20139-1-AP; 1:12000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MCT1 transfected HeLa cells.



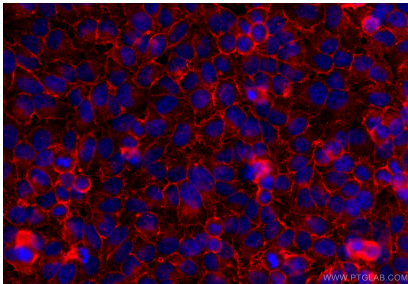
Various lysates were subjected to SDS PAGE followed by western blot with 20139-1-AP (MCT1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



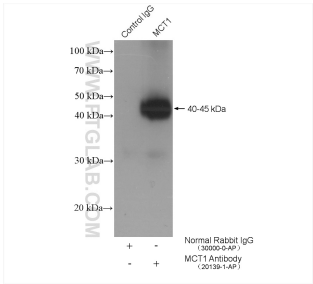
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 20139-1-AP (MCT1 antibody) at dilution of 1:600 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



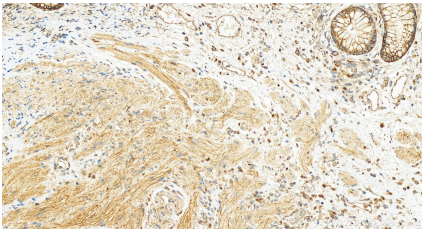
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 20139-1-AP (MCT1 antibody) at dilution of 1:600 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using MCT1 antibody (20139-1-AP) at dilution of 1:200 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).



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



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 20139-1-AP (MCT1 antibody) at dilution of 1:1600 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).