

For Research Use Only

MCT4 Polyclonal antibody

Catalog Number: 22787-1-AP

Featured Product

93 Publications



Basic Information

Catalog Number:

22787-1-AP

Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG18788

GenBank Accession Number:

BC112269

GeneID (NCBI):

9123

UNIPROT ID:

O15427

Full Name:

solute carrier family 16, member 3 (monocarboxylic acid transporter 4)

Calculated MW:

465 aa, 49 kDa

Observed MW:

38-42 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:2000-1:20000

IHC: 1:4000-1:16000

IF/ICC: 1:200-1:800

FC (Intra): 0.80 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, goat

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: HeLa cells, rat skeletal muscle tissue, HepG2 cells, PC-3 cells

IHC: human lung cancer tissue, human breast cancer tissue, human prostate cancer tissue, human renal cell carcinoma tissue, human skeletal muscle tissue, mouse skeletal muscle tissue

IF/ICC: HepG2 cells,

FC (Intra): HepG2 cells,

Background Information

The monocarboxylate transporter 4 (MCT4, also known as SLC16A3) is involved in the transportation of metabolically important monocarboxylates such as lactate, pyruvate, acetate and ketone bodies. It is widely expressed, particularly strongly in glycolytic tissues such as white skeletal muscle fibres, astrocytes, white blood cells, chondrocytes and some mammalian cell lines. MCT4 is also linked to tumor biology because it mediates lactate transport across membranes resulting in antiapoptotic effects.

Notable Publications

Author	Pubmed ID	Journal	Application
Xiao Liang	36212974	Evid Based Complement Alternat Med	IF
Yuto Mukai	36104287	Biopharm Drug Dispos	WB
Bo Cheng	30226548	Oncol Rep	

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

*** 20ul sizes contain 0.1% BSA

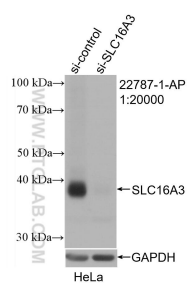
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

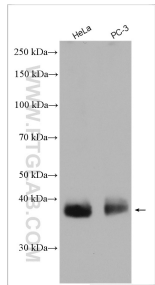
E: proteintech@ptglab.com
W: ptglab.com

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

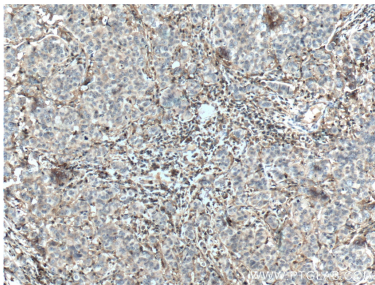
Selected Validation Data



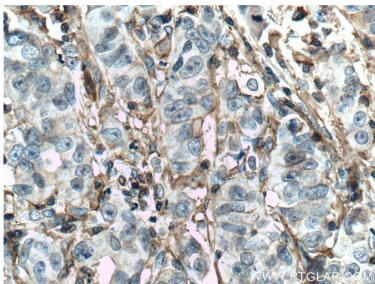
WB result of MCT4 antibody (22787-1-AP; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-MCT4 transfected HeLa cells.



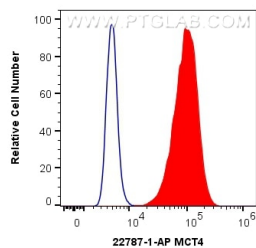
Various lysates were subjected to SDS PAGE followed by western blot with 22787-1-AP (MCT4 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



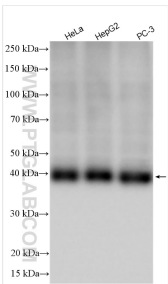
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 22787-1-AP (MCT4 antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



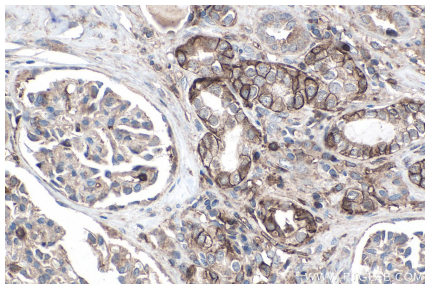
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 22787-1-AP (MCT4 antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



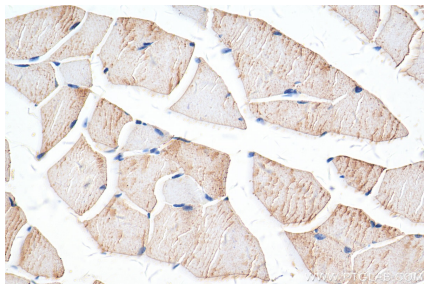
1X10⁶ HepG2 cells were intracellularly stained with 0.8 ug Anti-Human MCT4 (22787-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.8 ug Rabbit IgG control Rabbit PolyAb (30000-O-AP, Clone:) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



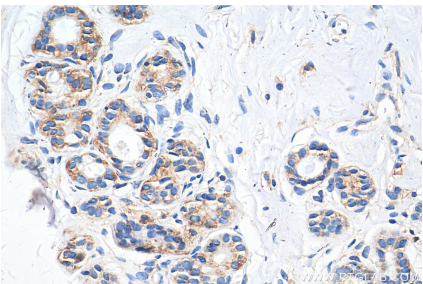
Various lysates were subjected to SDS PAGE followed by western blot with 22787-1-AP (MCT4 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



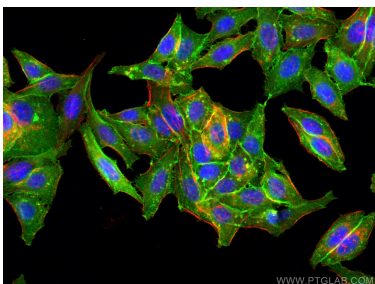
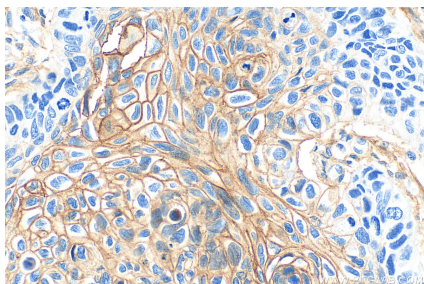
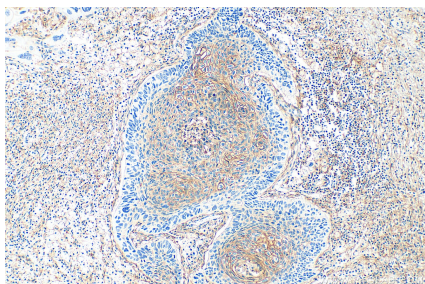
Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 22787-1-AP (MCT4 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



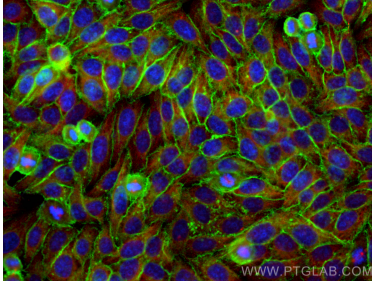
Immunohistochemical analysis of paraffin-embedded mouse skeletal muscle tissue slide using 22787-1-AP (MCT4 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 22787-1-AP (MCT4 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

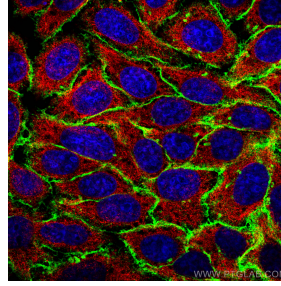


Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 22787-1-AP (MCT4 antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MCT4 antibody (22787-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red).

Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 22787-1-AP (MCT4 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MCT4 antibody (22787-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), Alpha Tubulin antibody (66031-1-Ig, Clone: 1E4C11, red).

Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using MCT4 antibody (22787-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).