For Research Use Only

OCTN2 Polyclonal antibody

Catalog Number:16331-1-AP Featured Product 7 Publications

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Basic Information

Catalog Number:
16331-1-AP

Size:
350 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG9450

GenBank Accession Number:
BC012325

GeneID (NCBI):
6584

UNIPROT ID:
O76082

Full Name:
solute carrier family 22 (organic cation/carnitine transporter), member 5

Calculated MW:
557 aa, 63 kDa

Observed MW:
70-80 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500

Applications

Tested Applications:
WB, IP, IHC, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse

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 : mouse small intestine tissue, mouse skeletal muscle tissue, human placenta tissue, mouse pancreas tissue, mouse testis tissue

IP : mouse skeletal muscle tissue,

IHC : human kidney tissue,

Background Information

OCTN2 (Organic Cation/Carnitine Transporter 2), encoded by SLC22A5, is a ubiquitously expressed organic anion/cation transporter. OCTN2 plays a key role in absorption, tissue distribution and renal reabsorption of L-carnitine which is an essential cofactor in fat metabolism. Defects in the OCTN2 are responsible for primary carnitine deficiency. OCTN2 also transports some important respiratory medicines (such as tiotropium), and due to its expression in the lung, may influence the disposition and absorption of these medicines in the lung.

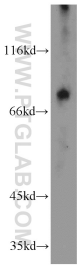
Notable Publications

Author	Pubmed ID	Journal	Application
S Fujita	30295925	J Neurochem	WB
Zheng Jing	35788046	Toxicol Lett	WB
Siwei Wang	30579255	Biomed Pharmacother	WB

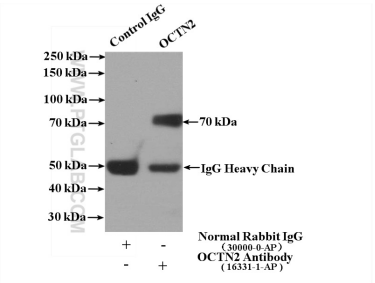
Storage

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

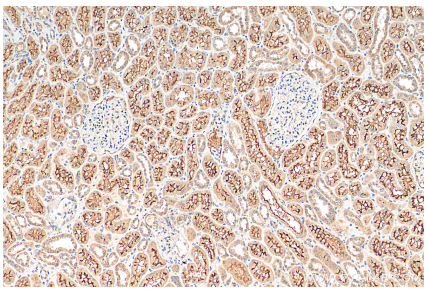
Selected Validation Data



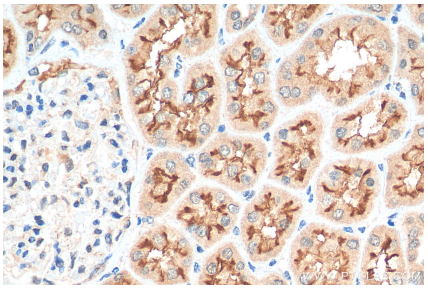
mouse small intestine tissue were subjected to SDS PAGE followed by western blot with 16331-1-AP (OCTN2 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



IP result of anti-OCTN2 (IP:16331-1-AP, 4ug; Detection:16331-1-AP 1:500) with mouse skeletal muscle tissue lysate 2200ug.



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 16331-1-AP (OCTN2 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 kidney tissue slide using 16331-1-AP (OCTN2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).