

### **Anti-OCT3 Antibody**

Rabbit polyclonal antibody to 41915 Catalog # AP59702

## **Specification**

# **Anti-OCT3 Antibody - Product Information**

Application WB, IP
Primary Accession O75751
Reactivity Human, Mouse, Rat
Host Rabbit
Clonality Polyclonal
Calculated MW 61280

# **Anti-OCT3 Antibody - Additional Information**

#### **Gene ID 6581**

#### **Other Names**

EMTH; OCT3; Solute carrier family 22 member 3; Extraneuronal monoamine transporter; EMT; Organic cation transporter 3

### Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human 41915. The exact sequence is proprietary.

#### Dilution

WB~~WB (1/500 - 1/1000), IP (1/10 - 1/100) IP~~N/A

#### **Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

# **Storage**

Store at -20 °C. Stable for 12 months from date of receipt

# **Anti-OCT3 Antibody - Protein Information**

## Name SLC22A3 (<u>HGNC:10967</u>)

### **Function**

Electrogenic voltage-dependent transporter that mediates the transport of a variety of organic cations such as endogenous bioactive amines, cationic drugs and xenobiotics (PubMed:<a href="http://www.uniprot.org/citations/10196521" target="\_blank">10196521</a>, PubMed:<a href="http://www.uniprot.org/citations/10966924" target="\_blank">10966924</a>, PubMed:<a href="http://www.uniprot.org/citations/12538837" target="\_blank">12538837</a>, PubMed:<a href="http://www.uniprot.org/citations/17460754" target="\_blank">17460754</a>, PubMed:<a href="http://www.uniprot.org/citations/20858707" target="\_blank">20858707</a>). Cation



Tel: 858.875.1900 Fax: 858.875.1999

cellular uptake or release is driven by the electrochemical potential, i.e. membrane potential and concentration gradient (PubMed:<a href="http://www.uniprot.org/citations/10966924" target=" blank">10966924</a>). Functions as a Na(+)- and Cl(-)-independent, bidirectional uniporter (PubMed: <a href="http://www.uniprot.org/citations/12538837" target=" blank">12538837</a>). Implicated in monoamine neurotransmitters uptake such as dopamine, adrenaline/epinephrine, noradrenaline/norepinephrine, histamine, serotonin and tyramine, thereby supporting a role in homeostatic regulation of aminergic neurotransmission in the brain (PubMed:<a href="http://www.uniprot.org/citations/10196521" target=" blank">10196521</a>, PubMed:<a href="http://www.uniprot.org/citations/16581093" target="\_blank">16581093</a>, PubMed:<a href="http://www.uniprot.org/citations/20858707" target="blank">20858707</a>). Transports dopaminergic neuromodulators cyclo(his- pro) and salsolino with low efficiency (PubMed: <a href="http://www.uniprot.org/citations/17460754" target=" blank">17460754</a>). May be involved in the uptake and disposition of cationic compounds by renal clearance from the blood flow (PubMed:<a href="http://www.uniprot.org/citations/10966924" target=" blank">10966924</a>). May contribute to regulate the transport of cationic compounds in testis across the blood-testis-barrier (Probable). Mediates the transport of polyamine spermidine and putrescine (By similarity). Mediates the bidirectional transport of polyamine agmatine (PubMed: <a href="http://www.uniprot.org/citations/12538837" target=" blank">12538837</a>). Also transports guanidine (PubMed: <a href="http://www.uniprot.org/citations/10966924" target=" blank">10966924</a>). May also mediate intracellular transport of organic cations, thereby playing a role in amine metabolism and intracellular signaling (By similarity).

### **Cellular Location**

Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein. Mitochondrion membrane {ECO:0000250|UniProtKB:O88446}. Endomembrane system {ECO:0000250|UniProtKB:O88446}. Nucleus membrane {ECO:0000250|UniProtKB:088446}. Nucleus outer membrane {ECO:0000250|UniProtKB:088446}. Note=Localized to the apical/brush border membrane of enterocytes (PubMed:16263091). Localized to the luminal/apical membrane of ciliated epithelial cells in bronchi (PubMed:15817714). Localized to the basolateral membrane of intermediate cells in bronchi (PubMed:15817714). Localized to the entire plasma membrane of basal cells in bronchi (PubMed:15817714)

### **Tissue Location**

Expressed in liver (PubMed:10196521, PubMed:9933568). Expressed in intestine (PubMed:16263091, PubMed:20858707). Expressed in kidney in proximal tubular cells (PubMed:10966924). Expressed in placenta (PubMed:10966924, PubMed:9933568). Expressed throughout the brain, including cerebral cortex, cerebrellum, substancia nigra, medulla oblongata, hippocampus, caudate nucleus, nucleus accumbens and pons with low levels of expression detected in nearly all brain regions (PubMed:10196521, PubMed:20858707). In testis, mostly localized to peritubular myoid cells and Leydig cells, and weakly expressed in developing germ cells (PubMed:35307651). Expressed in tracheal and bronchial epithelium of the respiratory tract. where it localizes to the apical membrane of ciliated cells, the entire membrane of basal cells and the basolateral membrane of intermediate cells (PubMed:15817714). Expressed in skeletal muscle, adrenal gland, heart, prostate, aorta, salivary gland, adrenal gland, uterus, lymph node, lung, trachea and spinal cord (PubMed:10196521, PubMed:20858707, PubMed:9933568). Expressed in fetal lung and liver (PubMed:9933568).

## **Anti-OCT3 Antibody - Protocols**

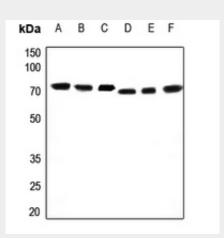
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides



- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **Anti-OCT3 Antibody - Images**



Western blot analysis of OCT3 expression in HEK293T (A), Hela (B), DLD (C), mouse muscle (D), mouse liver (E), rat muscle (F) whole cell lysates.

# **Anti-OCT3 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human 41915. The exact sequence is proprietary.