



Code No. KAL-KE038-EX

For research use only

## Anti Human Organic Anion Transporter 1 (OAT1) Polyclonal Antibody, Rabbit

To eliminate the drug, xenobiotics, a variety of endogenous substances, and their metabolites out of the body, specific membrane proteins named transporters are required. There are two major pathways for the elimination, hepatic one through bile and renal one to urine. The transporters fall into various transport systems by the transportative substrate. In particular, organic ion transporter family is comprised of organic anion transport family (OAT), organic cation transport family (OCT), OCTN/carnitine transport family, and OAT are multispecific organic anion transporters, the substrates of which include a lot of both endogenous and exogenous anions.

Human Organic anion transporter 1(OAT1) encodes a 563 amino acid residue protein, and which is predicted 12 putative membrane-spanning protein. Human OAT1 was found to be expressed predominantly in the kidney and only weakly in the brain. OAT1 mediates the Na<sup>+</sup>-independent transport of organic anions, such as PAH (*p*-aminohippurate), cyclic nucleotides, prostanoids, dicarboxylates, and many anion drugs.

This antibody has been proved to be useful for immunohistochemistry.

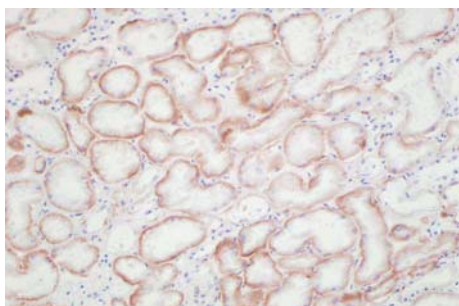
Package Size	25 $\mu$ g (250 $\mu$ L / vial)
Format	Rabbit polyclonal antibody 0.1 mg/mL
Buffer	Block Ace as a stabilizer, containing 0.1%Proclin as bacteriostat
Storage	Store below -20°C Once thawed, store at 4°C. Repeated freeze-thaw cycles should be avoided.

Purification method This antibody was purified from rabbit serum immunized with synthesized C-end peptide of human OAT1 by peptide affinity chromatography.

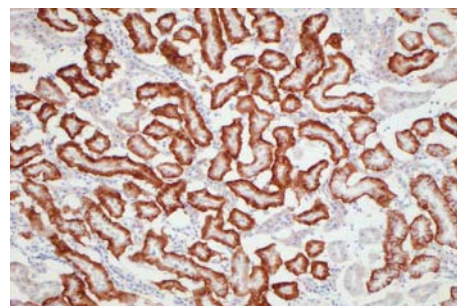
Working dilution for immunohistochemistry 5  $\mu$ g/mL

HGNC Name SLC22A6 (solute carrier superfamily 22A6)

\*HGNC : Human Gene Nomenclature Committee



Human Kidney (frozen section)



Rat Kidney(frozen section)



## Anti Human Organic Anion Transporter 1 (OAT1) Polyclonal Antibody, Rabbit

### 【Reference】

1. Hosoyamada M., Sekine T., Kanai Y. and Endou H.:Molecular cloning and functional expression of multispecific organic anion transporter from human kidney. *Am.J.Physiol.* 276(459):F122-F128,1999
2. Sekine T., Cha S.H., Kanai Y.and Endou H.:Molecular biology of multispecific organic anion transporter family (OAT family). *Clin.Exp.Nephrol.*3.237-243, 1999
3. Apiwattanakul N., Sekine T., Chairoungdua A., Kanai Y., Nakajima N., Sophasan S.and Endou H.: Transport properties of nonsteroidal anti-inflammatory drugs by organic anion transporter 1 expressed in *Xenopus laevis* oocytes. *Mol.Pharmacol.*55: 847-854,1999
4. Tsuda M., Sekine T., Takeda M., Kanai Y., Kimura M. and Endou H.: Transport of ochratoxin A by renal multispecific organic anion transporter 1.*J.Pharmacol. Exp. Ther.* 289(3): 1301-1305,1999
5. Sekine T., Cha S.H.and Endou H.:The multispecific organic anion transporter (OAT) family. *pflugers Arch-Eur.J.Physiol.*440.337-350,2000
6. Endou H.:Molecular mechanisms of drug transport. *Folia Pharmacol. Jpn.* 116. 114-124, 2000

### Distributor



COSMO BIO Co., LTD.  
Inspiration for Life Science

TOYO EKIMAE BLDG. 2-20, TOYO 2CHOME  
KOTO-KU, TOKYO 135-0016, JAPAN  
TEL : +81-3-5632-9617  
FAX : +81-3-5632-9618  
URL : <http://www.cosmobio.co.jp/>  
e-mail : [export@cosmobio.co.jp](mailto:export@cosmobio.co.jp)

### Manufacturer

 Trans Genic Inc.

7-1-6 Minatojima-minami-machi,  
Chuo-ku, Kobe,650-0047 JAPAN  
TEL : +81-78-306-0590  
FAX : +81-78-306-0589  
URL : <http://www.transgenic.co.jp/>  
e-mail : [techstaff@transgenic.co.jp](mailto:techstaff@transgenic.co.jp)