ARG59143
anti-SLC22A2 / OCT2 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes SLC22A2 / OCT2
Tested Reactivity	Hu
Tested Application	FACS, IHC-P
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SLC22A2 / OCT2
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 57-89 of Human SLC22A2 / OCT2.
Conjugation	Un-conjugated
Alternate Names	Organic cation transporter 2; OCT2; hOCT2; Solute carrier family 22 member 2

Application Instructions

Application table

Application	Dilution
FACS	1:25
IHC-P	1:25

Application Note: IHC-P: Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

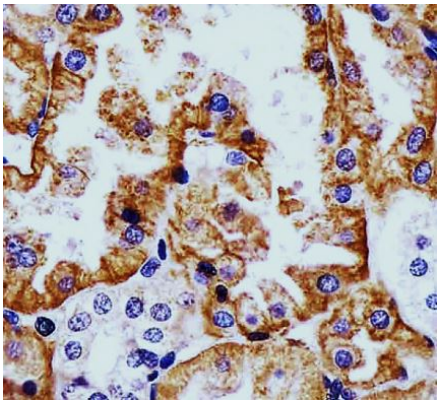
Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

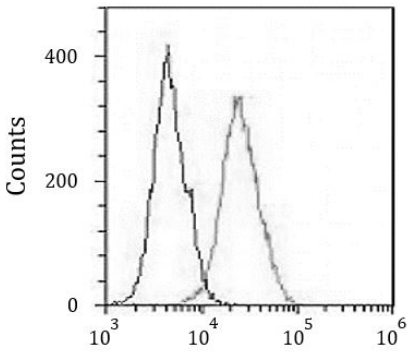
Gene Symbol	SLC22A2
Gene Full Name	solute carrier family 22 (organic cation transporter), member 2
Background	Polyspecific organic cation transporters in the liver, kidney, intestine, and other organs are critical for elimination of many endogenous small organic cations as well as a wide array of drugs and environmental toxins. This gene is one of three similar cation transporter genes located in a cluster on chromosome 6. The encoded protein contains twelve putative transmembrane domains and is a plasma integral membrane protein. It is found primarily in the kidney, where it may mediate the first step in cation reabsorption. [provided by RefSeq, Jul 2008]
Function	Mediates tubular uptake of organic compounds from circulation. Mediates the influx of agmatine, dopamine, noradrenaline (norepinephrine), serotonin, choline, famotidine, ranitidine, histamin, creatinine, amantadine, memantine, acriflavine, 4-[4-(dimethylamino)-styryl]-N-methylpyridinium ASP, amiloride, metformin, N-1-methylnicotinamide (NMN), tetraethylammonium (TEA), 1-methyl-4-phenylpyridinium (MPP), cimetidine, cisplatin and oxaliplatin. Cisplatin may develop a nephrotoxic action. Transport of creatinine is inhibited by fluoroquinolones such as DX-619 and LVFX. This transporter is a major determinant of the anticancer activity of oxaliplatin and may contribute to antitumor specificity. [UniProt]
Calculated Mw	63 kDa
Cellular Localization	Membrane; Multi-pass membrane protein. [UniProt]

Images



ARG59143 anti-SLC22A2 / OCT2 antibody IHC-P image

Immunohistochemistry: Paraformaldehyde-fixed and paraffin-embedded Human kidney tissue. Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at RT. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0). Samples were stained with ARG59143 anti-SLC22A2 / OCT2 antibody at 1:25, 37°C for 1 hour.



ARG59143 anti-SLC22A2 / OCT2 antibody FACS image

Flow Cytometry: A431 cells were fixed with 2% paraformaldehyde (10 min). The cells were then incubated in 2% BSA to block non-specific protein-protein interactions followed by ARG59143 anti-SLC22A2 / OCT2 antibody (right histogram) at 1:25, 37°C for 60 min, followed by DyLight®488 labelled secondary antibody. Isotype control antibody (left histogram) was Rabbit IgG (1 µg/10^6 cells) used under the same conditions. Acquisition of > 10000 events was performed.