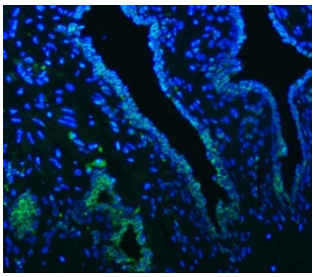
SLC22A8 Antibody / OAT3 (RQ7661)

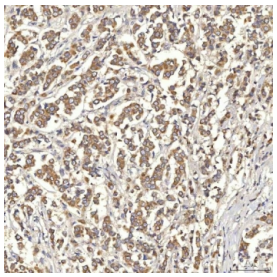
Catalog No.	Formulation	Size
RQ7661	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

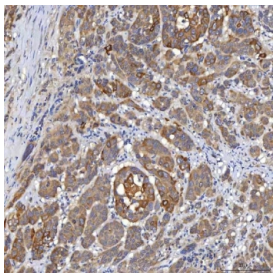
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q8TCC7
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Immunofluorescence: 5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This SLC22A8 / OAT3 antibody is available for research use only.



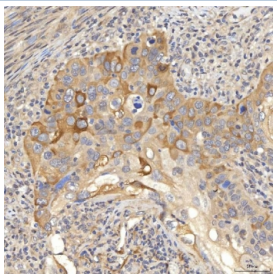
SLC22A8 / OAT3 Antibody Prostate Cancer IF. Immunofluorescence staining of FFPE human prostate cancer tissue using SLC22A8 Antibody / Organic Anion Transporter 3 (OAT3) Antibody demonstrates distinct green fluorescence within subsets of epithelial tumor-associated cells, consistent with expression of the membrane transporter SLC22A8/OAT3. Signal is observed in discrete cellular populations against a background of DAPI-counterstained nuclei (blue), supporting evaluation of transporter expression and localization in human prostate cancer tissue. Heat-induced epitope retrieval was performed by steaming tissue sections in pH 8 EDTA buffer for 20 minutes prior to staining. Target protein is visualized in green and nuclei are shown in blue.



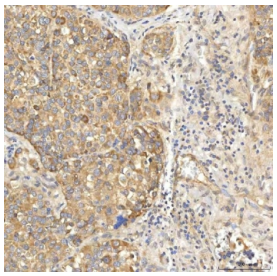
SLC22A8 / OAT3 Antibody Breast Cancer IHC. Immunohistochemistry staining of FFPE human breast cancer tissue using SLC22A8 Antibody / Organic Anion Transporter 3 (OAT3) Antibody demonstrates moderate to strong HRP-DAB brown staining within malignant epithelial cell populations. The observed staining pattern is predominantly membranous and cytoplasmic, consistent with expression of SLC22A8/OAT3, a transmembrane organic anion transporter involved in cellular uptake and transport of endogenous metabolites and xenobiotic compounds. These results support evaluation of OAT3 expression and localization in human breast cancer tissue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes followed by cooling prior to staining.



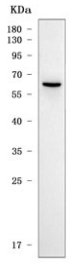
SLC22A8 / OAT3 Antibody Prostate Adenocarcinoma IHC. Immunohistochemistry staining of FFPE human prostate adenocarcinoma tissue using SLC22A8 Antibody / Organic Anion Transporter 3 (OAT3) Antibody demonstrates moderate to strong HRP-DAB brown staining within malignant glandular epithelial cells. The observed staining pattern is predominantly membranous and cytoplasmic, consistent with expression of SLC22A8/OAT3, a transmembrane transporter involved in organic anion uptake and cellular transport of endogenous metabolites and xenobiotic compounds. Staining highlights neoplastic glandular structures within the tumor microenvironment and supports evaluation of OAT3 expression and localization in human prostate adenocarcinoma tissue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes followed by cooling prior to staining.



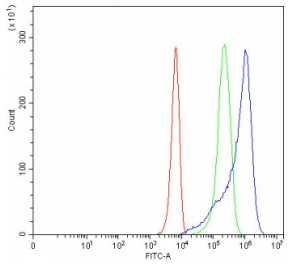
SLC22A8 / OAT3 Antibody Larynx Squamous Cell Carcinoma IHC. Immunohistochemistry staining of FFPE human larynx squamous cell carcinoma tissue using SLC22A8 Antibody / Organic Anion Transporter 3 (OAT3) Antibody demonstrates moderate to strong HRP-DAB brown staining within malignant squamous epithelial cell populations. The observed staining pattern is predominantly membranous and cytoplasmic, consistent with expression of SLC22A8/OAT3, a transmembrane organic anion transporter involved in cellular uptake and transport of endogenous metabolites, signaling molecules, and xenobiotic compounds. Staining highlights tumor-associated epithelial nests and supports evaluation of OAT3 expression and localization in human laryngeal squamous cell carcinoma tissue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes followed by cooling prior to staining.



SLC22A8 / OAT3 Antibody Liver Cancer IHC. Immunohistochemistry staining of FFPE human liver cancer tissue using SLC22A8 Antibody / Organic Anion Transporter 3 (OAT3) Antibody demonstrates moderate to strong HRP-DAB brown staining within malignant hepatocyte-like tumor cell populations. The observed staining pattern is predominantly membranous and cytoplasmic, consistent with expression of SLC22A8/OAT3, a transporter involved in organic anion uptake and cellular handling of endogenous metabolites, drugs, and xenobiotic compounds. Staining highlights tumor-associated epithelial cells and supports evaluation of OAT3 expression and localization in human liver cancer tissue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 8 EDTA buffer for 20 minutes followed by cooling prior to staining.



SLC22A8 / OAT3 Antibody Human 293T WB. Western blot analysis of human 293T cell lysate using SLC22A8 Antibody / Organic Anion Transporter 3 (OAT3) Antibody demonstrates a distinct band at approximately 60 kDa, consistent with the predicted molecular weight of SLC22A8/OAT3. OAT3 is a membrane-associated organic anion transporter involved in the cellular uptake and transport of endogenous metabolites, pharmaceutical compounds, and xenobiotic substances. The observed band supports detection of OAT3 expression in human cells and validates the antibody for Western blot applications.



SLC22A8 / OAT3 Antibody K562 FACS. Flow cytometry analysis of human K562 cells using SLC22A8 Antibody / Organic Anion Transporter 3 (OAT3) Antibody demonstrates a clear positive fluorescence shift relative to both unstained cells and isotype control-treated cells, consistent with expression of SLC22A8/OAT3. Overlay histograms compare cells alone (red), isotype control antibody (green), and SLC22A8/OAT3 antibody (blue), with the specific antibody producing a marked rightward shift indicative of target-associated binding. Cells were blocked with goat serum prior to staining, and antibody was used at 1 Î¼g per million cells. These results support application of the antibody for flow cytometric detection of OAT3 expression in human cell populations.

Description

SLC22A8 Antibody / OAT3 recognizes Solute Carrier Family 22 Member 8, more commonly known as Organic Anion Transporter 3 (OAT3), a multispecific membrane transporter involved in the uptake and excretion of a broad range of endogenous metabolites, drugs, toxins, and signaling molecules. OAT3 is predominantly expressed in the basolateral membrane of renal proximal tubule epithelial cells, where it plays a central role in renal secretion and systemic clearance of organic anions. Through its transport activity, OAT3 contributes to the elimination of numerous pharmaceutical compounds, making it an important target in nephrology, pharmacology, and drug development research.

As a member of the SLC22 transporter family, OAT3 functions in concert with other renal transporters to regulate the movement of organic solutes between blood and urine. Substrates transported by OAT3 include urate, prostaglandins, cyclic nucleotides, steroid conjugates, antibiotics, antiviral agents, diuretics, and a variety of xenobiotic compounds. Because OAT3 influences drug disposition and renal drug clearance, alterations in SLC22A8 expression or function can significantly affect pharmacokinetics, therapeutic efficacy, and susceptibility to drug-induced nephrotoxicity. Researchers frequently investigate OAT3 expression in studies of kidney physiology, transporter-mediated drug interactions, and renal disease mechanisms.

OAT3 is also implicated in broader physiological processes beyond renal excretion. Expression has been reported in additional tissues including the choroid plexus, brain, and vascular structures, where the transporter may contribute to metabolite homeostasis and regulation of signaling molecules. Changes in SLC22A8 expression have been associated with kidney injury, chronic kidney disease, inflammation, and altered metabolic states. Consequently, OAT3 has emerged as a valuable biomarker and research target for understanding transporter regulation, renal pathology, and mechanisms underlying drug toxicity and resistance.

SLC22A8 / OAT3 Antibody is useful for investigating renal transport pathways, membrane transporter biology, drug disposition, and nephrotoxicity-associated signaling networks. The antibody may be applied in studies examining transporter localization, tissue-specific expression, and regulation under physiological or pathological conditions. Common search terms including SLC22A8 antibody, OAT3 antibody, Organic Anion Transporter 3 antibody, renal transporter antibody, and kidney drug transporter antibody further reflect the broad scientific interest in this target across multiple research disciplines.

NSJ Bioreagents offers SLC22A8 / OAT3 Antibody to support studies of renal physiology, transporter-mediated drug handling, nephrology, pharmacokinetics, and cellular transport mechanisms. By enabling detection of this important organic anion transporter, the antibody provides researchers with a valuable tool for investigating kidney function, transporter biology, and drug transport pathways.

Researchers studying membrane transporters, renal physiology, drug disposition, and metabolite handling may also be interested in our Metabolism Antibodies landing page featuring targets involved in cellular transport, energy regulation, and metabolic homeostasis.

Application Notes

Optimal dilution of the SLC22A8 / OAT3 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids M1-Q470) was used as the immunogen for the SLC22A8 / OAT3 antibody.

Storage

After reconstitution, the SLC22A8 / OAT3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

SLC22A8 antibody, OAT3 antibody, Solute carrier family 22 member 8 antibody, Organic anion transporter 3 antibody

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