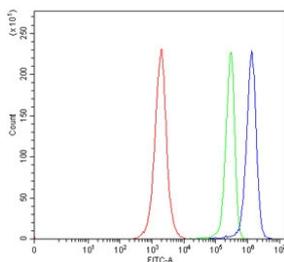


SLC5A7 Antibody / High affinity choline transporter 1 (RQ7364)

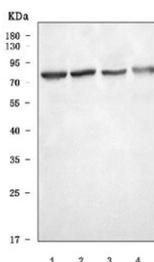
Catalog No.	Formulation	Size
RQ7364	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
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	Q9GZV3
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This SLC5A7 antibody is available for research use only.



Flow cytometry testing of human JK cells with SLC5A7 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= SLC5A7 antibody.



Western blot testing of 1) human A549, 2) human RT4, 3) rat C6 and 4) mouse NIH 3T3 cell lysate with SLC5A7 antibody. Predicted molecular weight ~63 kDa but may be observed at higher molecular weights due to glycosylation.

Description

The high-affinity choline transporter (ChT) also known as solute carrier family 5 member 7 is a protein in humans that is encoded by the SLC5A7 gene. This gene encodes a sodium ion- and chloride ion-dependent high-affinity transporter that mediates choline uptake for acetylcholine synthesis in cholinergic neurons. The protein transports choline from the extracellular space into presynaptic terminals for synthesis into acetylcholine. Increased choline uptake results from increased density of this protein in synaptosomal plasma membranes in response to depolarization of cholinergic terminals. Dysfunction of cholinergic signaling has been implicated in various disorders including depression, attention-deficit disorder, and schizophrenia. An allelic variant of this gene is associated with autosomal dominant distal hereditary motor neuronopathy type VIIA. Alternative splicing results in multiple transcript variants.

Application Notes

Optimal dilution of the SLC5A7 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids R446-Q580) was used as the immunogen for the SLC5A7 antibody.

Storage

After reconstitution, the SLC5A7 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.