

Product datasheet

info@arigobio.com

ARG11146 anti-Serotonin Transporter antibody

Package: 50 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes Serotonin Transporter

Tested Reactivity Hu, Ms, Rat, Cow

Tested Application IHC-Fr

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name Serotonin Transporter

Species Human

Immunogen KLH-conjugated synthetic peptide of Human Serotonin Transporter. (KSITPETPTEIPCGDIRLNAV)

Conjugation Un-conjugated

Alternate Names SERT; 5HTT; SERT1; Sodium-dependent serotonin transporter; hSERT; 5-HTTLPR; Solute carrier family 6

member 4; HTT; 5-HTT; 5HT transporter; OCD1

Application Instructions

Application table	Application	Dilution
	IHC-Fr	1:2000 - 1:5000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS, 5 mM Sodium azide and 50% Glycerol.

Preservative 5 mM Sodium azide

Stabilizer 50% Glycerol

Concentration 1 mg/ml

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. 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 SLC6A4

Gene Full Name solute carrier family 6 (neurotransmitter transporter), member 4

Background This gene encodes an integral membrane protein that transports the neurotransmitter serotonin from

synaptic spaces into presynaptic neurons. The encoded protein terminates the action of serotonin and recycles it in a sodium-dependent manner. This protein is a target of psychomotor stimulants, such as amphetamines and cocaine, and is a member of the sodium:neurotransmitter symporter family. A repeat length polymorphism in the promoter of this gene has been shown to affect the rate of serotonin uptake. There have been conflicting results in the literature about the possible effect, if any, that this polymorphism may play in behavior and depression. [provided by RefSeq, May 2019]

Function Serotonin transporter whose primary function in the central nervous system involves the regulation of

serotonergic signaling via transport of serotonin molecules from the synaptic cleft back into the presynaptic terminal for re-utilization. Plays a key role in mediating regulation of the availability of serotonin to other receptors of serotonergic systems. Terminates the action of serotonin and recycles it

in a sodium-dependent manner. [UniProt]

Calculated Mw 70 kDa

PTM Glycosylated; modification with sialylated N-glycans is a requirement for transporters to associate with

each other and to function as homooligomeric forms.

Phosphorylation at Thr-276 increases 5-HT uptake and is required for cGMP-mediated SERT regulation. Phosphorylation upon PKC stimulation modifies the SERT distribution and density in the membrane,

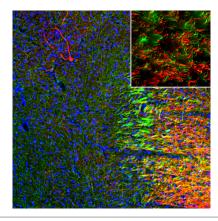
and diminishes the uptake capacity. [UniProt]

Cell membrane; Multi-pass membrane protein. Endomembrane system; Multi-pass membrane protein.

Endosome membrane; Multi-pass membrane protein. Note=Could be part of recycling endosomes (PubMed:18227069, PubMed:16870614). Density of transporter molecules on the plasma membrane is itself regulated by STX1A (By similarity). Density of transporter molecules on the plasma membrane is

also regulated by serotonin (PubMed:17506858) (PubMed:18227069). [UniProt]

Images



ARG11146 anti-Serotonin Transporter antibody IHC-Fr image

Immunohistochemistry: Frozen section of Rat brain tissue stained with ARG11146 anti-Serotonin Transporter antibody (green), and costained with <u>ARG11150</u> anti-Tyrosine Hydroxylase antibody (red). The blue stain reveals DNA in cell nuclei.