

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	lgG
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 recomme should be determined by the scie	nded starting dilutions and the optimal dilutions or concentrations ntist.

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 pre- synaptic 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]
Cellular Localization	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.