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Anti-Serotonin Transporter (Thr276) Antibody

Our Anti-Serotonin Transporter (Thr276) rabbit polyclonal phosphospecific primary antibody from Phos
Catalog # AN1553

Product Information

Application	WB
Primary Accession	P31652
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	70172

Additional Information

Gene ID	25553
Other Names	5 HTT antibody, 5 HTTLPR antibody, 5 hydroxytryptamine (serotonin) transporter antibody, 5 hydroxytryptamine transporter antibody, 5HT transporter antibody, 5HTT antibody, hSERT antibody, HTT antibody, Na+/Cl- dependent serotonin transporter antibody, OCD1 antibody, SC6A4_HUMAN antibody, Serotonin transporter 1 antibody, SERT antibody, SERT1 antibody, Slc6a4 antibody, Sodium dependent serotonin transporter antibody, Sodium-dependent serotonin transporter antibody, Solute carrier family 6 (neurotransmitter transporter) member 4 antibody, solute carrier family 6 (neurotransmitter transporter serotonin) member 4 antibody, Solute carrier family 6 member 4 antibody
Target/Specificity	The serotonin transporter (SERT) recycles serotonin by transporting it back to the pre-synaptic cell. It is the primary target for most anti-depressant drugs and for stimulants such as methamphetamines. SERT is regulated by several processes, including a cyclic GMP signaling pathway involving nitric oxide synthase, guanylyl cyclase, and cGMP-dependent protein kinase (PKG). cGMP- and PKG-mediated SERT regulation requires phosphorylation at Thr-276 (Ramamoorthy et al., 2007). It has been suggested that although PKG is involved in the stimulation of SERT at Thr-276, it does not directly phosphorylate the residue, rather it initiates a kinase cascade that leads to SERT phosphorylation by an as yet unidentified protein kinase (Wong et al., 2012). Also of therapeutic importance, mutation at the Thr-276 residue has been shown to decrease the potency of a variety of anti-depressant drugs, (Zhang YW and Rudnick G, 2005).
Dilution	WB~~1:1000
Format	Antigen Affinity Purified from Pooled Serum
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions	Anti-Serotonin Transporter (Thr276) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

The serotonin transporter (SERT) recycles serotonin by transporting it back to the pre-synaptic cell. It is the primary target for most anti-depressant drugs and for stimulants such as methamphetamines. SERT is regulated by several processes, including a cyclic GMP signaling pathway involving nitric oxide synthase, guanylyl cyclase, and cGMP-dependent protein kinase (PKG). cGMP- and PKG-mediated SERT regulation requires phosphorylation at Thr-276 (Ramamoorthy et al., 2007). It has been suggested that although PKG is involved in the stimulation of SERT at Thr-276, it does not directly phosphorylate the residue, rather it initiates a kinase cascade that leads to SERT phosphorylation by an as yet unidentified protein kinase (Wong et al., 2012). Also of therapeutic importance, mutation at the Thr-276 residue has been shown to decrease the potency of a variety of anti-depressant drugs, (Zhang YW and Rudnick G, 2005).