

Anti-Serotonin Transporter (Thr276) Antibody

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

Specification

Anti-Serotonin Transporter (Thr276) Antibody - Product Information

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

Anti-Serotonin Transporter (Thr276) Antibody - 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).

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

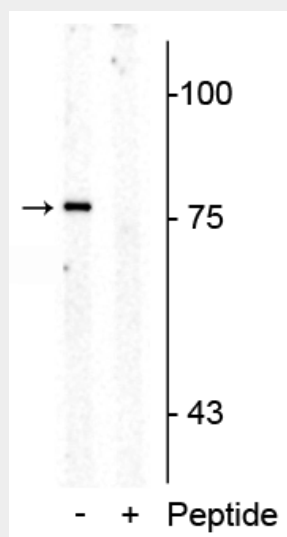
Blue Ice

Anti-Serotonin Transporter (Thr276) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Serotonin Transporter (Thr276) Antibody - Images



Western blot of rat mid brain membrane lysate showing specific immunolabeling of the ~76 kDa SERT protein phosphorylated at Thr276 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is blocked by preadsorption of the phosphopeptide used as antigen, but not by the corresponding non-phosphopeptide (not shown).

Anti-Serotonin Transporter (Thr276) Antibody - 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).