

## Anti-Phospho-Serotonin Transporter (Thr276) SLC6A4 Antibody

Catalog Number: P00496

### About SLC6A4

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).

### Overview

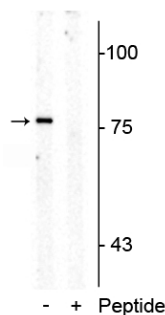
Product Name	Anti-Phospho-Serotonin Transporter (Thr276) SLC6A4 Antibody
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Phospho-Serotonin Transporter (Thr276) SLC6A4 Antibody (Catalog # P00496). Tested in WB applications. This antibody reacts with Mouse, Rat.
Application	WB
Clonality	Polyclonal
Formulation	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Storage Instructions	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C. After date of receipt, stable for at least 1 year at -20°C.
Host	Rabbit
Uniprot ID	P31652

### Technical Details

Immunogen	Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr276 of rat SERT, conjugated to keyhole limpet hemocyanin (KLH). Immunogen species is Rat.
Predicted Reactive Species	Bovine, Human, Primate, Sheep, Xenopus
Isotype	IgG
Form	Liquid
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.

Purification	Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>WB: 1:1000</p>

## Anti-Phospho-Serotonin Transporter (Thr276) SLC6A4 Antibody (P00496) Images



Western blot of rat mid brain membrane lysate showing specific immunolabeling of the ~76 kDa SERT protein phosphorylated at Thr<sup>276</sup> 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).

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