

Product datasheet for **TA389034**

Phospho-Slc6a4 (pThr276) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:1000 WB Brain: 1:1000
Reactivity:	Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr276 of rat SERT, conjugated to keyhole limpet hemocyanin (KLH).
Specificity:	Specific for endogenous levels of the ~76 kDa SERT protein phosphorylated at Thr276. Immunolabeling is blocked by preadsorption with the phosphopeptide used as antigen, but not by the corresponding non-phosphopeptide.
Formulation:	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Concentration:	lot specific
Purification:	Antigen Affinity Purified from Pooled Serum
Conjugation:	Unconjugated
Storage:	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.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	76
Gene Name:	solute carrier family 6 member 4
Database Link:	Entrez Gene 25553 Rat P31645



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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).
Synonyms:	5-HTT; 5-HTTLPR; 5HTT; hSERT; HTT; OCD1; OTTHUMP00000163633; SERT
Note:	Prepared from pooled rabbit serum by affinity purification via sequential chromatography on phospho and non-phosphopeptide affinity columns.