

Anti-Sodium-dependent serotonin transporter [1-4A5] Bulk Size Ab02547-10.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: 1-4A5

Alternative Name(s) of Target: SLC6A4; SERT; 5HT transporter; 5HTT; Solute carrier family 6 member 4

UniProt Accession Number of Target Protein: P31645

Published Application(s): ICC, WB, IF, IHC

Published Species Reactivity: Human

Immunogen: This antigen was raised by immunizing a BALB/c mouse with the sodium-dependent serotonin transporter antigen.

Specificity: This antibody is specific for the sodium-dependent serotonin transporter. This protein is a 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.

Application Notes: This antibody was used for immunohistochemistry on monkey midbrain and hypothalamic sections (Lu et al, 2003; pmid:12660809). Immunofluorescence was preformed on rat neurons using this antibody (Wersinger and Sidhu, 2009; pmid:19429025). SERT protein was analyzed with a western blot using this antibody (Chamba et al, 2008; pmid:18783838). Immunocytochemistry was preformed on stable Bcl-2 transfectants of EBV-ve L3055 Burkitt's lymphoma cells with this antibody (Chamba et al, 2008; pmid:18783838). This antibody was used for immunohistochemistry on mouse brain sections (Zhu et al, 2011; pmid:21705486). Pellets from the centrifuged homogenized rhesus monkey midbrain pontine blocks containing membrane-bound proteins were immunoblotted with this antibody (Smith et al, 2004; pmid:15199371). Western blot was preformed on a human colon adenocarcinoma Caco-

2 cell line using this antibody (Mastrangelo et al, 2008; pmid:18593952).

Antibody First Published in: Lu et al. Ovarian steroid regulation of serotonin reuptake transporter (SERT) binding, distribution, and function in female macaques Mol Psychiatry. 2003 Mar;8(3):353-60.

[PMID:12660809](#)

Note on publication: It was investigated whether the ovarian steroids, estrogen (E) and progesterone (P) regulate SERT binding, intracellular distribution, and function using [(3)H]citalopram ligand binding with quantitative autoradiography, immunofluorescence histochemistry with confocal microscopy and [(3)H]serotonin uptake, respectively.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.