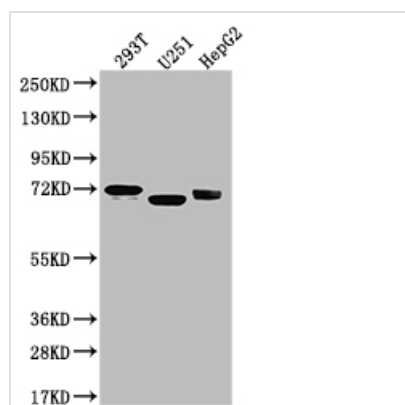




SLC6A4 Recombinant Monoclonal Antibody

Product Code	CSB-RA224413A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P31645
Immunogen	A synthesized peptide derived from human Serotonin transporter
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience; Metabolism; Signal transduction
Gene Names	SLC6A4
Clone No.	9G3

Image



Western Blot

Positive WB detected in: U-87 whole cell lysate, 293T whole cell lysate, U-251 whole cell lysate, HepG2 whole cell lysate

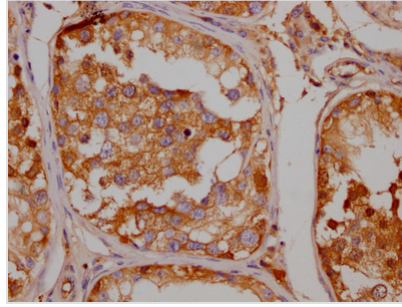
All lanes: Serotonin transporter antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 71, 75 kDa

Observed band size: 55 kDa



IHC image of CSB-RA224413A0HU diluted at 1:100 and staining in paraffin-embedded human testis tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The creation of the SLC6A4 recombinant monoclonal antibody involves four main stages: sequencing the SLC6A4 monoclonal antibody gene, cloning the gene into a plasmid vector, introducing the recombinant vector into a host cell line, and purifying the SLC6A4 recombinant monoclonal antibody using affinity chromatography. The SLC6A4 monoclonal antibody is obtained from the SLC6A4 antibody-producing hybridomas, with a synthesized peptide derived from human SLC6A4 used as the immunogen during its production. Once purified, the SLC6A4 recombinant monoclonal antibody is then tested and characterized and can be utilized in ELISA, WB, and IHC applications to detect human SLC6A4 protein.

The SLC6A4 protein, also known as the serotonin transporter (SERT), is a membrane-bound protein that plays a key role in the regulation of serotonin neurotransmission in the brain. SLC6A4 is responsible for the reuptake of serotonin from the synaptic cleft back into the presynaptic neuron, thereby terminating the action of serotonin at the synapse. This process is important in the modulation of mood, behavior, and various physiological processes. Dysfunction of the SLC6A4 gene has been associated with various psychiatric disorders, including depression, anxiety, and autism.