

Anti-Serotonin transporter Antibody [JE34-53]

HA721544



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, FC
Molecular Wt:	Predicted band size: 70 kDa
Clone number:	JE34-53

Description: The serotonin transporter (SERT or 5-HTT) also known as the sodium-dependent serotonin transporter and solute carrier family 6 member 4 is a protein that in humans is encoded by the SLC6A4 gene. SERT is a type of monoamine transporter protein that transports the neurotransmitter serotonin from the synaptic cleft back to the presynaptic neuron, in a process known as serotonin reuptake. This transport of serotonin by the SERT protein terminates the action of serotonin and recycles it in a sodium-dependent manner. Many antidepressant medications of the SSRI and tricyclic antidepressant classes work by binding to SERT and thus reducing serotonin reuptake. It is a member of the sodium:neurotransmitter symporter family. A repeat length polymorphism in the promoter of this gene has been shown to affect the rate of serotonin uptake and may play a role in sudden infant death syndrome, aggressive behavior in Alzheimer disease patients, post-traumatic stress disorder and depression-susceptibility in people experiencing emotional trauma.

Immunogen: Recombinant protein.

Positive control: Mouse brain tissue lysate, rat brain tissue lysate, mouse lung tissue lysate, HepG2.

Subcellular location: Cell membrane. Endomembrane system. Endosome membrane. Translocates from intracellular locations to the plasma membrane. Density of transporter molecules on the plasma membrane is itself regulated by serotonin.

Database links: SwissProt: P31645 Human | Q60857 Mouse | P31652 Rat

Recommended Dilutions:

WB	1:1,000
FC	1:500-1:1,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

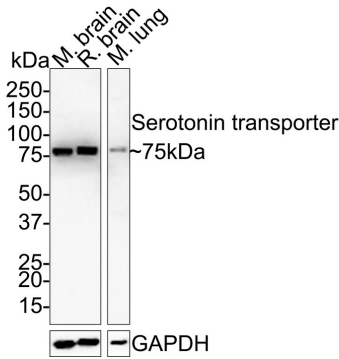
Service mail:support@huabio.cn

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Images

Fig1: Western blot analysis of Serotonin transporter on different lysates with Rabbit anti-Serotonin transporter antibody (HA721544) at 1/1,000 dilution.

Lane 1: Mouse brain tissue lysate
Lane 2: Rat brain tissue lysate
Lane 3: Mouse lung tissue lysate



Lysates/proteins at 30 µg/Lane.

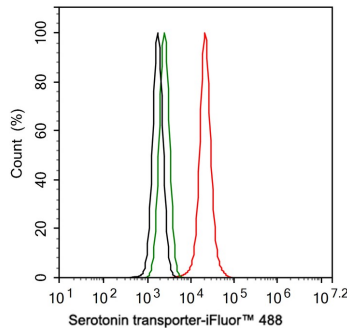
Predicted band size: 70 kDa
Observed band size: 75 kDa

Exposure time: 28 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (HA721544) at 1/1,000 dilution was used in 5% NFDN/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

Fig2: Flow cytometric analysis of HepG2 cells labeling Serotonin transporter.



Cells were fixed and permeabilized. Then stained with the primary antibody (HA721544, 1µg/ml) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4°C for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4°C. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- Gao J et al. Mucosal Serotonin Reuptake Transporter Expression in Irritable Bowel Syndrome Is Modulated by Gut Microbiota Via Mast Cell-Prostaglandin E2. *Gastroenterology*. 2022 Jun
- Szoke-Kovacs Z et al. Selective Inhibition of the Serotonin Transporter in the Treatment of Depression: Sertraline, Fluoxetine and Citalopram. *Neuropsychopharmacol Hung*. 2020 Mar

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