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## SLC6A7 Rabbit pAb

Catalog Number: bs-12124R

Target Protein: SLC6A7

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), ICC/IF (1:100-500), ELISA (1:5000-10000)

Reactivity: (predicted:Human, Mouse, Rat, Pig, Sheep, Cow, Chicken, Dog, Horse)

Predicted MW: 71 kDa

Subcellular: Cell membrane

Locations:

Entrez Gene: 6534

Swiss Prot: Q99884

Source: KLH conjugated synthetic peptide derived from human SLC6A7/PROT: 151-260/636.

Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** The GAT1 gene family includes sodium- and chloride-dependent plasma membrane transporters for neurotransmitters, metabolites and osmolites, which couple substrate flux to transmembrane electrochemical gradients. PROT (Sodium-dependent proline transporter), also known as Solute carrier family 6 member 7, is a 636 amino acid multi-pass membrane protein that is a GAT1 family member specifically expressed in regions of the brain. PROT terminates the action of proline by its high affinity sodium/chloride-dependent reuptake into pre-synaptic terminals. Enriched in glutamatergic synaptic terminals, it is likely that PROT plays an important role in excitatory events of neurotransmission. PROT-mediated proline uptake is inhibited by compounds such as benztropine, LP-403812 and Des-Tyr-Leu-enkephalin (GGFL). These inhibitors of proline uptake may lead to the development of therapeutic agents for certain neurologic disorders.