

## Rabbit Anti-SLC6A7/AF350 Conjugated antibody

SL12124R-AF350

<b>Product Name</b>	Anti-SLC6A7/AF350
<b>Chinese Name</b>	AF350 标记的钠依赖性脯氨酸转运 PROT 抗体
<b>Alias</b>	SC6A7_HUMAN; Slc6a7; Sodium-dependent proline transporter; Solute carrier family 6 member 7; PROT.
<b>Research Area</b>	Cell biology Neurobiology Signal transduction Channel protein The cell membrane 受体 Transporter
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	(predicted:Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Sheep)
<b>Applications</b>	ICC/IF=1:50-200,IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight</b>	71kDa
<b>Form</b>	Lyophilized or Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human SLC6A7/PROT
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Storage Buffer</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>Product Detail</b>	<b>background:</b> 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.

**Function:**

Terminates the action of proline by its high affinity sodium-dependent reuptake into presynaptic terminals.

**Subcellular Location:**

Membrane.

**Tissue Specificity:**

Brain.

**Similarity:**

Belongs to the sodium:neurotransmitter symporter (SNF) (TC 2.A.22) family. SLC6A7 subfamily.

**Database links:**

[Entrez Gene: 6534](#) Human

[Entrez Gene: 117100](#) Rat

[Olim: 606205](#) Human

[SwissProt: Q99884](#) Human

[SwissProt: P28573](#) Rat

[Unigene: 241597](#) Human

[Unigene: 9663](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.