

SLC1A7 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57925

Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype	IHC-P, IHC-F, IF, ICC, E O00341 Dog, Bovine Rabbit Polyclonal 60658 Liquid KLH conjugated synthetic peptide derived from human SLC1A7 1-100/560 IgG
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SUBCELLULAR LOCATION SIMILARITY	Membrane. Belongs to the sodium:dicarboxylate (SDF) symporter (TC 2.A.23) family. SLC1A7 subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Additional Information

Gene ID	6512
Other Names	Excitatory amino acid transporter 5, Retinal glutamate transporter, Solute carrier family 1 member 7, SLC1A7, EAAT5
Target/Specificity	Expressed primarily in retina. Detectable in liver, heart, muscle and brain.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000- 10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name

SLC1A7 (HGNC:10945)

Synonyms	EAAT5
Function	Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D- aspartate. Functions as a symporter that transports one amino acid molecule together with two or three Na(+) ions and one proton, in parallel with the counter-transport of one K(+) ion (PubMed: <u>9108121</u>). Acts primarily as an inhibitory glutamate-gated chloride channel being a major inhibitory presynaptic receptor at mammalian rod bipolar cell axon terminals. Glutamate binding gates a large Cl(-) conductance that mediates inhibition, affecting visual processing in the retina (By similarity).
Cellular Location	Photoreceptor inner segment membrane {ECO:0000250 UniProtKB:Q8JZR4}; Multi-pass membrane protein. Synaptic cell membrane {ECO:0000250 UniProtKB:Q8JZR4}; Multi-pass membrane protein. Note=Located in both cone and rod photoreceptor terminals and in axon terminals of rod bipolar cells. {ECO:0000250 UniProtKB:Q8JZR4}
Tissue Location	Expressed primarily in retina. Detectable in liver, heart, muscle and brain.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.