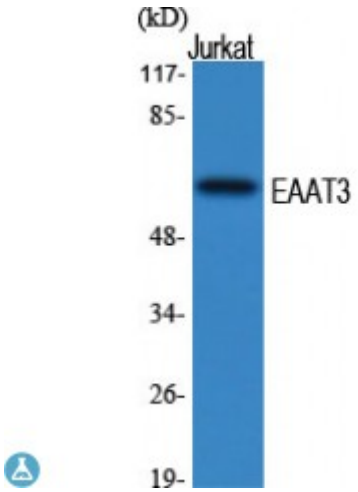
Anti-EAAT3 antibody



Description	Rabbit polyclonal to EAAT3.

Model	STJ92814
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human EAAT3.
Immunogen Region	Internal
Gene ID	6505
Gene Symbol	SLC1A1
Dilution range	WB 1:500-1:2000ELISA 1:10000
Specificity	EAAT3 Polyclonal Antibody detects endogenous levels of EAAT3 protein.
Tissue Specificity	Expressed in all tissues tested including liver, muscle, testis, ovary, retinoblastoma cell line, neurons and brain (in which there was dense expression in substantia nigra, red nucleus, hippocampus and in cerebral cortical layers).
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Excitatory amino acid transporter 3 Excitatory amino-acid carrier 1 Neuronal and epithelial glutamate transporter Sodium-dependent glutamate/aspartate transporter 3 Solute carrier family 1 member 1

Molecular Weight	57 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:10939OMIM:133550
Alternative Names	Excitatory amino acid transporter 3 Excitatory amino-acid carrier 1 Neuronal and epithelial glutamate transporter Sodium-dependent glutamate/aspartate transporter 3 Solute carrier family 1 member 1
Function	Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate . Can also transport L-cysteine . 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 . Mediates Cl(-) flux that is not coupled to amino acid transport; this avoids the accumulation of negative charges due to aspartate and Na(+) symport . Plays an important role in L-glutamate and L-aspartate reabsorption in renal tubuli . Plays a redundant role in the rapid removal of released glutamate from the synaptic cleft, which is essential for terminating the postsynaptic action of glutamate . Negatively regulated by ARL6IP5 .
Sequence and Domain Family	Contains eight transmembrane regions plus two helical hairpins that dip into the membrane. These helical hairpin structures play an important role in the transport process. The first enters the membrane from the cytoplasmic side, the second one from the extracellular side. During the transport cycle, the regions involved in amino acid transport, and especially the helical hairpins, move vertically by about 15-18 Angstroms, alternating between exposure to the aqueous phase and reinsertion in the lipid bilayer. In contrast, the regions involved in trimerization do not move.
Cellular Localization	Cell membrane Apical cell membrane
Post-translational Modifications	Glycosylated.