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Serine racemase Antibody

Rabbit mAb
Catalog # AP93077

Product Information

Application	WB
Primary Accession	Q9GZT4
Reactivity	Human
Clonality	Monoclonal
Other Names	D serine ammonia lyase; ILV1; ISO1; L serine ammonia lyase;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	36566

Additional Information

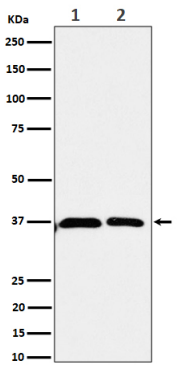
Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Serine racemase
Description	Catalyzes the synthesis of D-serine from L-serine. D-serine is a key coagonist with glutamate at NMDA receptors. Has dehydratase activity towards both L-serine and D-serine.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	SRR
Function	Pyridoxal-5'-phosphate (PLP)-dependent enzyme that catalyzes the synthesis of D-serine from L-serine (PubMed:20106978, PubMed:23391306, PubMed:29277459). D-serine is a key coagonist with glutamate at NMDA receptors. In addition to racemization, has dehydratase activity towards both L-serine and D-serine, a two-step reaction in which the hydroxyl group of serine is eliminated to produce aminoacrylate (2-aminoprop-2-enoate), and then the aminoacrylate (an unstable intermediate) is deaminated by nonenzymatic hydrolysis to produce pyruvate (By similarity).
Tissue Location	Expressed in the cerebellum, hippocampus, dorsolateral prefrontal cortex, and in motor neurons and glial cells of the lumbar spinal cord (at protein level) (PubMed:17880399, PubMed:24138986). Increased in the dorsolateral prefrontal cortex of schizophrenic patients (at protein level) (PubMed:17880399). Brain: expressed at high levels in hippocampus and corpus callosum, intermediate levels in substantia nigra and caudate, and low levels in amygdala, thalamus, and subthalamic nuclei (PubMed:15193426).

Expressed in heart, skeletal muscle, kidney, and liver (PubMed:15193426)

Images



Western blot analysis of Serine racemase expression in (1) 293 cell lysate; (2) U-87 MG cell lysate.

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