10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Serine Racemase Rabbit mAb

Catalog # AP76708

Product Information

Application	WB, IP
Primary Accession	Q9GZT4
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	36566

Additional Information

Gene ID	63826
Other Names	SRR
Dilution	WB~~1:1000 IP~~N/A
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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)

Background

Catalyzes the synthesis of D-serine from L-serine.

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