OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

AR50194PU-N Human Serine racemase / SRR (1-340, His-tag) - Purified

Quantity: 50 µg

Concentration: 0.5 mg/ml (determined by Bradford assay)

Background: SRR, also known as serine racemase, is an enzyme which generates D-serine from L-serine. D-serine acts as a neuronal signaling molecule by activating NMDA receptors in the brain. Mammalian serine racemase is a pyridoxal 5'-phosphate dependent enzyme that catalyzes both the racemization of L-serine to D-serine and also the elimination of water from L-serine, generating pyruvate and ammonia. The enzyme is physiologically stimulated by divalent cations (e.g., magnesium) and is allosterically activated by the magnesium/ATP complex.

Uniprot ID: Q9GZT4

NCBI: NP_068766

GeneID: 63826

Species: Human

Source: E. coli

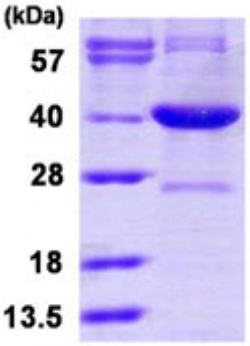
Format: **State:** Liquid purified protein
Purity: >85% by SDS - PAGE
Buffer System: 20 mM Tris-HCl buffer (pH8.0) containing 20% glycerol, 0.1M NaCl, 1mM DTT

Description: Recombinant human SRR protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.
AA Sequence:
MGSSHHHHHH SSGLVPRGSH MGSHMCAQYC ISFADVEKAH INIRDSIHLT PVLTSSILNQ
LTGRNLFFKC ELFQKTGSFK IRGALNAVRS LVPDALERKP KAVVTHSSGN HGQALTYAAK
LEGIPAYIVV PQTAPDCKKL AIQAYGASIV YCEPSDESRE NVAKRVTEET EGIMVHPNQE
PAVIAGQGTI ALEVLNQVPL VDALVVPVGG GGMLAGIAIT VKALKPSVKV YAAEPSNADD
CYQSKLKGKL MPNLYPPETI ADGVKSSIGL NTWPIIRDLV DDIFTVTEDE IKCATQLVWE
RMKLLIEPTA GVGVAAVLSQ HFQTVSPEVK NICIVLSGGN VDLTSSITWV KQAERPASYQ SVSV
Molecular weight: 39.1 kDa (364aa), confirmed by MALDI-TOF

Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings: De Miranda J., et al. (2000) Gene. 256:183-188Smith M.A., et al. (2010) J. Biol. Chem. 285:12873-12881

Pictures:



15% SDS-PAGE (3ug)