重组人GRIK3蛋白

Recombinant GRIK3 protein (His tag)

目录号 Catalog Number	547248
同用名 Synonyms	GluK3; Excitatory amino acid receptor 5; EAA5; Glutamate receptor 7; GluR-7; GluR7
种属 Species	Human
表达系统 Expression System	E. coli
蛋白编号 Accession	Q13003
分子量 Molecular Weight	Predictes a molecular mass of 19.38 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

产品信息

氨基酸序列 Amino Acid Sequence	MAAFLTVERM ESPIDSADDL AKQTKIEYGA VKDGATMTFF KKSKISTFEK MWAFMSSKPS ALVKNNEEGI QRALTADYAL LMESTTIEYV TQRNCNLTQI GGLIDSKGYG IGTPMGSPYR DKITIAILQL QEEDKLHIMK EKWWRGSGCP EEENKEASAL GIQKLEHHHH HH
性状 Form	冻干粉末 Lyophilized powder
组分 Formulation	Lyophilized from sterile PBS, pH 7.4
纯度 Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
内毒素 Endotoxin	Not tested.
活性 Activity	Not tested.
稳定性 Stability	Samples are stable for up to twelve months from date of receipt at -70℃
蛋白构建 Protein Construction	DNA encoding 658-820 aa (Q13003) were fused with C-terminal 6His tag.

保存与运输

复溶 Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
储存 Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
运输 Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

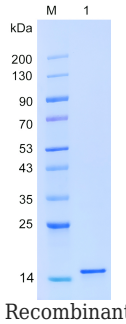
功能描述

研究背景 Background

This recombinant protein product features a 163-amino acid fragment (residues 658-820) of human Glutamate receptor ionotropic, kainate 3 (GluK3), a key ionotropic glutamate receptor that functions as a cation-permeable ligand-gated ion channel. The fragment has been computationally selected for optimal stability and solubility, making it ideal for structural studies and biochemical characterization of this important neuronal receptor.
Glutamate receptor ionotropic, kainate 3 (GluK3) is an excitatory neurotransmitter receptor that functions as a cation-permeable ligand-gated ion channel, activated by L-glutamate and the glutamatergic agonist kainic acid. Upon binding L-glutamate, the receptor undergoes conformational changes that open the cation channel, converting chemical signals to electrical impulses in neuronal communication. The receptor rapidly desensitizes and enters a transient inactive state after activation. In association with GRIK2, GluK3 participates in presynaptic facilitation of glutamate release at hippocampal mossy fiber synapses. The full-length protein is localized to the cell membrane and postsynaptic cell membrane as a multi-pass membrane protein, playing crucial roles in excitatory neurotransmission in the central nervous system.

验证数据

SDS-PAGE



Recombinant GRIK3 protein (His tag) SDS-PAGE
Lane 1: GRIK3