

Grik3 antibody (pAb)

Rabbit Anti-Human/Mouse/Rat Grik3

Instruction Manual

Catalog Number	PK-AB718-4389
Synonyms	Grik3 Antibody: Grik3, Glutamate receptor ionotropic kainate 3, glutamate receptor 7, gluR7, excitatory amino acid receptor 5, eea5
Description	Glutamate receptors are the predominant excitatory neurotransmitter receptors in the mammalian brain and are activated in a variety of normal neurophysiologic processes. Grik3, also known as glutamate receptor 7, belongs to the kainate family of glutamate receptors, which are composed of four subunits and function as ligand-activated ion channels. Grik3 is highly homologous to the related ionotropic glutamate receptors Grik2 and Grik1. Grik3 has recently been shown to be an essential subunit of presynaptic kainate autoreceptors at hippocampal mossy fiber synapses as grik3-null mice show significantly reduced short- and long-term synaptic potentiation. Other reports have suggested that different polymorphisms in the Grik3 protein may be associated with neurological defects such as recurrent major depressive disorder and schizophrenia. This Grik3 antibody does not cross-react with Grik2.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Grik3 antibody was raised in rabbits against a 13 amino acid peptide near the amino terminus of the human Grik3.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB I>Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. Grik3 antibody can be used for detection of Grik3 by Western blot at 1 - 2 µg/mL.
Images	Available upon request.
References	Tanaka K. Functions of glutamate transports in the brain. <i>Neurosci. Res.</i> 2000; 37:15-9. Pinheiro P and Mulle C. Kainate receptors. <i>Cell Tissue Res.</i> 2006; 326:457-82. Puranam RS, Eubanks JH, Heinemann SF, et al. Chromosomal localization of gene for human glutamate receptor subunit-7. <i>Somat. Cell Mol. Genet.</i> 1993; 19:581-8. Pinheiro PS, Perrais D, Coussen F, et al. GluR7 is an essential subunit of presynaptic kainate autoreceptors at hippocampal mossy fiber synapses. <i>Proc. Natl. Acad. Sci. USA</i> 2007; 104:12181-6.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4389P; Grik3 Peptide Cat.No. PK-AB718-1303; Human Brain Tissue Lysate

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