

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GluR4 in direct ELISA.
Source	Monoclonal Rabbit IgG Clone # 2913C
Purification	Protein A or G purified from cell culture supernatant
Immunogen	E. coli-derived recombinant human GluR4 Met112-His314 Accession # P48058.2
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Iontropic glutamate receptor 4 (GluR4) is a 100.9 kDa protein that is part of a family (iGluR 1-7) of ligand-gated ion channels that mediates fast transmission of neurotransmitter signals in neuronal cells. These receptors respond to several agonists including N-methyl-D-aspartic acid (NMDA), α-amino-3-hydroxyl-5-methylisoxazole-4-propionic acid (AMPA), or kainic acid (KA). iGluRs are tetrameric structures made by the dimerization of dimers. These receptors can form through a combination of iGluR1-iGluR4 subunits. Mature human GluR4 is a 902 amino acid (aa) molecule, and alternate gene-splicing results in transcript variations encoding different isoforms that may effect their signal transduction properties. GluR4 is made up of an extracellular amino-terminal domain (ATD), ligand binding domain (LBD), a common pore-forming transmembrane domain (TMD) and an intracellular C-terminal domain (CTD). GluR4's clam-shell shaped LBD binds to agonists. The LBD closes upon ligand binding to induce a conformational change to the TMD, resulting in the ion channel opening. GluR4 is highly expressed in areas that utilize fast kinetics and rapid desensitization. Examples of GluR4 expression include tissues of the central cervical nucleus in rats, the outer plexiform layer of goldfish, the retinal cells of chicken embryos and the human cerebral cortex.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.