Best Tools for immunology Research

KCNQ2/3/4/5 Polyclonal Antibody

Catalog No :	YT2458
Reactivity :	Human;Mouse;Rat
Applications :	IHC;IF;ELISA
Target :	KCNQ2/3/4/5
Fields :	>>Cholinergic synapse
Gene Name :	KCNQ2
Protein Name :	Potassium voltage-gated channel subfamily KQT member 2
Human Gene Id :	3786
Human Swiss Prot No :	O43526/O43525/P56696/Q9NR82
Mouse Gene Id :	16536/110862/60613/226922
Rat Gene Id :	170848/29682
Rat Swiss Prot No :	O88943/O88944/Q9JK96
Immunogen :	The antiserum was produced against synthesized peptide derived from human Kv7.3/KCNQ3. AA range:191-240
Specificity :	KCNQ2/3/4/5 Polyclonal Antibody detects endogenous levels of KCNQ2/3/4/5 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 97kD

Background : The M channel is a slowly activating and deactivating potassium channel that plays a critical role in the regulation of neuronal excitability. The M channel is formed by the association of the protein encoded by this gene and a related protein encoded by the KCNQ3 gene, both integral membrane proteins. M channel currents are inhibited by M1 muscarinic acetylcholine receptors and activated by retigabine, a novel anti-convulsant drug. Defects in this gene are a cause of benign familial neonatal convulsions type 1 (BFNC), also known as epilepsy, benign neonatal type 1 (EBN1). At least five transcript variants encoding five different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

Function : alternative products:Additional isoforms seem to exist,disease:Defects in KCNQ2 are the cause of benign neonatal epilepsy type 1 (EBN1) [MIM:121200]. Benign neonatal epilepsy is characterized by clusters of seizures occurring in the first days of life. Most patients have spontaneous remission by 12 months of age and show normal psychomotor development. The disorder is distinguished from benign familial infantile seizures by an earlier age at onset.,disease:Defects in KCNQ2 are the cause of benign neonatal epilepsy with myokymia (EBNMK) [MIM:606437]. EBNMK is a syndrome characterized by benign neonatal convulsions followed later in life by myokymia.,disease:Defects in KCNQ2 are the cause of myokymia isolated type 2 (MK2) [MIM:606437]. Myokymia is a condition characterized by spontaneous involuntary contraction of muscle fiber groups that can be observed as vermiform movement of the overly

Subcellular Location : Cell membrane ; Multi-pass membrane protein .

Expression : In adult and fetal brain. Highly expressed in areas containing neuronal cell bodies, low in spinal cord and corpus callosum. Isoform 2 is preferentially expressed in differentiated neurons. Isoform 6 is prominent in fetal brain, undifferentiated neuroblastoma cells and brain tumors.

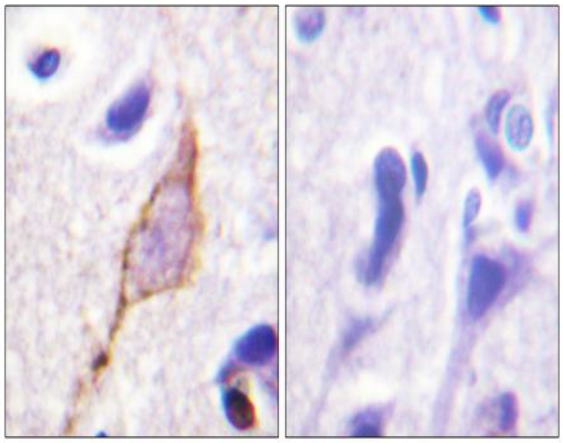
Sort : 8867

No4 : 1

Host : Rabbit

Modifications : Unmodified

Products Images



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Kv7.3/KCNQ3 Antibody. The picture on the right is blocked with the synthesized peptide.