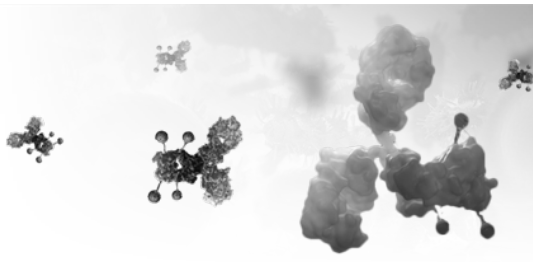

Human KCNQ2 peptide (DAG-P0709)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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]
Specificity	In adult and fetal brain. Highly expressed in areas containing neuronal cell bodies, low in spinal chord and corpus callosum. Isoform 2 is preferentially expressed in differentiated neurons. Isoform 6 is prominent in fetal brain, undifferentiated neurobla
Conjugate	Unconjugated
Sequence Similarities	Belongs to the potassium channel family. KQT (TC 1.A.1.15) subfamily. Kv7.2/KCNQ2 sub-subfamily.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	KCNQ2 potassium voltage-gated channel, KQT-like subfamily, member 2 [Homo sapiens (human)]
Official Symbol	KCNQ2

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Synonyms	KCNQ2; potassium voltage-gated channel, KQT-like subfamily, member 2; EBN; BFNC; EBN1; ENB1; BFNS1; EIEE7; HNSPC; KV7.2; KCNA11; KVEBN1; potassium voltage-gated channel subfamily KQT member 2; KQT-like 2; voltage-gated potassium channel subunit Kv7.2; neuroblastoma-specific potassium channel protein; neuroblastoma-specific potassium channel subunit alpha KvLQT2;
Entrez Gene ID	3785
mRNA Refseq	NM_004518.4
Protein Refseq	NP_004509.2
UniProt ID	O43526
Chromosome Location	20q13.3
Pathway	Axon guidance, organism-specific biosystem; Cholinergic synapse, organism-specific biosystem; Developmental Biology, organism-specific biosystem; Interaction between L1 and Ankyrins, organism-specific biosystem; L1CAM interactions, organism-specific biosystem; Neuronal System, organism-specific biosystem; Potassium Channels, organism-specific biosystem; Voltage gated Potassium channels, organism-specific biosystem;
Function	ankyrin binding; delayed rectifier potassium channel activity; potassium channel activity; voltage-gated potassium channel activity;

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