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GABRR3 Rabbit pAb

Catalog # AP97449

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	A8MPY1
Other Accession	A8MPY1
Predicted	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54272
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GABRR3
Epitope Specificity	1-100/117
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the ligand-gated ion channel (TC 1.A.9) family. Gamma-aminobutyric acid receptor (TC 1.A.9.5) subfamily. GABRR3 sub-subfamily.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	GAD-65 and GAD-67, glutamate decarboxylases, function to catalyze the production of GABA (gamma-aminobutyric acid). In the central nervous system GABA functions as the main inhibitory transmitter by increasing a Cl- conductance that inhibits neuronal firing. GABA has been shown to activate both ionotropic (GABAA) and metabotropic (GABAB) receptors as well as a third class of receptors called GABAC. Both GABAA and GABAC are ligand-gated ion channels; however, they are structurally and functionally distinct. GABAC receptors (GABAC Rr) mediate rapid inhibitory neurotransmission in retina. Three human genes, r1 (GABRR1), r2 (GABRR2) and r3 (GABRR3), encode the three polypeptides that comprise this receptor. GABRR1 and GABRR2 are located close together, in a region of chromosome 6q that contains loci for inherited disorders of the eye, but GABRR3 maps to chromosome 3q11-q13.3. The r polypeptide genes, which are thought to share a common ancestor with GABA(A) receptor subunit genes, diverged at an early stage in the evolution of this gene family. The expression of GABAC Rr subunits is not restricted to the retina, but significant expression can also be detected in many other brain regions, especially in those belonging to the visual pathways.

Additional Information

Gene ID	200959
Other Names	GBRR3_HUMAN; GABRR3; GABA(A) receptor subunit rho-3 (GABAAR subunit rho-3); GABA(C) receptor; gamma-aminobutyric acid type A receptor subunit

	rho3; gamma-aminobutyric acid (GABA) receptor, rho 3; gamma-aminobutyric acid type A receptor subunit rho3 (gene/pseudogene); GABA(A) receptor, rho 3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	GABRR3 (HGNC:17969)
Function	Rho subunit of the pentameric ligand-gated chloride channels responsible for mediating the effects of gamma-aminobutyric acid (GABA), the major inhibitory neurotransmitter in the brain (By similarity). Rho-containing GABA-gated chloride channels are a subclass of GABA(A) receptors (GABAARs) entirely composed of rho subunits, where GABA molecules bind at the rho intersubunit interfaces (By similarity). When activated by GABA, rho-GABAARs selectively allow the flow of chloride anions across the cell membrane down their electrochemical gradient (By similarity).
Cellular Location	Postsynaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.