

Product datasheet for **TA328819**

Gabbr1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide CRGEREVVGPVKVRK, corresponding to amino acid residues 66-79 of rat GABA(B) R1. Extracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	gamma-aminobutyric acid type B receptor subunit 1
Database Link:	NP_112290 Entrez Gene 2550 Human Entrez Gene 54393 Mouse Entrez Gene 81657 Rat Q9Z0U4



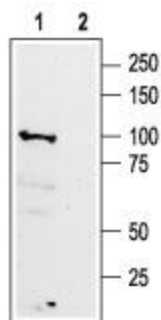
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Background:

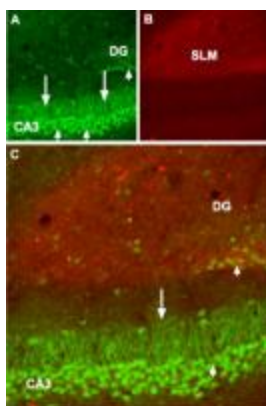
GABA (gamma-aminobutyric acid) is the major inhibitory neurotransmitter in the central nervous system and plays a crucial role in the modulation of neuronal activity. The GABA transmitter interacts with three types of receptors: the ionotropic receptors, GABA (A)R and GABA (C)R, and the metabotropic GABA (B) receptor, [GABA (B)R]. The latter belongs to the G-protein-coupled receptor superfamily and mediates slow synaptic inhibition in the brain and spinal cord. The functional GABA (B) receptor [GABA (B)R] is a heterodimer consisting of two subunits, the GABA (B)R1 and the GABA (B)R2. These subunits were demonstrated to have complementary roles essential for the functional receptor. The GABA (B)R1 subunit was demonstrated to be important for agonist and antagonist binding, while GABA (B)R2 was shown to be essential for trafficking and for G-protein binding. To date, eight alternatively spliced isoforms of GABA (B) R1 have been proposed. These are named 1a-1h, of which 1a and 1b are the most prominent. Only 1a, 1b, and 1c appear to act as functional subunits. They are widespread, being expressed in testis, stomach, spinal cord, and brain. Isoform 1b is also expressed in kidney and liver. Alomone labs is please to offer a highly specific antibody directed against an epitope located at the extracellular N-terminal domain of rat GABA (B) R1. Anti-GABA(B) R1 (extracellular) antibody (#AGB-001) can be used in Western blot analysis and immunohistochemistry applications, and recognizes GABA(B) R1 in rat and mouse samples.

Synonyms:

dj271M21.1.1; dj271M21.1.2; FLJ92613; GABA-B-R1; GABABR1; GABBR1-3; GB1; GPRC3A; hGB1a; OTTHUMP00000109099

Product images:

Western blot analysis of rat brain membranes: 1. Anti-GABA(B) R1 (extracellular) antibody, (1:200). 2. Anti-GABA(B) R1 (extracellular) antibody, preincubated with the control peptide antigen.



IHC staining of mouse hippocampus frozen sections using Anti-GABA(B) R1 (extracellular) antibody, (1:100). A. GABA(B) R1 staining (green) is detected in neurons in the CA3 field and in the dentate granule layer (short arrows), as well as in dendrites of CA3 pyramidal neurons (long arrows). B. Staining with mouse anti-GAP43 antibody (red) sets apart the stratum lacunosum moleculare (SLM). C. Confocal merge suggests the presence of GABA(B) R1 in pyramidal neurons.