

Product datasheet for **TA328816**

Gabrd 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:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)HHGARAMNDIGDYVGSN, corresponding to amino acid residues 19-35 of rat GABA(A)d .
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 A receptor delta subunit
Database Link:	NP_058985 Entrez Gene 14403 Mouse Entrez Gene 29689 Rat P18506



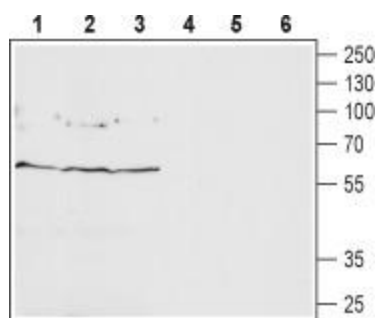
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Background:

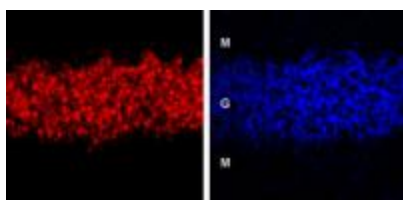
GABA (γ -aminobutyric acid) is the major inhibitory neurotransmitter in the brain. Its production, release, reuptake, and metabolism all occur in the nervous system. The GABA transmitter interacts with two major types of receptors: ionotropic GABA_A receptors (GABA_AR) and metabotropic receptors (GABA_BR). GABA_ARs belong to the ligand-gated ion channel superfamily. GABA inhibits the activity of signal-receiving neurons by interacting with the GABA_A receptor on these cells. Binding of GABA to its GABA_A receptor results in conformational changes that open a Cl⁻ channel, producing an increase in membrane conductance that results in inhibition of neural activity. GABA_ARs are heteropentamers, in which all five subunits contribute to the pore formation. To date, eight subunit isoforms have been cloned: α , β , γ , δ , ϵ , ρ , σ , and θ . Six α subunit isoforms have been found to exist in mammals ($\alpha 1$ - $\alpha 6$). In most cases, native GABA_A receptors consist of 2 α , 2 β , and 1 γ subunits. The α subunit is the most common and is expressed ubiquitously. It determines the affinity of GABA_ARs for allosteric ligands. Each subtype has a unique regional expression in the brain, and individual neurons often express multiple subtypes. For example, the $\alpha 4$ subunit is detected in the hippocampus, cortex, olfactory bulb and in the basal forebrain.

Synonyms:

EIG10; EJM7; GEFSP5; MGC45284

Product images:


Western blot analysis of rat brain (lanes 1, and 4), rat cerebellum (lanes 2 and 5) and mouse brain (lanes 3 and 6): 1-3. Anti-GABA(A) δ Receptor (extracellular) antibody, (1:200). 4-6. Anti-GABA(A) δ Receptor (extracellular) antibody, preincubated with the control peptide antigen.



Expression of GABA(A) δ receptor in rat cerebellum. Immunohistochemical staining of GABA(A) δ receptor in rat cerebellum using Anti-GABA(A) δ Receptor (extracellular) antibody. GABA(A) δ receptor (red) appears exclusively in the granule layer (G). Above and below the granule layer is the molecular layer (M). DAPI is used as the counterstain (blue).