

Product datasheet for **TA328810**

Gabra2 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 (C)TPEPNKKPENKPA, corresponding to amino acid residues 393-405 of rat GABA(A) a2 Receptor. 2nd intracellular loop.
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, 5% sucrose, 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 alpha2 subunit
Database Link:	NP_001129251 Entrez Gene 2555 Human Entrez Gene 14395 Mouse Entrez Gene 289606 Rat



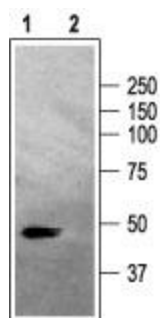
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Background:

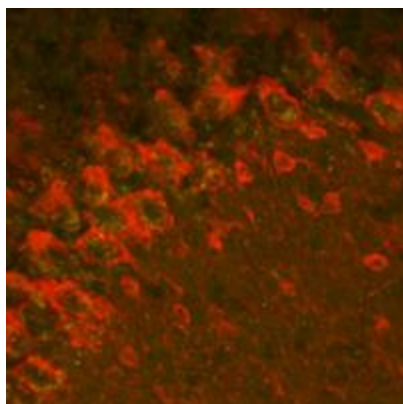
GABA (γ -aminobutyric acid) is the major inhibitory neurotransmitter in the brain. Its production, release, reuptake and metabolism occur in the nervous system. The GABA transmitter interacts with two major types of receptors: ionotropic GABAA (GABAAR) and the metabotropic GABAB) receptors. The GABAAR belong to the ligand gated ion channel superfamily. The GABAAR, is a heteropentamer, with all of its five subunits contributing to the pore formation. To date, eight subunit isoforms were cloned: α , β , γ , δ , ϵ , ρ , σ , and θ . Six α subunit isoforms were described to exist in mammals (α 1- α 6). The native GABAA receptor, in most cases, consists of 2 α , 2 β and 1 γ subunit. The α subunit is the most common subunit and is expressed ubiquitously. It determines the affinities for allosteric ligands shown by GABAAR. The α 2-subunit mRNA is strongly expressed only in the hippocampus and the hypothalamus. It occurs very early in rat brain development and declines in adulthood. The failure to complete the normal transition between the α -subunits that are highly expressed in early development (α 2, α 3, α 5) to those expressed in adulthood (α 1) might play a major role in the development of temporal lobe epilepsy.

Synonyms:

FLJ97076

Product images:

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



Expression of GABA(A) α 2 Receptor in mouse cerebellum. Immunohistochemical staining of mouse formalin-fixed frozen cerebellum sections with Anti-GABA(A) α 2 Receptor antibody. The receptor subunit is localized mainly on the soma of Purkinje cells. Staining with mouse anti-parvalbumin (red) suggests that GABA(A) α 2 Receptor subunit is restricted to a sub-region of the Purkinje cell.