

GABA-A receptor $\alpha 3$

Cat.No. 224 302; Polyclonal rabbit antibody, 200 μ l antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	200 μ l antiserum, lyophilized. For reconstitution add 200 μ l H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) (see remarks) IP: not tested yet ICC: not tested yet IHC: not tested yet (see remarks) IHC-P/FFPE: not tested yet
Immunogen	Synthetic peptide corresponding to AA 29 to 43 from rat GABA-A receptor $\alpha 3$ (UniProt Id: P20236)
Reactivity	Reacts with: rat (P20236), mouse (P26049). Other species not tested yet.
Specificity	Specific for GABA-A receptor $\alpha 3$.
matching control	224-3P
Remarks	WB: This protein aggregates after boiling, making it necessary to run SDS-PAGE with non-boiled samples. IHC: This antibody requires antigen retrieval with pepsin according to: Lorincz A & Nusser Z (2008).

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Gamma-aminobutyric acid type A (GABA-A) receptors mediate the majority of inhibitory neurotransmission in the brain. These receptor proteins are ligand gated chloride ion channels and consist of a pentameric combination of different subunits (**alpha**, beta, gamma, delta, epsilon and rho). The resulting heterogenous population of GABA-A receptor subtypes are expressed throughout the brain with specific cellular and subcellular expression patterns.

Selected General References

The distribution of thirteen GABAA receptor subunit mRNAs in the rat brain. III. Embryonic and postnatal development. Laurie DJ, Wisden W, Seeburg PH

The Journal of neuroscience : the official journal of the Society for Neuroscience (1992) 12(11): 4151-72.

GABA receptor heterogeneity modulates dendrodendritic inhibition.

Sassoè-Pognetto M, Panzanelli P, Lagier S, Fritschy JM, Lledo PM
Annals of the New York Academy of Sciences (2009) 1170: 259-63.

Synaptogenesis in the cerebellar cortex: differential regulation of gephyrin and GABAA receptors at somatic and dendritic synapses of Purkinje cells.

Viltono L, Patrizi A, Fritschy JM, Sassoè-Pognetto M

The Journal of comparative neurology (2008) 508(4): 579-91.

Compensatory alteration of inhibitory synaptic circuits in cerebellum and thalamus of gamma-aminobutyric acid type A receptor alpha1 subunit knockout mice.

Kralic JE, Sidler C, Parpan F, Homanics GE, Morrow AL, Fritschy JM

The Journal of comparative neurology (2006) 495(4): 408-21.

Postsynaptic clustering of major GABAA receptor subtypes requires the gamma 2 subunit and gephyrin.

Essrich C, Lorez M, Benson JA, Fritschy JM, Lüscher B

Nature neuroscience (1998) 1(7): 563-71.

GABAA-receptor heterogeneity in the adult rat brain: differential regional and cellular distribution of seven major subunits.

Fritschy JM, Mohler H

The Journal of comparative neurology (1995) 359(1): 154-94.

Distribution, prevalence, and drug binding profile of gamma-aminobutyric acid type A receptor subtypes differing in the beta-subunit variant.

Benke D, Fritschy JM, Trzeciak A, Bannwarth W, Mohler H

The Journal of biological chemistry (1994) 269(43): 27100-7.

The distribution of 13 GABAA receptor subunit mRNAs in the rat brain. II. Olfactory bulb and cerebellum.

Laurie DJ, Seeburg PH, Wisden W

The Journal of neuroscience : the official journal of the Society for Neuroscience (1992) 12(3): 1063-76.

The distribution of 13 GABAA receptor subunit mRNAs in the rat brain. I. Telencephalon, diencephalon, mesencephalon.

Wisden W, Laurie DJ, Monyer H, Seeburg PH

The Journal of neuroscience : the official journal of the Society for Neuroscience (1992) 12(3): 1040-62.

Five subtypes of type A gamma-aminobutyric acid receptors identified in neurons by double and triple immunofluorescence staining with subunit-specific antibodies.

Fritschy JM, Benke D, Mertens S, Oertel WH, Bachi T, Möhler H

Proceedings of the National Academy of Sciences of the United States of America (1992) 89(15): 6726-30.

Cerebellar GABAA receptor selective for a behavioural alcohol antagonist.

Lüddens H, Pritchett DB, Köhler M, Killisch I, Keinänen K, Monyer H, Sprengel R, Seeburg PH

Nature (1990) 346(6285): 648-51.