

GABA-A receptor $\beta 3$

Cat.No. 224 411BT; Monoclonal mouse antibody, 100 μ g purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 μ g purified IgG, lyophilized, biotin-labeled. . For reconstitution add 100 μ l H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 500 up to 1 : 1000 (AP staining) (see remarks) IP: yes ICC: 1 : 500 IHC: 1 : 100 up to 1 : 500 (see remarks) IHC-P/FFPE: not tested yet
Label	biotin
Clone	261F6
Subtype	IgG2a (κ light chain)
Immunogen	Recombinant protein corresponding to AA 344 to 429 from mouse GABA-A receptor $\beta 3$ (UniProt Id: P63080)
Reactivity	Reacts with: rat (P63079), mouse (P63080). Other species not tested yet.
Specificity	Specific for GABA-A receptor $\beta 3$.
Remarks	WB: Less sensitive compared to the polyclonal antibodies. IHC: This antibody requires antigen retrieval with pepsin according to: Lorincz A & Nusser Z (2008). recommended protocol

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

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.

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.