Synaptic Systems

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GABA-A receptor β3

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

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 µl H_2O 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
Clone	261F6
Subtype	IgG2a (κ light chain)
Immunogen	Recombinant protein corresponding to AA 344 to 429 from mouse GABA-A receptor β3 (UniProt Id: P63080)
Epitop	Epitop: AA 344 to 429 from mouse GABA-A receptor β3 (UniProt Id: P63080)
Reactivity	Reacts with: rat (P63079), mouse (P63080). Other species not tested yet.
Specificity	Specific for GABA-A receptor β3.
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-**a**mino**b**utyric **a**cid 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 References SYSY Antibodies

The Autism-Related Protein PX-RICS Mediates GABAergic Synaptic Plasticity in Hippocampal Neurons and Emotional Learning in Mice.
Nakamura T, Sakaue F, Nasu-Nishimura Y, Takeda Y, Matsuura K, Akiyama T
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Selected General References

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Synaptogenesis in the cerebellar cortex: differential regulation of gephyrin and GABAA receptors at somatic and dendritic synapses of Purkinje cells.
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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.
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Distribution, prevalence, and drug binding profile of gamma-aminobutyric acid type A receptor subtypes differing in the beta-subunit variant.
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