

GABA-A receptor $\alpha 3$

Cat.No. 224 303; Polyclonal rabbit antibody, 50 μ g specific antibody (lyophilized)

Data Sheet

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|----------------------------|---|
| Reconstitution/ Storage | 50 μ g specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 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 : 1000 (AP staining) (see remarks) IP: not tested yet ICC: 1 : 500 IHC: 1 : 500 (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). 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 References SYSY Antibodies

Long-term behavioral programming induced by peripuberty stress in rats is accompanied by GABAergic-related alterations in the Amygdala.

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PloS one (2014) 9(4): e94666. **IHC; tested species: rat**

Only a Minority of the Inhibitory Inputs to Cerebellar Golgi Cells Originates from Local GABAergic Cells.

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Selected General References

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GABA receptor heterogeneity modulates dendrodendritic inhibition.

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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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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

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

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

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