Synaptic Systems

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α/β Synuclein

Cat.No. 128 011; 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 : 1000 (AP staining) **IP**: yes **ICC**: 1 : 500 **IHC**: 1 : 200 **IHC-P/FFPE**: 1 : 500 **ELISA**: yes (see remarks)
Clone	94C1
Subtype	IgG2b (κ light chain)
Immunogen	Synthetic peptide corresponding to AA 126 to 140 from human α-Synuclein (UniProt Id: P37840)
Epitop	Epitop: AA 126 to 140 from human α-Synuclein (UniProt Id: P37840)
Reactivity	Reacts with: human (P37840, Q16143), rat (P37377, Q63754), mouse (O55042, Q91ZZ3), mammals. Other species not tested yet. Peptide conserved in almost all mammals.
Specificity	Recognizes α- and β-synuclein, no cross-reactivity to γ-synuclein.
Remarks	

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

Synuclein proteins are produced by three genes. They share structural resemblance to apolipoproteins, but are abundant in the neuronal cytosol and present in enriched amounts at presynaptic terminals.
Synucleins have been specifically implicated in three diseases: Alzheimer's (AD), Parkinson's (PD) and breast cancer. In AD, a peptide derived from α-synuclein forms an intrinsic component of plaque amyloid. In PD, an α-synuclein allele is genetically linked to several independent familial cases, and the protein appears to accumulate in Lewy bodies. In breast cancer, increased expression of γ-synuclein correlates with disease progression.
In songbirds, α-synuclein expression is correlated with plasticity in the developing song control system. Although the normal function of synucleins is unknown, a role in synaptic plasticity seems likely.

Selected General References

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