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# a Synuclein

Cat.No. 128 211; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

## **Data Sheet**

Reconstitution/ Storage	100 $\mu g$ purified IgG, lyophilized. Azide was added before lyophilization. For reconstitution add 100 $\mu l$ 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	354A10
Subtype	IgG1 (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), rat (P37377), mouse (O55042), mammals. Other species not tested yet.
Specificity	Specific for a-synuclein, no cross-reactivity to $\beta$ - and $\gamma$ -synuclein.
Remarks	<b>ELISA</b> : This antibody is suitable as capture antibody for sandwich-ELISA with cat. no. 128 003 as detector antibody (protocol for sandwich-ELISA).

#### 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, a-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 References SYSY Antibodies

E46K a-synuclein pathological mutation causes cell-autonomous toxicity without altering protein turnover or aggregation. Iñigo-Marco I, Valencia M, Larrea L, Bugallo R, Martínez-Goikoetxea M, Zuriguel I, Arrasate M Proceedings of the National Academy of Sciences of the United States of America (2017) 114(39): E8274-E8283. **ICC; tested species: rat** 

## **Selected General References**

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The synuclein family. Lavedan C Genome research (1998) 8(9): 871-80.

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