

Cat.No. 128 111BT; Monoclonal mouse antibody, 100  $\mu$ g purified IgG (lyophilized)

## Data Sheet

Reconstitution/Storage	100 $\mu$ g purified IgG, lyophilized, biotin-labeled. For reconstitution add 100 $\mu$ l H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	<b>WB:</b> not recommended <b>IP:</b> not tested yet <b>ICC:</b> not tested yet <b>IHC:</b> 1 : 500 up to 1 : 1000 <b>IHC-P/FFPE:</b> 1 : 500
Label	biotin
Clone	56F2
Subtype	IgG2a ( $\kappa$ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 140 from human $\alpha$ -Synuclein (UniProt Id: P37840)
Reactivity	Reacts with: human (P37840, Q16143), rat (P37377, Q63754), mouse (O55042, Q91ZZ3). Other species not tested yet.
Specificity	Recognizes $\alpha$ - and $\beta$ -synuclein.

**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  $\alpha$ -synuclein forms an intrinsic component of plaque amyloid. In PD, an  $\alpha$ -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  $\gamma$ -synuclein correlates with disease progression.

In songbirds,  $\alpha$ -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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