

**Qty:** 100 μg/200 μl Mouse anti-α/β-Synuclein **Catalog No.** 32-8200

Lot No.

# Mouse anti-α/β-Synuclein

# FORM

This monoclonal antibody is supplied as a 200 µl aliquot at a concentration of 0.5 mg/ml in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A affinity chromatography.

CLONE: Syn 202

ISOTYPE: Mouse IgG2a

## IMMUNOGEN

Recombinant human  $\alpha$ - and  $\beta$ -synuclein

#### SPECIFICITY

This antibody reacts with the  $\alpha$ - and  $\beta$ - synuclein proteins. This antibody does not cross react with  $\gamma$ -synuclein or synoretin.

#### REACTIVITY

This antibody is confirmed reactive with human and mouse. Reactivity with other species has not been tested.

Sample	ELISA	Immuno- precipitation (native)	IHC (paraffin)	Western Blotting	Immuno- fluorescence
Human	++	++	+++	++	++
Mouse	++	++	ND	++	ND
Immunogen	+++	0	NA	+++	NA

(Excellent +++, Good ++, Poor +, No reactivity 0, Not applicable NA, Not determined ND)

#### USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Immunoprecipitation <sup>(1)</sup>: Western Blotting: 1-3 µg/ml IHC (paraffin)<sup>(1)</sup>:

#### STORAGE

PI328200

Store at 2-8°C for up to one month. Store at -20°C for long term storage. Avoid repeated freezing and thawing.

(cont'd)

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(Rev 10/08) DCC-08-1089

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# BACKGROUND

Human  $\alpha$ -Synuclein is predominantly a presynaptic neuronal protein that has been localized in close proximity to synaptic vesicles. Studies have revealed that this protein is mostly cytosolic, although a fraction may be associated with vesicular membranes. In addition,  $\alpha$ -synuclein binds to small synthetic unilamellar vesicles and rat brain vesicles, suggesting that  $\alpha$ -synuclein may play a role in neurotransmission or in the organization and regulation of synaptic vesicles.  $\alpha$ -Synuclein has been reported to be a major component of Lewy bodies in Parkinson's disesease, as well as dementia and Alzheimer's disease. In recent studies, antibodies to  $\beta$ - and  $\gamma$ -synuclein have been used to investigate the biological functions of  $\alpha$ -synuclein as well as its role in neurodegenerative disorders.

## REFERENCES

- 1. Giasson B., et. al. A panel of epitope-speicific antibodies detects protein domains distributed throughout human α-Synuclein in Lewy Bodies of Parkinson's Disease. *J Neurosci Res.* 59:528-533 (2000).
- 2. Baba M., et. al. Aggregation of alpha-synuclein in Lewy bodies of sporadic Parkinson's disease and dementia with Lewy bodies. *Am J Pathol.* 152(4): 879-884 (1998).

### **RELATED PRODUCTS**

Product	Clone	Cat. No.
Mouse anti-α-Synuclein	LB509	18-0215
Mouse anti-β-Synuclein	Syn 207	18-0281
Mouse anti- $\alpha/\beta$ -Synuclein	Syn 202	18-0280
Mouse anti-α-Synuclein	Syn 211	32-8100
Product	Conjugate	Cat. No.
Protein A	Sepharose <sup>®</sup> 4B	10-1041
rec-Protein G	Sepharose <sup>®</sup> 4B	10-1241

Conjugate	ZyMAX™ Goat x Mouse IgG (H+L)
Purified	81-6500
FITC	81-6511
TRITC	81-6514
Cy™3	81-6515
Cy™5	81-6516
HRP	81-6520
AP	81-6522
Biotin	81-6540

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