

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human $\beta$ -Synuclein in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human $\alpha$ -Synuclein is observed.                                                                                                          |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 516505                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | E. coli-derived recombinant human $\beta$ -Synuclein<br>Gly47-Glu120<br>Accession # Q16143                                                                                                                                                                                  |
| <b>Conjugate</b>          | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

$\beta$ -Synuclein is a 19 kDa, 134 amino acid (aa) cytoplasmic phosphoprotein that is a member of a family of small, highly conserved proteins, including synucleins alpha, beta, and gamma (synoretin), localized predominantly in presynaptic nerve terminals in the brain.  $\beta$ -Synuclein associates with  $\alpha$ -Synuclein, preventing it from aggregating. Abnormal  $\alpha$ -Synuclein aggregates form filamentous inclusions (Lewy bodies) in neurodegenerative diseases including Parkinson's disease. Within the region used as an immunogen, human SNCB shares 99% aa identity with mouse and rat  $\beta$ -Synuclein.

## PRODUCT SPECIFIC NOTICES

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