

## DESCRIPTION

|                           |  |
|---------------------------|--|
| <b>Species Reactivity</b> | Human  |
| <b>Specificity</b>        | Detects human Nestin.  |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 196908   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant   |
| <b>Immunogen</b>          | NS0 mouse myeloma cell line transfected with human Nestin  |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm  |
| <b>Formulation</b>        | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.<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.

|   | Recommended Concentration       | Sample   |
|---|---------------------------------|--|
| <b>Intracellular Staining by Flow Cytometry</b> | 0.25-1 µg/10 <sup>6</sup> cells | A172 human glioblastoma cell line fixed with paraformaldehyde and permeabilized with saponin |

## 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> | <b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul> |

## BACKGROUND

Nestin is a class VI intermediate filament protein (1, 2) that is expressed in stem cells of the central nervous system (CNS) (3) but not in mature CNS cells (4). Nestin expression is used extensively as a marker for CNS stem cells in the developing nervous system and *in vitro* cultured cells (5-10). Its transient expression is a critical step in the neural differentiation pathway (2). Nestin is also expressed in non-neural stem cell populations, such as pancreatic islet progenitors (11-13) and hematopoietic progenitors (14).

### References:

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