

## Anti-Nestin antibody, rat monoclonal (7A3)

73-100      100ug

**Nestin** is an intermediate filament protein that is expressed in stem cells and progenitor cells in the mammalian central nervous system (CNS) during development. Nestin is replaced in the adult organism by other intermediate filament proteins, however, it may be re-expressed under certain pathological conditions such as ischemia, inflammation, brain injury, and neoplastic transformation. Nestin has been detected in many kinds of tumors, especially in tumors derived from the CNS, therefore it is considered to be a marker for cancer stem cells in neurogenic tumors.

The antibody was produced from the hybridoma cultured in serum-free medium and purified under mild conditions by propriety chromatography processes.

### Applications

1. Immunocytochemistry
2. Immunohistochemistry

This antibody doesn't work in immunoblotting. Other applications are not tested.

This antibody is very useful for immunostaining of mouse embryonic brain because it is rat antibody.

Rat antibody has very low background in immunostaining using mouse tissues and is also useful for double-staining with mouse and rabbit antibodies.

### Specification

**Immunogen:** Mouse E16 embryonic cerebral cortex extracts

**Isotype:** Rat IgG2b  $\kappa$

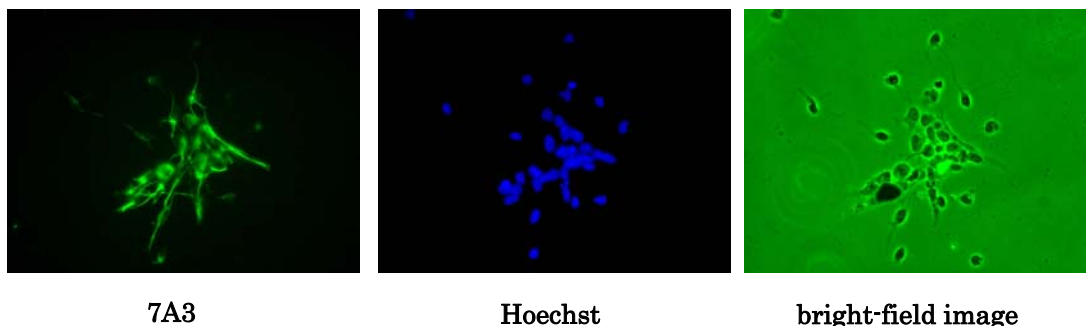
**Form:** Purified monoclonal antibody (IgG) 1mg/ml in PBS, 50% glycerol, filter-sterilized

**Specificity:** Specific to mouse Nestin, not tested with other species.

**Storage:** Shipped at 4 °C or -20 °C, and stored at -20 °C.

**Data Link** UniProtKB/Swiss-Prot [Q6P5H2](#) (NEST\_MOUSE) **References**

1. Hockfield S & McKay RD "Identification of major cell classes in the developing mammalian nervous system" *J Neurosci* **5**: 3310-3328 (1985) PMID: [4078630](#)
2. Gilyarov AV "Nestin in central nervous system cells" *Neuroscience and Behavioral Physiology* **38**:165-169 (2008) PMID: [18197384](#)



**7A3**

**Hoechst**

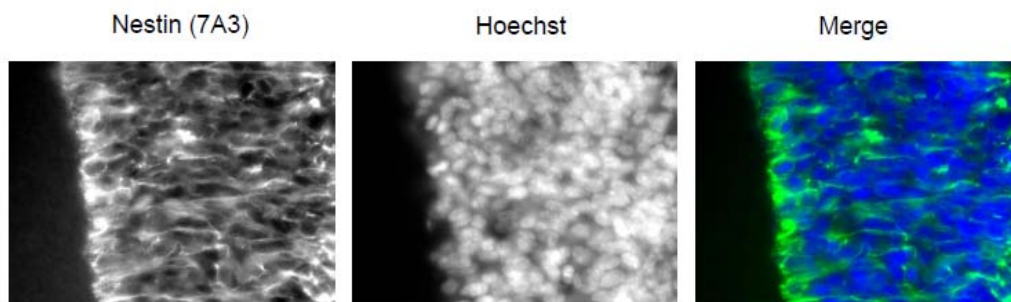
**bright-field image**

Fig.1 Primary culture of neural progenitor cells from mouse fetal brain stained with 7A3 (Left), stained with Hoechst (Center), and without staining (Right).



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**Fig.2** Coronal section of E16 mouse cerebral cortex (frozen) was immunostained with anti-Nestin antibody at 1/100 dilution



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