

Anti-Nestin antibody, rat monoclonal (7A3)

73-100 200 μg

Shipping and Storage: Shipped at 4° C or -20° Cand store at -20° C. Do not freeze.

Immunogen: Mouse E16 embryonic cerebral cortex extracts

Form: 1mg/ml in PBS- with 50% glycerol, filter-sterilized. No preservative or carrier protein added.

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

Isotype: Rat IgG2b κ

Reactivity: Specific to mouse Nestin,

Applications

1. Immunocytochemistry

2. Immunohistochemistry

This antibody doesn't work in immunoblotting.

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.

Background: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.

Data Link UniProtKB/Swiss-Prot <u>Q6P5H2</u> (NEST_MOUSE)

References. This antibody has been used in the following publication.

. Iriuchishi H. Neovascular niche for human myeloma cells in immunodeficient mouse bone <u>PLoS One.</u> 2012;7(2):e30557. PMID: <u>22347385</u> **IHC-F (mouse)**



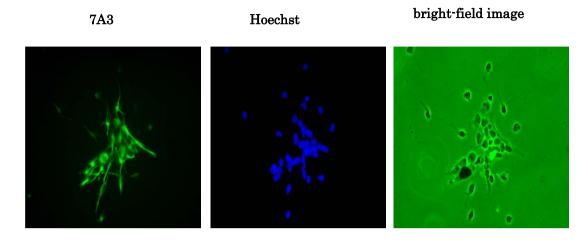


Fig.1 Primary culture of neural progenitor cells from mouse fetal brain stained with 7A3 (Left), stained with Hoechst (Center), and without staing (Right).

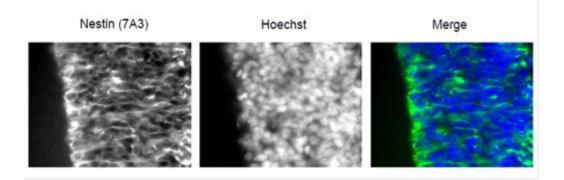


Fig.2 Coronal section of E16 mouse cerebral cortex (frozen) was immunostained with anti-Nestin antibody at 1/100 dilution