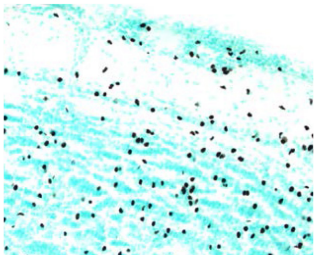
PRODUCT INFORMATION

STEM101™

Mouse Monoclonal Antibody Specific for Human Cell Nucleus Marker

Catalog Number: Y40400
Size: 50 µg
Volume: 100 µL
Isotype: IgG1
Form: Unconjugated



STEM101 detects nuclei of transplanted human neural stem cells in the olfactory bulb of a mouse brain.

Specificity:

STEM101 reacts specifically with a protein located in the nucleus of human cells. This antibody detects cells from a variety of human tissues including brain. This antibody does not cross-react with brain tissue or extracts from mouse or rat.

Preparation and Storage:

STEM101 is generated from cell culture supernatant in serum-free conditions and is purified by Protein G chromatography. The antibody is supplied in Phosphate Buffered Saline (pH 7.4) containing 0.02% sodium azide.

Store at 2 - 8℃.

Usage/Application:

STEM101 has been extensively used to detect the engraftment, migration and differentiation of human cells transplanted into mice and rats. The antibody can be used to quantify the location and number of engrafted cells by immunohistochemistry (typically using a 1:100 dilution)[2, 3] and immunofluorescence (typically using a 1:50 dilution)[1, 4]. It is recommended that the investigators determine optimal conditions for use of STEM101 in their own experiments.

References:

1. Cummings BJ, *et al*. Human neural stem cells differentiate and promote locomotor recovery in spinal cord-injured mice. *PNAS*. (2005) **102**: 14069-14074.

2. Guzman R, *et al*. Long-term monitoring of transplanted human neural stem cells in developmental and pathological contexts with MRI. *PNAS*. (2007) **104**: 10211-10216.

3. Tamaki SJ, *et al*. Neuroprotection of host cells by human central nervous system stem cells in a mouse model of infantile neuronal ceroid lipofuscinosis. *Cell Stem Cell*. (2009) **5**: 310-319.

4. Salazar DL, *et al*. Human neural stem cells differentiate and promote locomotor recovery in an early chronic spinal cord injury NOD-scid mouse model. *PLoS ONE*. (2010) **5**: e12272.