

Mouse Anti-NeuN [A60]: MC0557, MC0557RTU7

Intended Use: For Research Use Only

Description: NeuN antibody specifically recognizes the DNA-binding, neuron-specific protein NeuN, which is present in most CNS and PNS neuronal cell types of all vertebrates tested. NeuN protein distributions are apparently restricted to neuronal nuclei, perikarya and some proximal neuronal processes in both fetal and adult brain although, some neurons fail to be recognized by NeuN at all ages: INL retinal cells, Cajal-Retzius cells, Purkinje cells, inferior olivary and dentate nucleus neurons, and sympathetic ganglion cells are examples. Immunohistochemically detectable NeuN protein first appears at developmental time points that correspond with the withdrawal of the neuron from the cell cycle and/or with the initiation of terminal differentiation of the neuro. Immunoreactivity appears around E9.5 in the mouse neural tube and is extensive throughout the developing nervous system by E12.5. Strong nuclear staining suggests a nuclear regulatory protein function; however, no evidence currently exists as to whether the NeuN protein antigen has a function in the distal cytoplasm or whether it is merely synthesized there before being transported back into the nucleus. No difference between protein isolated from purified nuclei and whole brain extract on immunoblots has been found.

Specifications

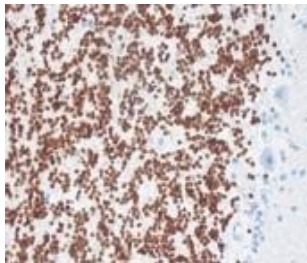
Clone: A60
 Source: Mouse
 Isotype: IgG1
 Reactivity: Human, avian, chicken, ferret, mouse, pig, rat, salamander
 Localization: Nucleus
 Formulation: Antibody in PBS pH 7.5, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃).
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt., ICC/IF, IP, WB
 Package:

Description	Catalog No.	Size
NeuN Concentrated	MC0557	1 ml
NeuN Prediluted	MC0557RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Brain
 Concentrated Dilution: 50-100
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



Human cerebellum FFPE tissue stained with anti-NeuN using DAB

References:

1. FDG-PET and NeuN-GFAP immunohistochemistry of hippocampus at different phases of the pilocarpine model of temporal lobe epilepsy. Zhang L, et al. Int J Med Sci. Mar 19;12(3):288-94, 2015.
2. Supra- and infratentorial pediatric ependymomas differ significantly in NeuN, p75 and GFAP expression. Hagel C, et al. J Neurooncol. Apr;112(2):191-7, 2013.
3. Neuronal nuclear antigen (NeuN): a useful marker of neuronal immaturity in sudden unexplained perinatal death. Lavezzi AM, et al. J Neurol Sci. Jun 15;329(1-2):45-50, 2013.