

**Rabbit Anti-NeuN [MD242R]: RM0107, RM0107RTU7**

**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**

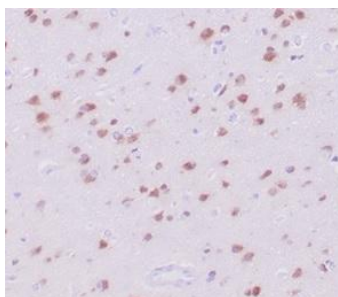
Clone: MD242R  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human, mouse  
 Immunogen: Recombinant full-length human NeuN protein  
 Localization: Nucleus, cytoplasm  
 Formulation: Purified antibody in PBS pH 7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, WB  
 Package:

Description	Catalog No.	Size
NeuN Concentrated	RM0107	1 ml
NeuN Prediluted	RM0107RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Brain  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes 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.



FFPE human cerebrum 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.