

NeuN

Cat.No. 266 006; Polyclonal chicken antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg purified IgY, lyophilized. Ovalbumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use. Before storing at -20°C add 1 vol of glycerol.
Applications	WB: not tested yet IP: not tested yet ICC: 1 : 500 IHC: 1 : 100 up to 1 : 500 IHC-P/FFPE: 1 : 200
Immunogen	Recombinant protein corresponding to AA 1 to 97 from mouse NeuN (UniProt Id: Q8BIF2)
Reactivity	Reacts with: rat (D4A2H6), mouse (Q8BIF2). Other species not tested yet.
Specificity	Specific for NeuN.

**TO BE USED IN VITRO / FOR RESEARCH ONLY
 NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS**

NeuN (Neuronal Nuclei) is a neuron-specific nuclear protein that has recently been identified as Fox-3/Rbfox3, a member of the Fox-1 family of transcription factors. NeuN is only expressed in the nuclei of differentiated neurons. In some neurons - Purkinje cells, sympathetic ganglion cells, INL retinal cells, Cajal-Retzius cells, inferior olivary and dentate nucleus neurons - NeuN is not detectable.

Selected References SYSY Antibodies

Widespread expression of erythropoietin receptor in brain and its induction by injury.
 Ott C, Martens H, Hassouna I, Oliveira B, Erck C, Zafeirou MP, Peteri UK, Hesse D, Gerhart S, Altas B, Kolbow T, et al. Molecular medicine (Cambridge, Mass.) (2015) : . IHC

Substance P-expressing excitatory interneurons in the mouse superficial dorsal horn provide a propriospinal input to the lateral spinal nucleus.
 Gutierrez-Mecinas M, Polgár E, Bell AM, Herau M, Todd AJ. Brain structure & function (2018) : . IHC; **tested species: mouse**

Increased synthesis of chondroitin sulfate proteoglycan promotes adult hippocampal neurogenesis in response to enriched environment.
 Yamada J, Naganaka S, Kitagawa H, Takeuchi K, Jinno S. The Journal of neuroscience : the official journal of the Society for Neuroscience (2018) : . IHC; **tested species: mouse**

Structural Plasticity of Synaptotagmin in the Axon Initial Segment during Visual Cortex Development.
 Schlüter A, Del Turco D, Deller T, Gutzmann A, Schultz C, Engelhardt M. Cerebral cortex (New York, N.Y. : 1991) (2017) 27(9): 4662-4675. IHC; **tested species: mouse**

Late postnatal shifts of parvalbumin and nitric oxide synthase expression within the GABAergic and glutamatergic phenotypes of inferior colliculus neurons.
 Fujimoto H, Konno K, Watanabe M, Jinno S. The Journal of comparative neurology (2017) 525(4): 868-884. IHC; **tested species: mouse**

Selected General References

Neurons identified by NeuN/Fox-3 immunoreactivity have a novel distribution in the hamster and mouse suprachiasmatic nucleus.
 Morin LP, Hefton S, Studholme KM. Brain research (2011) 1421: 44-51.

NeuN/Fox-3 is an intrinsic component of the neuronal nuclear matrix.
 Dent MA, Segura-Anaya E, Alva-Medina J, Aranda-Anzaldo A. FEBS letters (2010) 584(13): 2767-71.

NeuN is not a reliable marker of dopamine neurons in rat substantia nigra.
 Cannon JR, Greenamyre JT. Neuroscience letters (2009) 464(1): 14-7.

Identification of neuronal nuclei (NeuN) as Fox-3, a new member of the Fox-1 gene family of splicing factors.
 Kim KK, Adelstein RS, Kawamoto S. The Journal of biological chemistry (2009) 284(45): 31052-61.

NeuN, a neuronal specific nuclear protein in vertebrates.
 Mullen RJ, Buck CR, Smith AM. Development (Cambridge, England) (1992) 116(1): 201-11.