NeuN Recombinant Antibody [SR45-07] - Rat IgG1 (Chimeric)

HA601397

Product Type:	Recombinant Chimeric Antibody IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Cynomolgus monkey, Pig
Applications:	IHC-Fr, IHC-P
Molecular Wt:	Predicted band size: 34 kDa
Clone number:	SR45-07

Description: Neuronal nuclei (NeuN, Fox-3, RBFOX3) is a nuclear protein expressed in most post-mitotic neurons of the central and peripheral nervous systems. NeuN is not detected in Purkinje cells, sympathetic ganglion cells, Cajal-Retzius cells, INL retinal cells, inferior olivary, and dentate nucleus neurons. This neuronal protein was originally identified by immunoreactivity with a monoclonal antibody also called NeuN. Using MS-analysis, NeuN was later identified as the Fox-3 gene product. Fox-3 contains an RNA recognition motif and functions as a splicing regulator. Fox-3 regulates alternative splicing of NumB, promoting neuronal differentiation during development.

Immunogen: Synthetic peptide within human NeuN aa 20-60.

Positive control: Human cerebellum tissue, mouse cerebellum tissue, rat cerebellum tissue.

Subcellular location: Nucleus, Cytoplasm.

Database links: SwissProt: A6NFN3 Human | Q8BIF2 Mouse
Unigene: 143966 Rat

Recommended Dilutions:

IHC-Fr	1:1,000
IHC-P	1:2,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

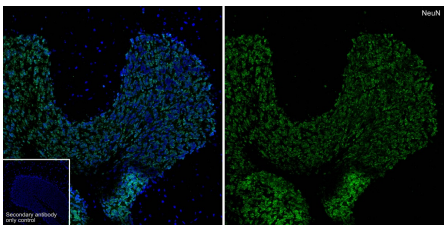

Fig1: Application: IHC-Fr

Species: Mouse

Site: Cerebellum

Sample: Frozen section

Antibody concentration: 1:1,000

Antigen retrieval: Not required

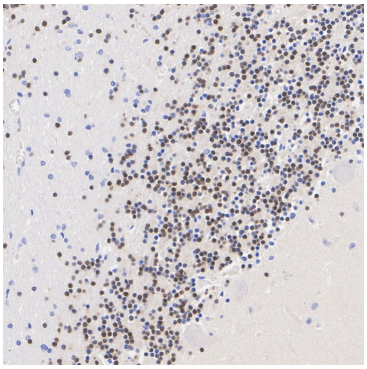

Fig2: Immunohistochemical analysis of paraffin-embedded human cerebellum tissue with Rat anti-NeuN antibody (HA601397) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA601397) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

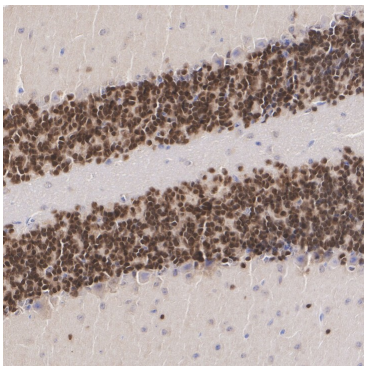

Fig3: Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue with Rat anti-NeuN antibody (HA601397) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA601397) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

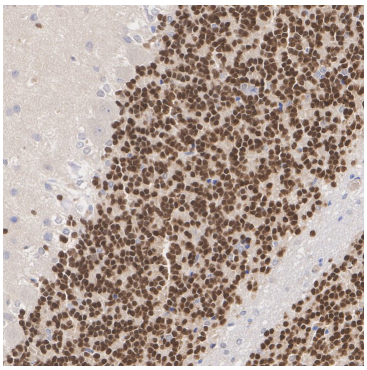

Fig4: Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue with Rat anti-NeuN antibody (HA601397) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA601397) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Santamaría G et al. NeuN distribution in brain structures of normal and Zika-infected suckling mice. J Mol Histol. 2023 Jun
2. Luijerink L et al. Immunostaining for NeuN Does Not Show all Mature and Healthy Neurons in the Human and Pig Brain: Focus on the Hippocampus. Appl Immunohistochem Mol Morphol. 2021 Jul