

NeuN

Cat.No. 266 004; Polyclonal Guinea pig antibody, 100 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µl antiserum, lyophilized. For reconstitution add 100 µl H ₂ O, then aliquot and store at -20°C until use. Antibodies should be stored at +4°C when still lyophilized. Do not freeze! For detailed information, see back of the data sheet.
Applications	WB: not tested yet IP: not tested yet ICC: 1 : 500 IHC: 1 : 100 up to 1 : 500 IHC-P: 1 : 200 up to 1 : 1000 IHC-Fr: yes ExM: external data
Immunogen	Recombinant protein corresponding to AA 1 to 97 from mouse NeuN (UniProt Id: Q8BIF2)
Reactivity	Reacts with: rat (D4A2H6), mouse (Q8BIF2), human (A6NFN3). Other species not tested yet.

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

Background

NeuN (Neuronal Nuclei) is a neuron-specific nuclear protein that has 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 for 266 004

Jionoside A1 alleviates ischemic stroke ischemia/reperfusion injury by promoting Nix-mediated mitophagy.

Yu X, Liu X, Mi X, Luo X, Lian Z, Tang J, Wang G

Cellular and molecular biology (Noisy-le-Grand, France) (2023) 698: 237-245. . **ICC, IHC; tested species: rat**

Characterizing and targeting glioblastoma neuron-tumor networks with retrograde tracing.

Tetzlaff SK, Reyhan E, Layer N, Bengtson CP, Heuer A, Schroers J, Faymonville AJ, Langeroudi AP, Drewa N, Keifert E, Wagner J, et al.

Cell (2024) : . . **ICC, IHC-P; tested species: human,mouse**

Neonatal brain injury unravels transcriptional and signaling changes underlying the reactivation of cortical progenitors.

Foucault L, Capeliez T, Angonin D, Lentini C, Bezin L, Heinrich C, Parras C, Donega V, Marcy G, Raineteau O

Cell reports (2024) 432: 113734. . **ICC, IHC; tested species: mouse**

Single-cell dissection of the human motor and prefrontal cortices in ALS and FTLD.

Pineda SS, Lee H, Ulloa-Navas MJ, Linville RM, Garcia FJ, Galani K, Engelberg-Cook E, Castanedes MC, Fitzwalter BE, Pregent LJ, Gardashli ME, et al.

Cell (2024) 1878: 1971-1989.e16. . **IHC_FR; tested species: mouse**

Comparative pathogenesis of different phylogroup I bat lyssaviruses in a standardized mouse model.

Klein A, Eggerbauer E, Potratz M, Zaack LM, Calvelage S, Finke S, Müller T, Freuling CM

PLoS neglected tropical diseases (2022) 161: e0009845. . **CLARITY; tested species: mouse**

Polyserine-mediated targeting of FAF2/UBXD8 ameliorates tau aggregation.

Van Alstyne M, Brown G, Nguyen VL, Ramaswami M, Hoeffler CA, Parker R

Neuron (2025) : . . **IHC; tested species: mouse**

Compact transcription factor cassettes generate functional, engraftable motor neurons by direct conversion.

Wang NB, Adewumi HO, Lende-Dorn BA, Beitz AM, O'Shea TM, Galloway KE

Cell systems (2025) 164: 101206. . **IHC; tested species: mouse**

Chronic unpredictable stress during adolescence exerts sex-specific effects on depressive-like behavior and neural activation triggered by tail suspension test.

Hu W, Jiang L, Wang Q, Hu Q, Zhong T, Wu J, Chen X, Liu T

Behavioural brain research (2025) 477: 115314. . **IHC; tested species: mouse**

Dynamic mapping of network-level LTP in the hippocampus via high-resolution bioelectrical sensing.

Khanzada S, Hu X, Emery BA, Średniawa W, Wójcik DK, Kempermann G, Amin H

APL bioengineering (2025) 93: 036109. . **IHC; tested species: mouse**

Astrocytic RIPK3 exerts protective anti-inflammatory activity in mice with viral encephalitis by transcriptional induction of serpins.

Lindman M, Estevez I, Marmut E, DaPrano EM, Chou TW, Newman K, Atkins C, O'Brown NM, Daniels BP

Science signaling (2025) 18895: eadq6422. . **IHC; tested species: mouse**

Experience-induced NPAS4 reduces dendritic inhibition from CCK+ inhibitory neurons and enhances plasticity.

Heinz DA, Cui W, Cooper K, Bloodgood BL

Journal of neurophysiology (2025) : . . **IHC; tested species: mouse**

Activity-dependent synapse elimination requires caspase-3 activation.

Yu Z, Gutu A, Kim N, O'Shea EK

eLife (2025) 13: . . **IHC; tested species: mouse**

Access the online factsheet including applicable protocols at <https://sysy.com/product/266004> or scan the QR-code.



FAQ - How should I store my antibody?

Shipping Conditions

- All our antibodies and control proteins / peptides are shipped lyophilized (vacuum freeze-dried) and are stable in this form without loss of quality at ambient temperatures for several weeks.

Storage of Sealed Vials after Delivery

- **Unlabeled** and **biotin-labeled antibodies** and **control proteins** should be stored at 4°C before reconstitution. **They must not be stored in the freezer when still lyophilized!** Temperatures below zero may cause loss of performance.
- **Fluorescence-labeled antibodies** should be reconstituted immediately upon receipt. Long term storage (several months) may lead to aggregation.
- **Control peptides** should be kept at -20°C before reconstitution.

Long Term Storage after Reconstitution (General Considerations)

- The storage freezer must not be of the frost-free variety ("no-frost freezer"). This cycle between freezing and thawing (to reduce frost-build-up), which is exactly what should be avoided. For the same reason, antibody vials should be placed in an area of the freezer that has minimal temperature fluctuations, for instance towards the back rather than on a door shelf.
- Aliquot the antibody and store frozen (-20°C to -80°C). Avoid very small aliquots (below 20 µl) and use the smallest storage vial or tube possible. The smaller the aliquot, the more the stock concentration is affected by evaporation and adsorption of the antibody to the surface of the storage vial or tube. Adsorption of the antibody to the surface leads to a substantial loss of activity.
- The addition of glycerol to a final concentration of 50% lowers the freezing point of your stock and keeps your antibody at -20°C in liquid state. This efficiently avoids freeze and thaw cycles.

Product Specific Hints for Storage

Control proteins / peptides

- Store at -20°C to -80°C.

Monoclonal Antibodies

- **Ascites** and **hybridoma supernatant** should be stored at -20°C up to -80°C. **Prolonged storage at 4°C is not recommended!** Unlike serum, ascites may contain proteases that will degrade the antibodies.
- **Purified IgG** should be stored at -20°C up to -80°C. Adding a carrier protein like BSA will increase long term stability. Many of our antibodies already contain carrier proteins. Please refer to the data-sheet for detailed information.

Polyclonal Antibodies

- **Crude antisera:** With anti-microbials added, they may be stored at 4°C. However, frozen storage (-20°C up to -80°C) is preferable.
- **Affinity purified antibodies:** Less robust than antisera. Storage at -20°C up to -80°C is recommended. Adding a carrier protein like BSA will increase long term stability. Most of our antibodies already contain carrier proteins. Please refer to the data-sheet for detailed information.

Fluorescence-labeled Antibodies

- Store as a liquid with 1 : 1 (v/v) glycerol at -20°C. Protect these antibodies from light exposure.

Avoid repeated freeze-thaw cycles for all antibodies!

FAQ - How should I reconstitute my antibody?

Reconstitution

- All our purified antibodies are lyophilized from PBS. To reconstitute the antibody in PBS, add the amount of deionized water given in the respective datasheet. If higher volumes are preferred, add water as mentioned above and then the desired amount of PBS and a stabilizing carrier protein (e.g. BSA) to a final concentration of 2%. Some of our antibodies already contain albumin. Take this into account when adding more carrier protein. For complete reconstitution, carefully remove the lid. After adding water, briefly vortex the solution. You can spin down the liquid by placing the vial into a 50 ml centrifugation tube filled with paper.
- If desired, add small amounts of azide or thimerosal to prevent microbial growth. This is especially recommended if you want to keep an aliquot at 4°C.
- After reconstitution of fluorescence-labeled antibodies, add 1 : 1 (v/v) glycerol to a final concentration of 50%. This lowers the freezing point of your stock and keeps your antibody in liquid state at -20°C.
- Glycerol may also be added to unlabeled primary antibodies. It is a suitable way to avoid freeze-thaw cycles.
- Please refer to our **tips and hints for subsequent storage** of reconstituted antibodies and control peptides and proteins.