

# HuC/HuD Monoclonal Antibody (16A11)

Product Details	
Size	100 µg
Species Reactivity	Avian, Chicken, Human, Zebrafish
Published Species	Avian, Pig, Rat, Reptile, Non-human primate, Rodent, Shark, Sheep, Zebrafish, Fish, Cat, Human, Mouse, Lizard, Chicken, Xenopus, Rhesus monkey, Horse, Chimpanzee, Guinea pig, Rabbit
Host/Isotype	Mouse / IgG2b, kappa
Class	Monoclonal
Type	Antibody
Clone	16A11
Conjugate	Unconjugated
Immunogen	Human HuC/HuD neuronal protein.
Form	Lyophilized
Purification	purified
Contains	no preservative
Storage conditions	-20°C
RRID	AB_221448

Applications	Tested Dilution	Publications
Western Blot (WB)	1-5 µg/mL	13 Publications
Immunohistochemistry (IHC)	-	302 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	24 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	2 Publications
Immunohistochemistry (Frozen) (IHC (F))	5-20 µg/mL	39 Publications
Immunohistochemistry - Free Floating (IHC (Free))	-	6 Publications
Immunocytochemistry (ICC/IF)	5-20 µg/mL	60 Publications
Flow Cytometry (Flow)	-	1 Publication
ELISA (ELISA)	-	1 Publication
Functional Assay (FN)	-	1 Publication
Miscellaneous PubMed (Misc)	-	41 Publications

## Product Specific Information

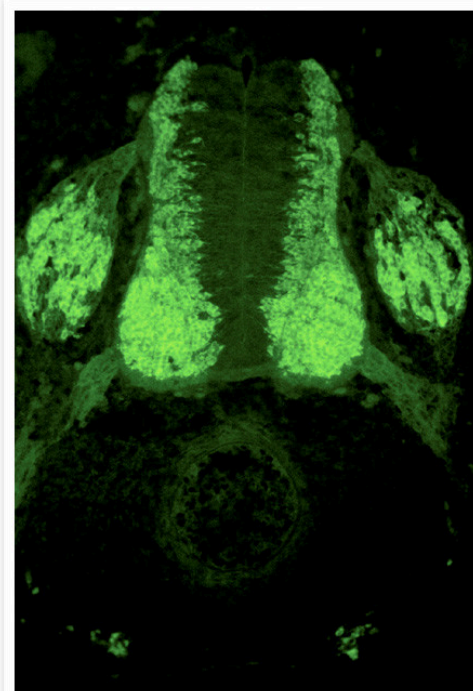
This antibody recognizes the Elav family members HuC, HuD and Hel-N1 neuronal proteins. It does not recognize HuR, another Elav family member that is present in all proliferating cells. The antibody has been shown to specifically label neuronal cells in zebrafish, chick, canaries, and humans, and is likely to label neuronal cells in most vertebrate species. Labeling is visible early in development, at about the time that the neurons leave the mitotic cycle.

**Storage and reconstitution:** Upon receipt, lyophilized antibodies should be stored desiccated at -20°C or lower. When properly stored, these products are stable for at least one year. To prepare stock solution, reconstitute the antibody in 0.5-1 mL PBS, pH 7.4, containing 1% BSA. Store the solution for up to two weeks at 4°C with the addition of 2mM sodium azide. For longer storage, divide solutions into single-use aliquots and freeze at -20°C, avoidig freeze/thaw cycles.

For best results in immunohistochemistry, antigen retrieval is required. Use 50mM Tris, pH 8.0, for 30 minutes.

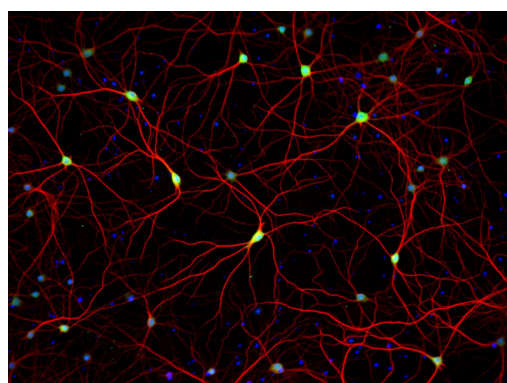
A-21271 was successfully used to detect HuC/HuD in neurons differentiated from H9 ESC derived NSCs.

## Product Images For HuC/HuD Monoclonal Antibody (16A11)



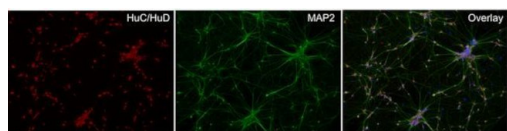
### HuC/HuD Antibody (A-21271) in IHC (F)

The spinal cord, dorsal root ganglia and sympathetic ganglia from the brachial region of a chick cryosection at stage 23 (Hamburger and Hamilton numbering) were identified with the mouse monoclonal anti-human neuronal protein HuC/HuD antibody (Product # A-21271) and visualized with fluorescein-labeled goat anti-mouse IgG antibody (Product # F-2761). The primary antibody recognizes an antigen localized to neuronal cell bodies and is ideal for identifying and counting neurons in both early and late development. Human, mouse, avian and zebrafish tissues have all demonstrated similar neuron-specific labeling patterns. Image contributed by Michael Marusich, Monoclonal Antibody Facility, University of Oregon, Eugene, Oregon.



### HuC/HuD Antibody (A-21271) in ICC/IF

Immunofluorescent analysis of HuC/D (green) and MAP2 (red) on rat primary cortical neurons cultured for 28 days in the B-27 Plus Neuronal Culture System (Product # A3653401). At day 28 the cells were fixed with 4% paraformaldehyde for 15 min, permeabilized with 0.1% triton x-100 for 30min, and blocked with 1% BSA for 30 min at room temperature. Cells were stained with anti-HuC/D antibody (Product # A-21271) at a dilution of 1:250, and anti-MAP2 (Product # PA5-17646) at a dilution of 1:250, in 1% BSA staining buffer, overnight at 4C, and then incubated with Alexa Fluor 488 conjugated donkey anti-mouse (Product # A-21202) and Alexa Fluor 594 donkey anti-rabbit (Product # A-21207) antibodies at a dilution of 1:1000 for 30 min. at room temp. Wash 3 times with DPBS. Stain with DAPI for nucleus. Images were taken on a Thermo Fisher Scientific EVOS M5000 Cell Imaging System at 10x magnification.



### HuC/HuD Antibody (A-21271) in ICC/IF

Immunofluorescent analysis of HuC/HuD in the differentiated neurons from H9 ESC-derived NSCs. 2 weeks after differentiation, cells were fixed, permeabilized and stained with a MAP2 rabbit polyclonal antibody (Product # PA5-17646) at 1:100 dilution (green) and a HuC/HuD mouse monoclonal antibody (Product # A-21271), at a concentration of 5 µg/mL (red) in blocking buffer for at least 1 hour at room temperature, and then incubated with goat anti-rabbit IgG secondary antibody, Alexa Fluor Plus 488 conjugate (Product # A32731, green) and a donkey anti-mouse IgG secondary antibody, Alexa Fluor 594 conjugate (Product # A-21203, red) at a dilution of 1:1000 for 1 hour at room temperature. Nuclei (blue) were stained with Hoechst 33342 dye (Product # 62249).

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Western Blot (13)

<p>The Journal of comparative neurology</p> <p><b>Quantification of CGRP-immunoreactive myenteric neurons in mouse colon.</b></p> <p>"A-21271 was used in Immunohistochemistry-immunofluorescence to conclude that CGRP+ myenteric neurons in mouse colon were comprehensively quantified, occurring within a range expected of a putative IPAN marker."</p> <p>Authors: Hibberd TJ,Yew WP,Dodds KN,Xie Z,Travis L,Brookes SJ,Costa M,Hu H,Spencer NJ</p>	<p>Year 2022</p> <p>Species Mouse Rat</p>
<p>Genome research</p> <p><b>Whole-genome analysis of noncoding genetic variations identifies multiscale regulatory element perturbations associated with Hirschsprung disease.</b></p> <p>"A-21271 was used in Western Blotting to show that a noncoding variant found only in the patients affects the binding of the gliogenesis regulator NFIA, with a corresponding up-regulation of multiple genes in the same topologically associating domain."</p> <p>Authors: Fu AX,Lui KN,Tang CS,Ng RK,Lai FP,Lau ST,Li Z,Garcia-Barcelo MM,Sham PC,Tam PK,Ngan ES,Yip KY</p>	<p>Year 2020</p> <p>Species Human</p> <p>Dilution 1:1000</p>

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Immunohistochemistry (302)

<p>Frontiers in neuroanatomy</p> <p><b>HERC1 Ubiquitin Ligase Is Required for Hippocampal Learning and Memory.</b></p> <p>"A-21271 was used in Immunohistochemistry to study the tbl hippocampus using behavioral tests, ex vivo electrophysiological recordings, immunohistochemistry, the Golgi-Cox method and transmission electron microscopy."</p> <p>Authors: Pérez-Villegas EM,Pérez-Rodríguez M,Negrete-Díaz JV,Ruiz R,Rosa JL,de Toledo GA,Rodríguez-Moreno A,Armengol JA</p>	<p>Year 2023</p> <p>Species Mouse</p> <p>Dilution 1:200</p>
<p>Neurogastroenterology and motility</p> <p><b>Glyphosate affects the neurochemical phenotype of the intramural neurons in the duodenum in the pig.</b></p> <p>"A-21271 was used in Immunohistochemistry-immunofluorescence to determine the effect of glyphosate intoxication on the neurochemical properties of the enteric nervous system (ENS) neurons located in the wall of the porcine duodenum."</p> <p>Authors: Palus K,Bulc M,Caka J</p>	<p>Year 2023</p> <p>Species Pig</p> <p>Dilution 1:1000</p>

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- IHC (P) (24)
- IHC (PFA) (2)
- IHC (F) (39)
- IHC (Free) (6)
- ICC/IF (60)
- Flow (1)
- ELISA (1)
- FN (1)
- Misc (41)

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