HuC/HuD Monoclonal Antibody (16A11)

Product Details	
Size	100 µg
Species	Avian, Chicken, Human, Zebrafish
Published Species	Avian, Pig, Rat, Reptile, Non-human primate, Shark, Rodent, Sheep, Zebrafish, Fish, Mouse, Human, Chicken, Xenopus, Horse, Guinea pig, Artificial Control, Rabbit
Expression System	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
Immunocytochemistry (ICC)	5-20 µg/mL	55 Publications
Immunofluorescence (IF)	5-20 µg/mL	33 Publications
Immunohistochemistry (Frozen) (IHC (F))	5-20 µg/mL	38 Publications
Western Blot (WB)	1-5 µg/mL	10 Publications
ELISA (ELISA)	-	1 Publication
Immunohistochemistry (IHC)	-	221 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	-	24 Publications
Immunohistochemistry - Free Floating (IHC (Free))	-	6 Publications
Miscellaneous PubMed (Misc)	-	47 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.

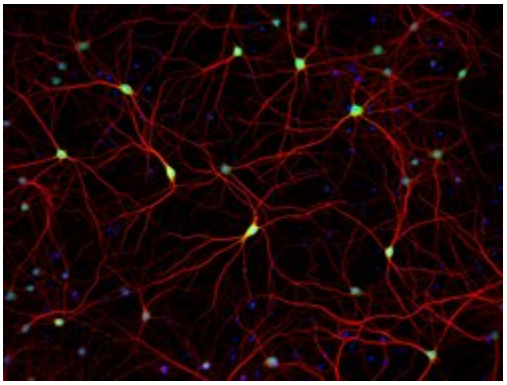
Storage and reconstitution: Upon receipt, lyophilized antibodies should be stored desiccated at -20°C or lower. When properly stored, these products are stable for at least one year. To prepare stock solution, reconstitute the antibody in 0.5-1 mL PBS, pH 7.4, containing 1% BSA. Store the solution for 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.

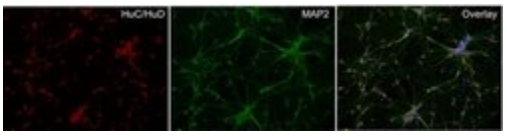
For best results in immunohistochemistry, antigen retrieval is required. Use 50mM Tris, pH 8.0, for 30 minutes.

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

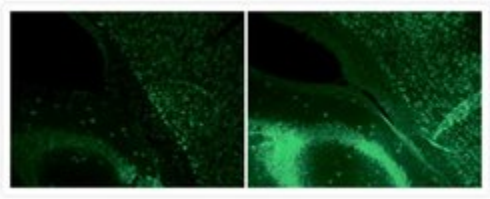
Product Images For HuC/HuD Monoclonal Antibody (16A11)



HuC/HuD Antibody (A-21271) in 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 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).



HuC/HuD Antibody (A-21271) in IF
Reduced background staining afforded by Image-iT® FX signal enhancer. Mouse brain cryosections were permeabilized and antigen retrieval was carried out. The sections were then treated for 30 minutes with Image-iT® FX signal enhancer (Product # I36933, left) or left untreated (right). Sections were labeled with the neural cell body selective antibody anti-Hu C/D (Product # A-21271) and visualized using TSA Kit #2 (Product # T-20912) with the HRP conjugate of goat anti-mouse IgG and Alexa Fluor® 488 tyramide. Sections were mounted using the reagents in the ProLong® Antifade Kit (Product # P-7481).

View more figures on thermofisher.com

436 References

Immunohistochemistry (221)

Frontiers in neuroanatomy

CRISPR/Cas9-Mediated Zebrafish Knock-in as a Novel Strategy to Study Midbrain-Hindbrain Boundary Development.

"A-21271 was used in Immunohistochemistry to generate four CRISPR/Cas9-based knock-in fluorescent reporter lines for otx2 and pax2a, which are involved in midbrain-hindbrain boundary development."

Authors: Kesavan G,Chekuru A,Machate A,Brand M

Species
Zebrafish

Dilution
1:150

Year
2020

Frontiers in cell and developmental biology

Glucocorticoids Target Ependymal Glia and Inhibit Repair of the Injured Spinal Cord.

"A-21271 was used in Immunohistochemistry to examine the mechanism by which glucocorticoids inhibit neural repair following spinal cord injury."

Authors: Nelson CM,Lennon VA,Lee H,Krug RG,Kamalova A,Madigan NN,Clark KJ,Windebank AJ,Henley JR

Species
Zebrafish

Dilution
1:300

Year
2020

View more IHC references on thermofisher.com

Immunohistochemistry (Paraffin) (24)

Frontiers in molecular neuroscience

Dusp16 Deficiency Causes Congenital Obstructive Hydrocephalus and Brain Overgrowth by Expansion of the Neural Progenitor Pool.

"A-21271 was used in Immunohistochemistry on paraffin embedded tissues to study the consequences of genetically inactivating dual-specificity phosphatase 16 on the development of congenital obstructive hydrocephalus and brain overgrowth."

Authors: Zega K,Jovanovic VM,Vitic Z,Niedzielska M,Knaapi L,Jukic MM,Partanen J,Friedel RH,Lang R,Brodski C

Species
Mouse

Dilution
1:800

Year
2020

Journal of physiology and biochemistry

Octodon degus, a new model to study the agonist and plexus-induced response in the urinary bladder.

"A21271 was used in immunohistochemistry - paraffin section to study the contractility of the detrusor muscle and the morphology and code of the vesical plexus from Octodon degus"

Authors: Martin-Cano FE,Caso-Agundez M,Camello-Almaraz C,Santos FJ,Espin MT,Madrid JA,Diez-Perez A,Camello PJ,Pozo MJ

Species
Mouse

Dilution
1:200

Year
2017

View more IHC (P) references on thermofisher.com

More applications with references on thermofisher.com

ICC (55) | IF (33) | IHC (F) (38) | WB (10) | IHC (Free) (6) | Misc (47) | IHC (PFA) (1) | ELISA (1)