NEUROMICS

α-Internexin/NF 66 Data Sheet

Catalog Number:	MO22154	**Host:**	Mouse
Product Type:	Mouse Monoclonal IgG	**Species Reactivity:**	Human, Rat, Mouse, and Cat
Immunogen Sequence:	Purified recombinant rat α-internexin expressed in and purified from *E. coli.*	**Format:**	Purified liquid antibody in PBS, 50% glycerol plus 5mM of Sodium Azide. Concentration: 1mg/ml.
Applications:	Immunofluorescent: 1:5,000 Immunocytochemistry: 1:5,000 Immunohistochemistry: 1:5,000 Western Blot: 1:10,000		
	Dilutions listed as a recommendation. Optimal dilution should be determined by investigator.		
Storage:	Antibody can also be aliquotted and stored frozen at -20° C in a manual defrost freezer for six months without detectable loss of activity. The antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Avoid repeated freeze-thaw cycles.		

Application Notes

Description/Data:

α-internexin is a Class IV intermediate filament protein originally discovered by two different groups of researchers as it copurifies with NF-L, NF-M and NF-H, the then better known major neurofilament "triplet" subunits. It is expressed only in neurons and in large amounts early in neuronal development, but is down-regulated in many neurons as development proceeds. Some neurons express α-internexin in the absence of NF-L, NF-M and NF-H, though most mature neurons express all four proteins. This α-internexin antibody has been shown, in peer reviewed publications, to reveal the upregulation of α-internexin in facial neurons following experimental axotomy followed by down regulation on axonal regeneration. It is also the standard reagent used to identify and classify patients with neurofilament inclusion body disease, a specific form of frontotemporal lobar dementia. Finally, it has been used to confirm the presence of circulating antibodies to α-internexin in the blood of certain patients with endocrine autoimmunity.

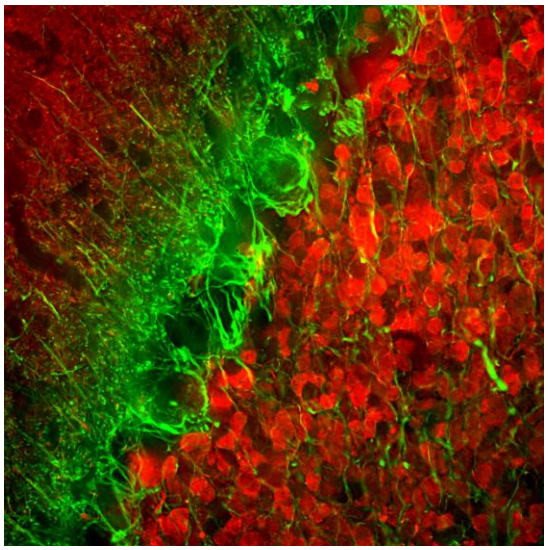

Image: Immunofluorescent analysis of rat cerebellum section stained with mouse mAb to α-internexin, MO22102, dilution 1:5,000 in green, and costained with chicken pAb to calretinin 1:2,000 in red. Following transcardial perfusion of rat with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45µM, and free-floating sections were stained with the above antibodies. The α-internexin antibody selectively stains neuronal processes, in particular parallel fibers, the axons of granule cells. Calretinin antibody stains interneurons predominantly in the molecular layer of the cerebellum.

FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RSKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012

www.neuromics.com

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail: pshuster@neuromics.com