

**Mouse Anti-Internexin Alpha/NF66 [2E3]: MC0230, MC0230RTU7**

**Intended Use:** For Research Use Only

**Description:** Alpha-internexin is an intermediate filament family member expressed during early neuron development and is related to the neurofilament proteins NF-H, NF-L and NF-M. Due to the specific spatial and temporal expression pattern of alpha-internexin, it is a useful marker of neuronal subtypes. It is related to but distinct from the better known neurofilament triplet proteins, NF-L, NF-M and NF-H, having similar protein sequence motifs and a similar intron organization. It is expressed in large amounts early in neuronal development, but is downregulated in many neurons as development proceeds. Many classes of mature neurons contain alpha-internexin in addition to NF-L, NF-M and NF-H. In some mature neurons alpha-internexin is the only neurofilament subunit expressed. Antibodies to a-internexin are therefore unique probes to study and classify neuronal types and follow their processes in sections and in tissue culture. The very early developmental expression of alpha-internexin means its presence is an early and convenient diagnostic feature of neuronal progenitors cells and other cell committed to the neuronal lineage. Recent studies show a marked up-regulation of a-internexin during neuronal regeneration.

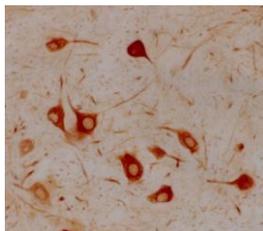
**Specifications:**

Clone: 2E3  
Source: Mouse  
Isotype: IgG1k  
Reactivity: Human, rat, mouse, feline, rabbit, bovine and porcine  
Localization: Nucleus  
Formulation: Purified antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, ELISA, Flow Cyt., ICC/IF, WB  
Package:

Description	Catalog No.	Size
Internexin Alpha/NF66 Concentrated	MC0230	1 ml
Internexin Alpha/NF66 Prediluted	MC0230RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Facial neurons, cerebral cortex tissue  
Concentrated Dilution: 100-500  
Pretreatment: EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual  
\* Result should be confirmed by an established diagnostic procedure.



FFPE rat facial neurons stained with anti-Internexin Alpha using DAB

**References:**

1. Expression of intermediate filament proteins and neuronal markers in the human fetal gut. Rauch U, et al. J Histochem Cytochem 54:39-46, 2006.
2. Screening for neurofilament inclusion disease using alpha-internexin immunohistochemistry. Uchikado H, et al. Neurology 64:1658-9, 2005.
3. The expression of alpha-internexin and peripherin in the developing mouse pineal gland. Ko TL, et al. J Biomed Sci 12:777-89, 2005.

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Rev. A