

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human $\alpha$ -Internexin in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) NF-M or rhVimentin is observed.                                                                                                    |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 529724                                                                                                                                                                                                                            |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human $\alpha$ -Internexin<br>Val230-Glu450<br>Accession # Q16352                                                                                                                                                                       |
| <b>Conjugate</b>          | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm                                                                                                                                                                                         |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

$\alpha$ -Internexin ( $\alpha$ -Inx; also NF-66) is a 66 kDa member of the intermediate filament (IF) protein family. It was the first of two molecules named for its presumed interaction with cytoskeletal proteins.  $\alpha$ -Inx is one of four Class IV neuronal IF proteins. It both self-assembles and complexes with NF-L, H and M in select cortical and cerebellar neurons.  $\alpha$ -Inx contains one DNA-binding region (aa 10-92), a poly-Glu segment (aa 449-454) and three serine phosphorylation sites (Ser72/335/496). There is one 494 aa alternative splice form that shows multiple short sequence aa substitutions in the first 200 amino acids. Over aa 230-450, human  $\alpha$ -Inx shows more than 96% aa identity with mouse, canine and rat  $\alpha$ -Inx.

## PRODUCT SPECIFIC NOTICES

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