

# $\alpha$ -internexin (H-90): sc-48740

## BACKGROUND

$\alpha$ -internexin is a brain specific type IV intermediate filament protein. This axonal protein is found in most, if not all, neurons of the CNS. The head domain of  $\alpha$ -internexin is essential for self-assembly into a filament network. Expression levels of  $\alpha$ -internexin have been shown to be maximal during late embryogenesis and to decline into adulthood, suggesting that this protein plays a role in regulatory processes during the development of the brain. The  $\alpha$ -internexin promoter has been shown to be activated by Brn-3a or Brn-3c transcription factor binding, while Brn-3b binding to the promoter results in  $\alpha$ -internexin repression.

## REFERENCES

1. Fliegner, K.H., et al. 1990. The predicted amino acid sequence of  $\alpha$ -internexin is that of a novel neuronal intermediate filament protein. EMBO J. 9: 749-755.
2. Fliegner, K.H., et al. 1994. Expression of the gene for the neuronal intermediate filament protein  $\alpha$ -internexin coincides with the onset of neuronal differentiation in the developing rat nervous system. J. Comp. Neurol. 342: 161-173.

## CHROMOSOMAL LOCATION

Genetic locus: INA (human) mapping to 10q24.33; Ina (mouse) mapping to 19 C3.

## SOURCE

$\alpha$ -internexin (H-90) is a rabbit polyclonal antibody raised against amino acids 410-499 mapping at the C-terminus of  $\alpha$ -internexin of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

$\alpha$ -internexin (H-90) is recommended for detection of  $\alpha$ -internexin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

$\alpha$ -internexin (H-90) is also recommended for detection of  $\alpha$ -internexin in additional species, including canine and bovine.

Suitable for use as control antibody for  $\alpha$ -internexin siRNA (h): sc-41992,  $\alpha$ -internexin siRNA (m): sc-41993,  $\alpha$ -internexin shRNA Plasmid (h): sc-41992-SH,  $\alpha$ -internexin shRNA Plasmid (m): sc-41993-SH,  $\alpha$ -internexin shRNA (h) Lentiviral Particles: sc-41992-V and  $\alpha$ -internexin shRNA (m) Lentiviral Particles: sc-41993-V.

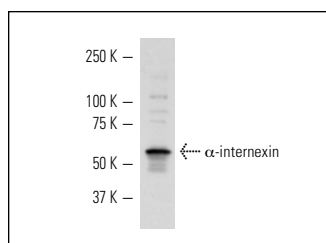
Molecular Weight of  $\alpha$ -internexin: 66 kDa.

Positive Controls: rat brain extract: sc-2392, IMR-32 cell lysate: sc-2409 or HeLa whole cell lysate: sc-2200.

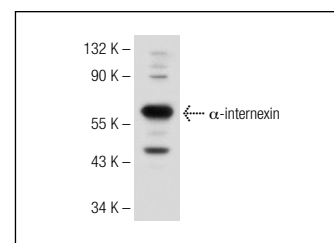
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



$\alpha$ -internexin (H-90): sc-48740. Western blot analysis of  $\alpha$ -internexin expression in HeLa whole cell lysate.



$\alpha$ -internexin (H-90): sc-48740. Western blot analysis of  $\alpha$ -internexin expression in IMR-32 whole cell lysate.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

**MONOS**  
Satisfaction  
Guaranteed

Try  **$\alpha$ -internexin (G-9): sc-271302** or  **$\alpha$ -internexin (2E3): sc-58478**, our highly recommended monoclonal alternatives to  $\alpha$ -internexin (H-90).