**BACKGROUND**

GAP-43 (growth associated protein 43, B-50, PP46, calmodulin-binding protein P-57, neuromodulin, neuron growth-associated protein 43, protein F1) is a crucial component for regenerative response in the nervous system that is present at high levels in neuronal growth cones during development and axonal regeneration. GAP-43 is normally produced by neurons during developmental growth and axonal regeneration, but it is also expressed in specific regions of the normal adult nervous system. The neuron-specific ELAV/Hu family member, HuD, interacts with and stabilizes GAP-43 mRNA in developing neurons and leads to increased levels of GAP-43 protein. Heterozygous GAP-43 knockout mice with GAP-43 levels reduced by one-half display significant memory impairments in cued conditioning or on tests of nociceptive or auditory perception.

**CHROMOSOMAL LOCATION**

Genetic locus: GAP43 (human) mapping to 3q13.31; Gap43 (mouse) mapping to 16 B4.

**SOURCE**

GAP-43 (H-100) is a rabbit polyclonal antibody raised against amino acids 1-100 mapping at the N-terminus of GAP-43 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Available as agarose conjugate for immunoprecipitation, sc-10786 AC, 500 µg/0.25 ml agarose in 1 ml.

**APPLICATIONS**

GAP-43 (H-100) is recommended for detection of axonal membrane protein GAP-43 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

GAP-43 (H-100) is also recommended for detection of axonal membrane protein GAP-43 in additional species, including canine, bovine and porcine. Suitable for use as control antibody for GAP-43 siRNA (h): sc-35446, GAP-43 siRNA (m): sc-35447, GAP-43 shRNA Plasmid (h): sc-35446-SH, GAP-43 shRNA Plasmid (m): sc-35447-SH, GAP-43 shRNA (h) Lentiviral Particles: sc-35446-V and GAP-43 shRNA (m) Lentiviral Particles: sc-35447-V.

Molecular Weight of GAP-43: 43 kDa.


**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.

**DATA**

**SELECT PRODUCT CITATIONS**


Try GAP-43 (B-5): sc-17790 or GAP-43 (7B10): sc-33705, our highly recommended monoclonal alternatives to GAP-43 (H-100). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see GAP-43 (B-5): sc-17790.