



GAP-43 (1-100): sc-4507

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.

REFERENCES

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STORAGE

Store at -20° C; stable for one year from the date of shipment.

SOURCE

GAP-43 (1-100) is expressed in *E. coli* as a 38 kDa tagged fusion protein corresponding to amino acids 1-100 of GAP-43 of human origin.

PRODUCT

GAP-43 (1-100) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 50 µg purified protein in PBS containing 5 mM DTT and 50% glycerol.

Available as a Western blotting control; 10 µg in 0.1 ml SDS-PAGE loading buffer, GAP-43 (1-100): sc-4507 WB.

APPLICATIONS

GAP-43 (1-100): sc-4507 is suitable as a substrate for PKC α : sc-4820 and as a Western blotting control for sc-7458, sc-10786 and sc-17790.

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SELECT PRODUCT CITATIONS

1. Jutapakdeegul, N., et al. 2010. Repeated restraint stress and corticosterone injections during late pregnancy alter GAP-43 expression in the hippocampus and prefrontal cortex of rat pups. *Int. J. Dev. Neurosci.* 28: 83-90.

RESEARCH USE

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