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ProductInformation

Anti-NCS-1
Developed in Rabbit
Affinity Isolated Antibody

Product Number **N 4285**

Product Description

Anti-NCS-1 is developed in rabbit using a synthetic peptide DGKLTLQEFQEGSKADPSIVQALSLYDGLV corresponding to the amino acid residues 161-190 of rat NCS-1 (neuronal calcium sensor-1) as immunogen. This sequence is completely conserved in mouse, rat, chicken, and human NCS-1. There is a single amino acid substitution in this region for *Xenopus* NCS-1. This antibody is purified by immunoaffinity chromatography.

Anti-NCS-1 detects neuronal calcium sensor-1 (NSC-1) from rat by immunoblotting.

Neuronal calcium sensor proteins bind calcium through EF-hand motifs and are predominantly expressed in neurons. Photoreceptor cells express type A sensors and include the proteins recoverin, S-modulin, and visinin. Type B receptors are expressed in neurons and include NCS1 and the *Drosophia* homolog frequenin and VILIP. NCS1 regulates neurosecretion in a calcium-dependent manner, potentiates nitric oxide synthase activity, and activates calcineurin and 3'-5' nucleotide phosphodiesterase.

Reagent

Anti-NCS-1 is supplied as an approx. 1 mg/ml solution in phosphate buffered saline containing 1 mg/ml bovine serum albumin (BSA), and 0.05% sodium azide.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) has been sent to the attention of the safety officer at your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. For extended use, freeze in working aliquots. Repeated freezing and thawing is not recommended. Do not store in a "frost-free" freezer. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

For immunoblotting, the minimum recommended working antibody concentration is 1 µg/ml detecting an approximately 20 kDa protein representing NCS-1 from rat brain extract.

Note: In order to obtain the best results in various techniques and preparations, we recommend determining the optimal working concentrations by titration.

References

1. Sallese, M., et al., Regulation of G protein-coupled receptor kinase subtypes by calcium sensor proteins. Biochim. Biophys. Acta., **1498**, 112-121 (2000).
2. Burgoyne, R.D., and Weiss, J.L., The neuronal calcium sensor family of Ca^{2+}-binding proteins. Biochem. J., **353**, 1-12 (2001).

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