Native Bovine Calmodulin

Cat. No. CALM3-74B **Lot. No.** (See product label)

SPECIFICATION

Product Overview	
Species	Bovine
Source	Bovine Brain
Description	Calmodulin (CaM) is a ubiquitous, calcium-binding protein that can bind to and regulate a multitude of different protein targets, thereby affecting many different cellular functions. CaM mediates processes such as inflammation, metabolism, apoptosis, muscle contraction, intracellular movement, short-term and long-term memory, nerve growth and the immune response. CaM is expressed in many cell types and can have different subcellular locations, including the cytoplasm, within organelles, or associated with the plasma or organelle membranes. Many of the proteins that CaM binds are unable to bind calcium themselves, and as such use CaM as a calcium sensor and signal transducer. CaM can also make use of the calcium stores in the endoplasmic reticulum, and the sarcoplasmic reticulum. CaM undergoes a conformational change upon binding to calcium, which enables it to bind to specific proteins for a specific response. CaM can bind up to four calcium ions, and can undergo post-translational modifications, such as phosphorylation, acetylation, methylation and proteolytic cleavage, each of which can potentially modulate its actions.
Form	Lyophilized
Molecular Mass	16 kDa

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Purity	Purity by SDS-PAGE: ≥95%
Usage	For Research Use Only! Not For Use in Humans.
Notes	Centrifuge the vial prior to opening
Storage	-20°C
Storage Buffer	Lyophilized in 30 mM Hepes, pH 7.4, 1 mM CaCl2 and 0.1 mM DTT.
Reconstitution	In water or aqueous buffer
Shipping	Gel pack

GENE INFORMATION

Gene Name	CALM3 calmodulin 3 (phosphorylase kinase, delta) [Bos taurus]
Official Symbol	CALM3
Synonyms	calmodulin
Gene ID	520277
mRNA Refseq	NM_001046249
Protein Refseq	NP_001039714
UniProt ID	P62157
Chromosome Location	chromosome: 18

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Pathway	Activation of Ca-permeable Kainate Receptor, organism-specific biosystem; Activation of Kainate Receptors upon glutamate binding, organism-specific biosystem; Adaptive Immune System, organism-specific biosystem

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