

Datasheet for ABIN7318225

Calmodulin 1 Protein (Calm1)[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	Calmodulin 1 (Calm1)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Recombinant Human Calmodulin/CALM1 Protein
Sequence:	Met 1-Lys149
Characteristics:	Recombinant Human Calmodulin is produced by our E.coli expression system and the target gene encoding Met1-Lys149 is expressed.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	Calmodulin 1 (Calm1)
Alternative Name:	Calmodulin/CALM1 (Calm1 Products)
Background:	Background: Calmodulin (CaM) is a multifunctional intermediate calcium-binding messenger protein expressed in all eukaryotic cells. It is an intracellular target of the secondary messenger Ca ²⁺ , and the binding of Ca ²⁺ is required for the activation of Calmodulin. Once bound to Ca ²⁺ , Calmodulin acts as part of a calcium signal transduction pathway by modifying its interactions

Target Details

with various target proteins such as kinases or phosphatases. Calmodulin is a small, highly conserved protein that is 148 amino acids long. The protein has two approximately symmetrical globular domains each containing a pair of EF-hand motifs (the N- and C-domain) separated by a flexible linker region for a total of four Ca²⁺ binding sites. Calmodulin mediates many crucial processes such as inflammation, metabolism, apoptosis, smooth muscle contraction, intracellular movement, short-term and long-term memory, and the immune response. Calmodulin 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, but it is always found intracellularly.

Synonym: Calmodulin, CaM, CALM1, CALM, CAM, CAM1, CALM2, CAM2, CAMB, CALM3, CALML2, CAM3, CAMC, CAMIII

Molecular Weight:	16.8 kDa
UniProt:	P62158
Pathways:	cAMP Metabolic Process , Myometrial Relaxation and Contraction , G-protein mediated Events , Interaction of EGFR with phospholipase C-gamma , Phototransduction , BCR Signaling

Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from a 0.2 µm filtered solution of 50 mM NH ₄ HCO ₃ , pH 8.0 .
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.