



Product Datasheet

Product Name	Calmodulin-2 Human Recombinant
Cata No	CB501075
Source	<i>Escherichia Coli.</i>
Synonyms	PHKD, CAMII, PHKD2, Calmodulin-2, CALM2, CALM1 protein, Phosphorylase kinase delta.

Description

Calmodulin-2 acts as an intracellular calcium sensor protein. When the intracellular Ca^{2+} concentration increases, calmodulin can bind up to four Ca^{2+} , changing its conformation and regulating cellular functions such as activation or inhibition of a large number of enzymes, ion channels, and receptors. P53 protein stimulates CALM2 gene expression in O41 cells. CALM-2 is involved in the processes of $Ca(2+)$ -induced neuronal cell death and the blockage of calmodulin attenuates brain injury after cerebral ischemia. Calmodulin-2 mediates the control of a large number of enzymes and other proteins by $ca(2+)$. among the enzymes to be stimulated by the calmodulin- $ca(2+)$ complex are a number of protein kinases and phosphatases. Recombinant CALM2 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 149 amino acids and having a molecular mass of 16 kDa. CALM2 is purified by conventional chromatography techniques

Physical Appearance

Sterile filtered colorless solution.

Purity

Greater than 90.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The CALM2 solution (1mg/ml) contains 20mM Tris-HCl, pH-7.5.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks.

Store, frozen at -20°C for longer periods of time.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Avoid multiple freeze-thaw cycles.

Sequence

MADQLTEEQI AEFKEAFSLF DKDGDGTITT
KELGTVMRSL GQNPTEAELQ DMINEVDADG
NGTIDFPEFL TMMARKMKDT DSEEEIREAF
RVFDKDGNGY ISAAELRHVM TNLGEKLTDE
EVDEMIREAD IDGDGQVNYE EFVQMMTAK.