



TEL:4006-871-227 Web:www.ybio.net Email:shybio@126.com

**YB93315Ra01**  
**Calmodulin 1 (CALM1)**  
**Organism: Rattus norvegicus (Rat)**  
***Instruction manual***

FOR IN VITRO USE AND RESEARCH USE ONLY  
NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES

3th Edition (Revised in February, 2012)

## **[ DESCRIPTION ]**

**Protein Names:** Calmodulin 1

**Gene Names:** CALM1

**Size:** 100µg

**Source:** Recombinant

**Expression Host:** *E.coli*

**Function:** Calmodulin mediates the control of a large number of enzymes, ion channels and other proteins by Ca<sup>2+</sup>, AND MASS SPECTROMETRY. Among the enzymes to be stimulated by the calmodulin-Ca<sup>2+</sup> complex are a number of protein kinases and phosphatases.

**Subcellular Location:** Cytoplasm; cytoskeleton; spindle.

## **[ PROPERTIES ]**

**Residues:** Met1~Lys149 (Accession # P62161), with a N-terminal His-tag.

**Grade & Purity:** >97%, 18.08 kDa as determined by SDS-PAGE reducing conditions.

**Form & Buffer:** Supplied as lyophilized form in PBS, pH 7.4.

**Endotoxin Level:** <1.0 EU per 1µg (determined by the LAL method).

**Applications:** SDS-PAGE; WB; ELISA; IP.

(May be suitable for use in other assays to be determined by the end user.)

**Predicted Molecular Mass:** 18.08 kDa



TEL:4006-871-227 Web:www.ybio.net Email:shybio@126.com

## [ PREPARATION ]

Reconstitute in PBS.

## [ STORAGE AND STABILITY ]

**Storage:** Store at 4°C for short time storage (1-2 weeks). Aliquot and store at -20°C or -80°C for long term storage. Avoid repeated freeze/thaw cycles.

**Valid period:** 12 months stored at -80°C.

## [ BACKGROUND ]

The target protein is fused with a His-tag and its sequence is listed below. The first Met is an initiator amino acid. Moreover, Gly and Ser are added to improve the flexibility of N-terminus at both ends of the His-tag, which will increase the chelating ability of the tag to Ni-Sepharose during purification.

MGHHHHHSGS-MADQLTEEQI AEFKEAFSLF DKDGDGTITT KELGTVMRSL GQNPTEAELQ DMINEVDADG  
NGTIDFPEFL TMMARKMKDT DSEEEIREAF RVFDKDGNGY ISAAELRHVM TNLGEKLTDE  
EVDDEMIREAD IDGDGQVNYE EFVQMMTAK

## [ REFERENCES ]

1. Giaccone G., et al. (2005) Ann Onc. 16: 538-48.
2. Schlessinger J., et al. (2000) Cell. 103: 211-25.
3. Yarden Y., et al. (2001) Nat Rev Mol Cell Biol. 2: 127-37.