



P93315Ra01
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 Ca²⁺, AND MASS SPECTROMETRY. Among the enzymes to be stimulated by the calmodulin-Ca²⁺ 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



[**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 GQNPTAEALQ DMINEVDADG
NGTIDFPEFL TMMARKMKDT DSEEEIREAF RVFDKDGNGY ISAAELRHVM TNLGEKLTDE
EVDEMIREAD 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.

