MRC PPU REAGENTS

Standard Operating Procedure

Preparation of Calmodulin 2 [1 - 149]

Enzyme description:- Calmodulin 2 [1 – 149]

Clone number:- DU 11423

Source:- Recombinant

Expression system:- *E.coli*

Tag:- N-terminal GST

Purification method:- GSH Sepharose

Calculated molecular mass:-

Monoisotopic 43, 633.47 daltons
Average Mass 43, 661.75 daltons
[cysteines reduced, methionines have not been oxidised

Theoretical pI:- 4.64

Purity:- >85 %

Enzyme storage buffer:-

50 mM Tris-HCl pH 7.5, 270 mM Sucrose, 150 mM NaCl, 0.1 mM EGTA,
0.1 % 2-mercaptoethanol, 0.02 % Brij-35, 0.2 mM PMSF, 1 mM Benzamidine.

Storage temperature:- -70 deg C

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Clone Data Sheet

Calmodulin 2 [1 – 149]

Protein Calmodulin 2 [1 – 149]

Clone number DU 11423

Species Human

Accession number NM_001743

Tags N-terminal GST

Bacterially expressed protein

MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDKWRNKKFEL
GLEFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAEISMLE
GAVLDIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKTYLN
GDHVTHPDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPQIDKY
LKSSKYIAWPLQGWQATFGGGDHPPKSDLEVLFQGPLGS**MADQLTEEQ**
IAEFKEAFSLFDKDGDGTITTKELGTVMRSLGQNPTEAELQDMINEVD
ADGNGTIDFPEFLTMMARKMKDTDSEEEIREAFRVFDKDGNGYISAAE
LRHVMTNLGEKLTDEEVDEMIREADIDGDGQVNYEEFVQMMTAK

Native sequence Amino acids M1 – K149 (end) of human Calmodulin 2.
Residue M232 of the fusion protein is equivalent to M1 of the native enzyme. The GST tag is located at residues 1 – 220.

Protease cleavage PreScission (LEVLFQGP) residues 221 – 228

Cloning sites *Bam*H1 and *Not*1 sites of pGEX6P-3

Nucleotide Sequence Of Insert

ggatccATGGCTGACCAACTGACTGAAGAGCAGATTGCAGAATTCAAAGAAGCT
TTTTCACTATTTGACAAAGATGGTGATGGAACTATAACAACAAAGGAATTGGGA
ACTGTAATGAGATCTCTTGGGCAGAATCCCACAGAAGCAGAGTTACAGGACATG
ATTAATGAAGTAGATGCTGATGGTAATGGCACAATTGACTTCCCTGAATTTCTG
ACAATGATGGCAAGAAAAATGAAAGACACAGACAGTGAAGAAGAAATTAGAGAA
GCATTCCGTGTGTTTGATAAGGATGGCAATGGCTATATTAGTGCTGCAGAACTT
CGCCATGTGATGACAAACCTTGGAGAGAAGTTAACAGATGAAGAAGTTGATGAA
ATGATCAGGGAAGCAGATATTGATGGTGATGGTCAAGTAAACTATGAAGAGTTT
GTACAAATGATGACAGCAAAGtgagcggccgc

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