**Human Calmodulin 2 / CALM2 Protein (His Tag)**

**Catalog Number:** 12435-H07E

### General Information

**Gene Name Synonym:**
caM; CAMII; LQT15; PHKD; PHKD2

**Protein Construction:**
A DNA sequence encoding the mature form of human CALM2 (P0DP24) (Met1-Lys149) was expressed with a polyhistide tag at the N-terminus.

**Source:** Human  
**Expression Host:** E. coli

### QC Testing

**Purity:** > 85 % as determined by SDS-PAGE

**Endotoxin:**
Please contact us for more information.

**Stability:**
Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** His

**Molecular Mass:**
The recombinant human CALM2 consists of 164 amino acids and predicts a molecular mass of 18.7 KDa. It migrates as an approximately 19-22 KDa band in SDS-PAGE under reducing conditions.

### Formulation:
Lyophilized from sterile PBS, pH 7.4

Normally 5% - 8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

### Usage Guide

**Storage:**
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

**Reconstitution:**
Detailed reconstitution instructions are sent along with the products.

### SDS-PAGE:

![SDS-PAGE Image]

### Protein Description

Calmodulin 2, also known as CALM2, is a calmodulin. Calmodulin 2 mediates the control of a large number of enzymes, ion channels and other proteins by Ca(2+). It is involved in a genetic pathway that regulates the centrosome cycle and progression through cytokinesis. Calmodulin 2 gene may be a genetic determinant of hip osteoarthritis (OA). OA is a degenerative disease characterized by gradual loss of articular cartilage and is a leading cause of disability in elderly populations. CALM2 was most abundantly expressed in articular chondrocytes and OA cartilage.

### References