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# Recombinant Human Calumenin Protein (aa 1-311, His Tag)

Catalog Number: PKSH030624

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### **Description**

**Species** Human

Source HEK293 Cells-derived Human Calumenin protein Met 1-Arg311, with an C-terminal His

Calculated MW 35.9 kDa Observed MW 46-52 kDa Accession O43852-1

**Bio-activity** Not validated for activity

#### **Properties**

Purity > 90 % as determined by reducing SDS-PAGE.

< 1.0 EU per  $\mu g$  of the protein as determined by the LAL method. Endotoxin

Storage Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80

°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

This product is provided as lyophilized powder which is shipped with ice packs. Shipping

Lyophilized from sterile PBS, pH 7.4 Formulation

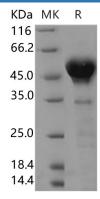
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

Please refer to the printed manual for detailed information. Reconstitution

### Data



> 90 % as determined by reducing SDS-PAGE.

## Background

Calumenin belongs to the CREC family. It contains 6 EF-hand domains. Calumenin is expressed in skeletal muscle (at protein level). Calumenin interacts with GGCX and RYR1 in the presence of calcium ions; but not in the presence of EDTA. Calumenin is Involved in regulation of vitamin K-dependent carboxylation of multiple N-terminal glutamate residues. It seems to inhibit gamma-carboxylase GGCX. Calumenin also binds 7 calcium ions with a low affinity and may modulate calcium release from the sarcoplasmic reticulum.

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