

## Recombinant Human CREG/CREG1 Protein (His Tag)

Catalog Number: PKSH033719

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

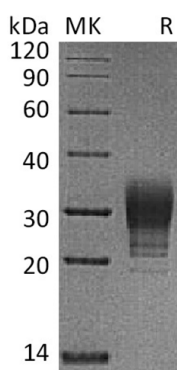
### Description

Species	Human
Source	HEK293 Cells-derived Human CREG;CREG1 protein Arg32-Gln220, with an C-terminal His
Calculated MW	21.9 kDa
Observed MW	20-38 kDa
Accession	O75629
Bio-activity	Not validated for activity

### Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. 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.
Reconstitution	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Cellular repressor of E1A genes (CREG) is an evolutionarily conserved lysosomal protein, and an important new factor in regulating tissue homeostasis that has been shown to antagonize injury of tissues or cells. CREG contains three mannose 6-phosphate (M6P) markers, and depends on interactions with M6P receptors for efficient delivery to lysosomes, which is implicated in the regulation of lysosomal functions. This protein shares limited sequence similarity with E1A and binds both the general transcription factor TBP and the tumor suppressor pRb in vitro. CREG plays an important role in the control of cell growth and differentiation. It has been shown that CREG antagonizes transcriptional and cellular transformation by the adenoviral E1A oncoprotein, induces differentiation while attenuating cellular proliferation, regulates the levels of the signaling kinases ERK1/2, and mediates glucocorticoid-induced proliferation of ileal epithelial cells. CREG is widely expressed in adult tissues, such as the brain, heart, lungs, liver, intestines and kidneys in mice, but is not markedly expressed in pluripotent embryonic stem cells.