

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

**Catalog No.** PKSH033719

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

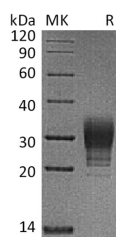
### Description

<b>Synonyms</b>	CREG1;cellular repressor of E1A-stimulated genes;cellular repressor of E1A-stimulated genes 1CREG;protein CREG1
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Arg32-Gln220
<b>Accession</b>	O75629
<b>Calculated Molecular Weight</b>	21.9 kDa
<b>Observed molecular weight</b>	20-38 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



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### Background

Cellular repressor of E1A genes (CREG) is an evolutionarily conserved lysosomal protein, and an important new factor in

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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.