



Recombinant Protein Technical Manual
Recombinant Human CREG/CREG1 Protein (His Tag)
RPES3534

Product Data:

Product SKU: RPES3534

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: O75629

Protein Information:

Molecular Mass: 21.9 kDa

AP Molecular Mass: 20-38 kDa

Tag: C-His

Bio-activity:

Purity: > 95% as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CREG1; cellular repressor of E1A-stimulated genes; cellular repressor of E1A-stimulated genes 1CREG; protein CREG1

Immunogen Information:

Sequence: Arg32-Gln220

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.