Data Sheet (Cat.No.TMPY-03420)

TargetMol

CREG1 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	AA755314;Creg;cellular repressor of E1A-stimulated genes 1
Protein Construction:	A DNA sequence encoding the mouse CREG (O88668) (Met1-Gln220) was expressed with a C-terminal polyhistidine tag. Predicted N terminal: Arg 32
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	O88668
Molecular Weight:	22.9 kDa (predicted); 28-32 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 95 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

CREG1 belongs to the CREG family. It is a adenovirus E1A protein which both activates and represses gene expression to promote cellular proliferation and inhibit differentiation. Thus it may contribute to the transcriptional control of cell growth and differentiation. The transcriptional control activity of cell growth requires interaction with IGF2R. CREG1 also antagonizes transcriptional activation and cellular transformation by E1A. It shares limited sequence similarity with E1A and binds both the general transcription factor TBP and the tumor suppressor pRb in

vitro. CREG1 gene may contribute to the transcriptional control of cell growth and differentiation.

Reference

Veal E,et al.(2000) The secreted glycoprotein CREG enhances differentiation of NTERA-2 human embryonal carcinoma cells. Oncogene. 19(17):2120-8.
Wen SJ,et al.(2003) Screening the proteins that interact with calpain in a human heart cDNA library using a yeast two-hybrid system. Hypertens Res. 25(4):647-52.
Grouse LH,et al.(2003) Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Proc Natl Acad Sci. 99(26):16899-903.