Data Sheet (Cat.No.TMPY-03454)

CRELD1 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	cysteine-rich with EGF-like domains 1;AI843811
Protein Construction:	A DNA sequence encoding the mouse CRELD1 (NP_598691.1) (Met1-Glu362) was expressed with a C-terminal polyhistidine tag. Predicted N terminal: Gln 30
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q91XD7
Molecular Weight:	37.7 kDa (predicted); 48 kDa (reducing conditions)

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

CRELD1 is a transmembrane glycoprotein. Epidermal growth factor(EGF)-like domain exists in CRELD1. EGF-like repeats are a class of cysteine-rich domains that mediate interactions between proteins of diverse function. EGF domains are found in proteins that are either completely secreted or have transmembrane regions that tether the protein to the cell surface. CRELD1 contains a 333 amino acid acid (aa) extracellular domain (ECD), two tandem transmembrane segments, and a second ECD of 15 aa. Defects in CRELD1 may cause susceptibility to

atrioventricular septal defect type 2 which results in a persistent common atrioventricular canal.

Reference

Robinson SW,et al. (2003) Missense Mutations in CRELD1 Are Associated with Cardiac Atrioventricular Septal Defects. Am J Hum Genet. 72(4):1047-52.
Zatyka M,et al. (2005) Analysis of CRELD1 as a candidate 3p25 atrioventicular septal defect locus (AVSD2). Clin Genet. 67(6):526-8.
Stelzl U,et al. (2005) A human protein-protein interaction network: a resource for annotating the proteome. Cell. 122(6):957-68.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481