Recombinant Mouse CRELD2

Catalog Number: 3686-CR

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived Ser23-Leu350, with a C-terminal 6-His tag Accession # Q9CYA0
N-terminal Sequence Analysis	Ser23
Predicted Molecular Mass	36.8 kDa

SPECIFICATIONS

SDS-PAGE	57-62 kDa, reducing conditions
Activity	Measured by its ability to induce adhesion of ATDC5 mouse chondrogenic cells. The ED_{50} for this effect is typically 0.75-3 µg/mL.
Endotoxin Level	<0.01 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 250 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Cysteine-rich with EGF-like domain protein 2 (CRELD2) is an approximately 60 kDa glycoprotein that contains two EGF-like domains and two FU domains (1). Mature mouse CRELD2 shares approximately 77% and 92% aa sequence identity with human and rat CRELD2, respectively. It is widely expressed in fetal and adult tissues (1, 2). CRELD2 localizes to the endoplasmic reticulum and Golgi and can also be secreted (2-4). It is up-regulated during the cellular stress-induced unfolded protein response (UPR), cartilage and bone pathologies (MED and MCDS), and arsenic-induced liver toxicity (3, 5-7). CRELD2 interacts intracellularly with the α4 and β2 subunits of the nicotinic acetylcholine receptor and inhibits cell surface expression of the receptor (2, 8). CRELD2 expression is up-regulated in prostate cancer by dihydroxytestosterone and is down-regulated following anti-androgen treatment (9).

References:

1. Rupp, P.A. *et al.* (2002) Gene **293**:47.
2. Ortiz, J.A. *et al.* (2005) J. Neurochem. **95**:1585.
3. Oh-hashi, K. *et al.* (2009) Biochem. Biophys. Res. Commun. **387**:504.
4. Oh-hashi, K. *et al.* (2011) FEBS Lett. **585**:2481.
5. Cameron, T.L. *et al.* (2011) PLoS ONE **6**:e24600.
6. Nundlall, S. *et al.* (2010) Cell Stress Chaperones **15**:835.
7. Nohara, K. *et al.* (2012) Toxicol. Sci. epub.
8. Hosur, V. *et al.* (2009) J. Neurochem. **111**:848.
9. Jariwala, U. *et al.* (2007) Mol. Cancer **6**:39.

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