

CSRP1 Protein, Human, Recombinant (His)

General Information

Synonyms:	cysteine and glycine-rich protein 1;D1S181E;CRP1;CYRP;CSRP;HEL-141;CRP
Protein Construction:	A DNA sequence encoding the human CSRP1 (NP_004069.1) (Met 1-Glu 193) was expressed, with a polyhistidine tag at the C-terminus. Predicted N terminal: Met 1
Species:	Human
Expression Host:	E. coli
Accession:	P21291
Molecular Weight:	21.4 kDa (predicted); 23 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:	Please contact us for more information.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing 10 mM Na ₂ HPO ₄ , 2 mM KH ₂ PO ₄ , 2.7 mM KCl, 500 mM NaCl, 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. <small>Actual storage temperature shall be subject to the COA.</small>

Shipping:

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

Protein Background

Cysteine and glycine-rich protein 1, also known as Cysteine-rich protein 1, CSRP1 and CSRP, is a member of the CSRP family which may be involved in regulatory processes important for development and cellular differentiation. CSRP1 contains two LIM zinc-binding domains. The LIM / double zinc-finger motif found in CSRP1 is found in a group of proteins with critical functions in gene regulation, cell growth, and somatic differentiation.

A DRUG SCREENING EXPERT

Zebrafish CSRP1 is expressed in the mesendoderm and its derivatives. CSRP1 interacts with Dishevelled 2 (Dvl2) and Diversin (Div), which control cell morphology and other dynamic cell behaviors via the noncanonical Wnt and JNK pathways. When CSRP1 message is knocked down, abnormal convergent extension cell movement is induced, resulting in severe deformities in midline structures. In addition, cardiac bifida is induced as a consequence of defects in cardiac mesoderm cell migration. CSRP1 acts as a key molecule of the noncanonical Wnt pathway, which orchestrates cell behaviors during dynamic morphogenetic movements of tissues and organs.

Reference

- Wimmer,U. et al., 2005, Nucleic acids Res. 33 (18):5715-27.
Miyasaka, KY.et al., 2007, Proc Natl Acad Sci USA. 104 (27): 11274-9.
Zhou,C.Z. et al., 2008,Chin Med J. 121 (24): 2479-86.
Lilly,B. et al., 2010, Arterioscler Thromb Vasc Biol. 30 (4):694-701.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only· Not for Human or Veterinary or Therapeutic Use

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