



Recombinant Protein Technical Manual

Recombinant Human CSRP1 Protein (His Tag)

RPES2960

Product Data:

Product SKU: RPES2960

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: NP_004069.1

Protein Information:

Molecular Mass: 21.4 kDa

AP Molecular Mass: 23 kDa

Tag: C-His

Bio-activity:

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

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°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 sterile 10mM Na₂HPO₄, 2mM KH₂PO₄, 2.7mM KCl, 500mM NaCl, pH 7.4

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

Application:

Synonyms: CRP;CRP1;CSRP;CYRP;D1S181E;HEL41

Immunogen Information:

Sequence: Met 1-Glu 193

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. 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.