# Mouse CSRP1 / CSRP / CRP1 Protein (His Tag)

Catalog Number: 50532-M08E



## Gene Name Synonym:

CRP; CRP1; CSRP; CYRP; D1S181E; HEL-141; AA408841; AA959891; AW545626; CRP1; Csrp

## **Protein Construction:**

A DNA sequence encoding the mouse CSRP1 (P97315) (Met 1-Glu 193) was expressed, with a polyhistide tag at the C-terminus.

Source:

Expression Host: E. coli

## **QC** Testing

**Purity:** > 95 % as determined by SDS-PAGE

Mouse

## Endotoxin:

Please contact us for more information.

## Stability:

Samples are stable for up to twelve months from date of receipt at -70  $^\circ C$ 

Predicted N terminal: Met

## **Molecular Mass:**

The recombinant mouse CSRP1 consisting of 203 amino acids and has a calculated molecular mass of 22 kDa. rm CSRP1 migrates as an approximately 23 kDa band in SDS-PAGE under reducing conditions.

## Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## **Usage Guide**

## Storage:

Store it under sterile conditions at -20  $^\circ\!C$  to -80  $^\circ\!C$  upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

## Avoid repeated freeze-thaw cycles.

## **Reconstitution:**

Detailed reconstitution instructions are sent along with the products.



# SDS-PAGE:



# **Protein Description**

Mouse 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.

## References

1.Wimmer,U. et al., 2005, Nucleic acids Res. 33 (18):5715-27. 2.Miyasaka, KY.et al., 2007, Proc Natl Acad Sci USA. 104 (27): 11274-9. 3.Zhou,C.Z. et al., 2008,Chin Med J. 121 (24): 2479-86.