Human CARHSP1 Protein (His Tag)

Catalog Number: **14333-H07E**

General Information

Gene Name Synonym:

CRHSP-24; CSDC1

Protein Construction:

A DNA sequence encoding the human CARHSP1(Q9Y2V2) (Met1-Ser147) was expressed with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: His

Molecular Mass:

The recombinant human CARHSP1 consists of 162 amino acids and predicts a molecular mass of 17.7 KDa. It migrates as an approximately 21 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tirs, 10% Glycerol, 200mM NaCl, pH 8.0.

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:

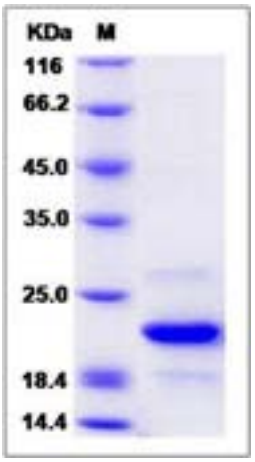
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CARHSP1 is a biomarker for diabetic complications. Adenovirus-mediated CARHSP1 overexpression and siRNA-mediated knockdown experiments were performed to characterize the role of CARHSP1 in the regulation of gluconeogenic gene expression. CARHSP1 is regulated by nutrient status in the liver and functions at the transcriptional level to negatively regulate gluconeogenic genes, including the glucose-6-phosphatase catalytic subunit (G6Pc) and phosphoenolpyruvate carboxykinase 1 (PEPCK1). In addition, it is found that CARHSP1 can physically interact with peroxisome proliferator-activated receptor-α (PPARα) and inhibit its transcriptional activity. Both pharmacological and genetic ablations of PPARα attenuate the inhibitory effect of CARHSP1 on gluconeogenic gene expression in hepatocytes.

References

1.Wistow G. et al., 2002, Mol Vis. 8: 205-20. 2.Wishart MJ. et al., 2002, Proc Natl Acad Sci. 99 (4): 2112-7. 3.Groblewski GE. et al., 1998, J Biol Chem. 273 (35): 22738-44.