Human CRIPT / cysteine-rich PDZ-binding Protein (His Tag)

Catalog Number: **14560-H07E**

General Information

Gene Name Synonym:

HSPC139; SSMDF

Protein Construction:

A DNA sequence encoding the mature form of human CRIPT (Q9P021) (Met1-Val101) was expressed with a polyhistide tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 90 % 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 CRIPT consists of 116 amino acids and predicts a molecular mass of 13.1 KDa. It migrates as an approximately 17 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:

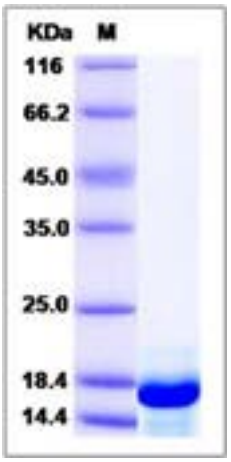
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CRIPT, also known as cysteine-rich PDZ-binding protein, belongs to the CRIPT family. It interacts with TUBB1. CRIPT also interacts strongly with the PDZ3 domain of members of the DLG4 family. It is involved in the cytoskeletal anchoring of DLG4 in excitatory synapses. CRIPT is highly conserved from mammals to plants and binds selectively to the third PDZ domain (PDZ3) of PSD-95 via its C terminus. n heterologous cells, CRIPT causes a redistribution of PSD-95 to microtubules. In brain, CRIPT colocalizes with PSD-95 in the postsynaptic density and can be coimmunoprecipitated with PSD-95 and tubulin. These findings suggest that CRIPT may regulate PSD-95 interaction with a tubulin-based cytoskeleton in excitatory synapses.

References

1.Niethammer M. et al., 1998,Neuron. 20 (4): 693-707. 2.Passafaro M. et al., 2000, Nat Neurosci. 2 (12): 1063-9. 3.Piserchio A. et al., 2002, J Biol Chem. 277 (9): 6967-73.