Human CSEN / Calsenilin / KCNIP3 Protein (His Tag)

Catalog Number: **14683-H07E**

General Information

Gene Name Synonym:

CSEN; DREAM; KCHIP3

Protein Construction:

A DNA sequence encoding the human KCNIP3 (Q9Y2W7-1) (Met1-Ile256) 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 KCNIP3 consists of 271 amino acids and predicts a molecular mass of 31.1 KDa. It migrates as an approximately 29 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris, 100mM NaCl, 10% Glycerol, 1mM DTT, 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:

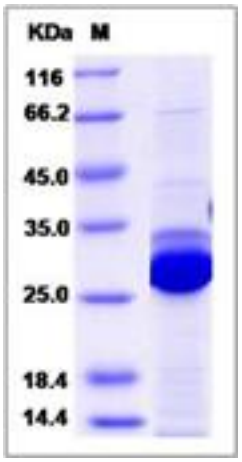
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CSEN, also known as calsenilin and KCNIP3, is a member of the family of voltage-gated potassium (Kv) channel-interacting proteins, which belong to the recoverin branch of the EF-hand superfamily. Members of this family are integral subunit components of native Kv4 channel complexes that may regulate A-type currents, and hence neuronal excitability, in response to changes in intracellular calcium. CSEN also functions as a calcium-regulated transcriptional repressor, and interacts with presenilins. CSEN binds to the DRE element of genes including PDYN and FOS.

References

1.Buxbaum J.D., *et al.*,(1998), Calsenilin: a calcium-binding protein that interacts with the presenilins and regulates the levels of a presenilin fragment. Nat. Med. 4:1177-1181. 2.Carrion A.M., *et al.*, (1999), DREAM is a Ca2+-regulated transcriptional repressor.Nature 398:80-84. 3.An W.F., *et al.*,(2000), Modulation of A-type potassium channels by a family of calcium sensors.Nature 403:553-556.