Human 14-3-3 sigma / Stratifin / YWHAS Protein (GST Tag)

Catalog Number: **10838-H09E**

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General Information

Gene Name Synonym:

YWHAS; Er; Mme1; Ywhas

Protein Construction:

A DNA sequence encoding the human SFN (NP_006133.1) (Met 1-Ser 248) was fused with the GST tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 94 % 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: Met

Molecular Mass:

The recombinant human SFN/GST chimera consists of 480 amino acids and has a predicted molecular mass of 50.1 kDa. It migrates as an approxiamtely 48 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 150mM NaCl, 10mM GSH, 25% glycerol, 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:

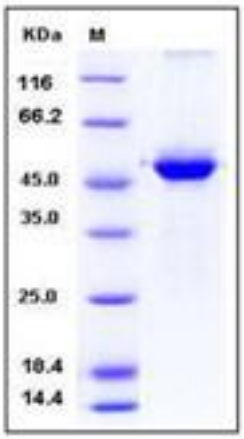
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

14-3-3 protein sigma (YWHAS), also known as stratifin (SFN) and epithelial cell marker protein 1, is a member of the14-3-3 proteins which are a family of conserved regulatory molecules expressed in all eukaryotic cells. The name 14-3-3 refers to the particular elution and migration pattern of these proteins on DEAE-cellulose chromatography and starch-gel electrophoresis. The 14-3-3 proteins eluted in the 14th fraction of bovine brain homogenate and were found on positions 3.3 of subsequent electrophoresis. There are seven genes that encode 14-3-3s in most mammals. 14-3-3 proteins have been identified as adapter proteins implicated in the regulation of a large spectrum of both general and specialized signaling pathway. More than 100 signaling proteins have been reported as 14-3-3 ligands including kinases, phosphatases, and transmembrane receptors, and the binding generally results in the modulation of the activity of the binding partner. YWHAE exists as a homodimer and present mainly in tissues enriched in stratified squamous keratinising epithelium. YWHAS has been repoted to interact with KRT17 and GAB2, and may regulate protein synthesis and epithelial cell growth by stimulating Akt/mTOR pathway upon binding to KRT17. Additionally, YWHAS (SFN) may also act as a p53-regulated inhibitor of G2/M progression.

References

1.Zakut-Houri R., *et al.*,(1985), Human p53 cellular tumor antigen: cDNA sequence and expression in COS cells. EMBO J. 4:1251-1255.
2.Lamb P., *et al.*, (1986), Characterization of the human p53 gene.Mol. Cell. Biol. 6:1379-1385.
3.Harlow E., *et al.*,(1985), Molecular cloning and in vitro expression of a cDNA clone for human cellular tumor antigen p53.Mol. Cell. Biol. 5:1601-1610.