Human 14-3-3 beta / YWHAB Protein (GST Tag)

Catalog Number: **10843-H09E**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

GW128, HS1, KCIP-1, YWHAB

Protein Construction:

A DNA sequence encoding the human YWHAB (NP_003395.1) (Met 1-Asn 246) was fused with the GST tag at the N-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 96 % 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 YWHAB/GST chimera consists of 478 amino acids and has a predicted molecular mass of 54.9 kDa. It migrates as an approxiamtely 52 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 150mM NaCl, 0.1mM DTT, 10% glycerol, pH 7.5

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

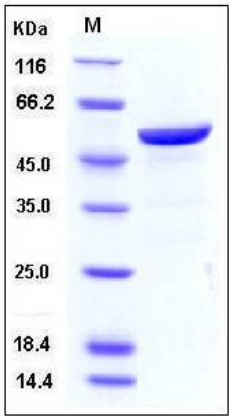
Usage Guide

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.

SDS-PAGE:



Reconstitution:

Detailed reconstitution instructions are sent along with the products.

Protein Description

Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide (YWHAB), also known as14-3-3 protein beta / alpha and protein kinase C inhibitor protein 1 (KCIP1), is a member of the 14-3-3 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. YWHAB has been repoted to interact with SSH1,TORC2/CRTC2, ABL1, ROR2, GAB2, and thus is invloved in the related processes, such as apoptosis. Inaddition, YWHAB may serve as a negative regulator of osteogenesis.

References

1. Mhawech, P. et al., 2005, Cell. Res. 15: 228-236.
2. Screaton, R.A. et al., 2004, Cell.119:61-74
3. Brummer, T. et al., 2008, EMBO. J. 27: 2305-2316.
4. Yang, X. et al., 2006, Proc. Natl. Acad. Sci. U.S.A. 103: 17237-17242.
5. Liu, Y. et al., 2007, Mol. Endocrinol. 21: 3050-3061.