

Mouse 14-3-3 epsilon / YWHAE Protein (GST Tag)

Catalog Number: 50691-M09E



Sino Biological Inc.

Biological Solution Specialist

General Information

Gene Name Synonym:

RP23-78H4.1, AU019196

Protein Construction:

A DNA sequence encoding the mouse YWHAE (P62259) (Met 1-Gln 255) was fused with the GST tag at the N-terminus.

Source: Mouse

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 °C

Predicted N terminal: Met

Molecular Mass:

The recombinant mouse YWHAE/GST chimera consists of 487 amino acids and has a predicted molecular mass of 56.1 kDa. It migrates as an approximately 48 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris, 2mM GSH, 1mM DTT, pH 8.2

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.

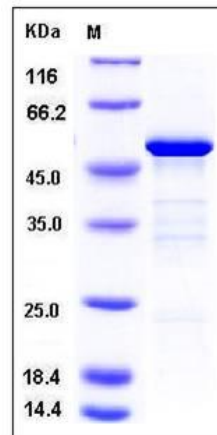
Usage Guide

Storage:

Store it under sterile conditions at -20°C to -80°C 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, epsilon polypeptide (YWHAE), 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. 14-3-3 epsilon/YWHAE exists as a homodimer and also heterodimerizes with YWHAZ. 14-3-3 epsilon/YWHAE has been reported to interact with NDEL1, RGNEF, TIAM2 and HCV core protein, as well as ABL1 and GAB2, and thus is involved in the related processes, such as apoptosis. It also weakly interacts with CDKN1B.

References

1. Mhaweche, P. et al., 2005, Cell. Res. 15: 228-236.
2. Aoki, H. et al., 2000, J. Virol. 74: 1736-1741.
3. Gu, Y-M. et al., 2006, FEBS Lett. 580: 305-310.
4. Yang, X. et al., 2006, Proc. Natl. Acad. Sci. U.S.A. 103: 17237-17242.
5. Brummer, T. et al., 2008, EMBO. J. 27: 2305-2316.