Recombinant Human 14-3-3 epsilon/YWHAE Protein

Catalog Number: PKSH031395

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

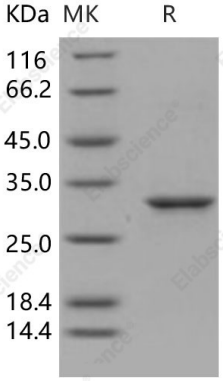
Description

Species	Human
Source	E.coli-derived Human 14-3-3 epsilon/YWHAE protein Met 1-Gln 255
Calculated MW	29.4 kDa
Observed MW	29.4 kDa
Accession	NP_006752.1
Bio-activity	Not validated for activity

Properties

Purity	> 96% as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20 mM Tris, 150 mM NaCl, 0.25 mM DTT, 25% glycerol, 0.5 mM GSH, pH 7.5 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 96 % as determined by reducing SDS-PAGE.

Background

YWHAE; also known as 14-3-3 epsilon; mediate signal transduction by binding to phosphoserine-containing proteins. 14-3-3 epsilon/YWHAE is a member of the 14-3-3 proteins family. 14-3-3 proteins are a group of highly conserved proteins that are involved in many vital cellular processes such as metabolism; protein trafficking; signal transduction; apoptosis and cell cycle regulation. 14-3-3 proteins are mainly localized in the synapses and neuronal cytoplasm; and seven isoforms have been identified in mammals. This family of proteins was initially identified as adaptor proteins which bind to phosphoserine-containing motifs. Binding motifs and potential functions of 14-3-3 proteins are now recognized to have a wide range of functional relevance. 14-3-3 epsilon/YWHAE is found in both plants and mammals; and this protein is 100% identical to the mouse ortholog. YWHAE interacts with CDC25 phosphatases; RAF1 and IRS1 proteins; suggesting its role in diverse biochemical activities related to signal transduction; such as cell division and regulation of insulin sensitivity. It has also been implicated in the pathogenesis of small cell lung cancer. 14-3-3 epsilon/YWHAE is implicated in the regulation of a large spectrum of both general and specialized signaling pathways. 14-3-3 epsilon/YWHAE Binds to a large number of partners; usually by recognition of a phosphoserine or phosphothreonine motif. This Binding generally results in the modulation of the activity of the binding partner.

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