



Recombinant Protein Technical Manual
Recombinant Human 14-3-3 epsilon/YWHAE Protein
RPES2765

Product Data:

Product SKU: RPES2765

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: NP_006752.1

Protein Information:

Molecular Mass: 29.4 kDa

AP Molecular Mass: 29.4 kDa

Tag:

Bio-activity:

Purity: > 96 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: 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 20mM Tris, 150mM NaCl, 0.25mM DTT, 25% glycerol, 0.5mM GSH, pH 7.5

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: 14-3-3E;HEL2;KCIP;MDCR;MDS

Immunogen Information:

Sequence: Met 1-Gln 255

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.