

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

Catalog No. PKSH031401

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

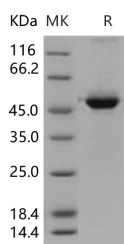
Description

Synonyms	14-3-3 Protein Sigma;Epithelial Cell Marker Protein 1;Stratifin;SFN;HME1
Species	Human
Expression Host	E.coli
Sequence	Met 1-Ser 248
Accession	NP_006133.1
Calculated Molecular Weight	50.1 kDa
Observed molecular weight	48 kDa
Tag	N-GST
Bioactivity	Not validated for activity

Properties

Purity	> 94 % 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 20mM Tris, 150mM NaCl, 10mM GSH, 25% glycerol, pH 8.0 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



> 94 % as determined by reducing SDS-PAGE.

Background

14-3-3 protein sigma (YWHAS); also known as stratifin (SFN) and epithelial cell marker protein 1; is a member of

For Research Use Only

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 pathways. 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 is present mainly in tissues enriched in stratified squamous keratinising epithelium. YWHAS has been reported 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.