

Recombinant Protein Technical Manual Recombinant Human HSPB11 Protein (His Tag) RPES0337

Product Data:

Product SKU: RPES0337

Species: Human

**Size:** 10µg

Expression host: E. coli

Uniprot: Q9Y547

## **Protein Information:**

Molecular Mass:	18.5 kDa
AP Molecular Mass:	21 kDa
Tag:	N-6His
Bio-activity:	
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 μm filtered solution of 20mM TrisHCl, 100mM NaCl, 2mM DTT, 10% Glycerol, pH 8.0.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Heat Shock Protein Beta1; Hspb11; Placental Protein 25; PP25; HSPB11; C1orf41

## Sequence: Met 1-Ser144

## Background:

Heat Shock Protein  $\beta$ 1 (HSPB11) is a stress-responsive protein that is required to deal with proteotoxic stresses. HSPB11 is composed of an IFT complex B composed of IFT88, IFT57, TRAF3IP1, IFT52, IFT27, HSPB11 and IFT20 and is detected in placenta. HSPB11 has beeb shown to form oligomeric complexes and prevent the aggregation of in vitro denaturated aldolase and glyceraldehyde-3-phosphate dehydrogenase in accordance with the chaperone model of HSPB1 and HSPB5. HSPB11 overexpression protected against etoposide-induced cell death that correlated with a decreased release of mitochondrial Cytochrome C into the cytosol. Inhibition of HSP90 function completely abrogated the protective effect of HSPB11. This data suggests that at least in the case of HSPB11, interaction with other chaperone machines besides HSPA1A may contribute to functional specificity and cellular functioning.