PRODUCT INFORMATION

Expression system E.coli

Domain 1-205aa

UniProt No. P04792

NCBI Accession No. NP_001531

Alternative Names Heat shock protein beta-1, CMT2F, HMN2B, Hsp25, Heat shock protein beta-1

PRODUCT SPECIFICATION

Molecular Weight 24.9 kDa (225aa) confirmed by MALDI-TOF

Concentration 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1mM DTT, 0.1 M NaCl.

Purity

> 95% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Tag His-Tag

Application SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Hsp27 (also known as the Estrogen-Regulated 24K protein, and hsp 28) is a member of the mammalian small heat shock protein family. Hsp27 is expressed constitutively in many tissues and its expression is increased to high levels after various types of stress including elevated temperatures, toxic metals, drugs and oxidants. Also, Hsp27 is phosphorylated in vivo on three phosphorylation sites (Ser15, Ser78 and Ser82) by protein kinases



1

NKMAX

including MAPKAP kinase 2 and the stress-activated protein kinase SAPK2 (p38). Recombinant human HSP27 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

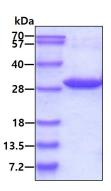
<MGSSHHHHHH SSGLVPRGSH> MTERRVPFSL LRGPSWDPFR DWYPHSRLFD QAFGLPRLPE EWSQWLGGSS WPGYVRPLPP AAIESPAVAA PAYSRALSRQ LSSGVSEIRH TADRWRVSLD VNHFAPDELT VKTKDGVVEI TGKHEERQDE HGYISRCFTR KYTLPPGVDP TQVSSSLSPE GTLTVEAPMP KLATQSNEIT IPVTFESRAQ LGGPEAAKSD ETAAK

General References

Friedman MJ., et al. (2009) J Biol Chem. 284(41):27944-51. Brunet Simioni M., et al. (2009) Oncogene. 28(37):3332-44.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.