

California Bioscience

Product Datasheet

Product Name	Heat Shock Protein 27 Human Recombinant
Cata No	CB500767
Source	Escherichia Coli.
Synonyms	HSPB1, CMT2F, HMN2B, HSP27, HSP28, HSP25, Heat shock protein beta-1, Heat shock 27 kDa protein, Stress-responsive protein 27, SRP27, HS.76067, DKFZp586P1322.

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 including MAPKAP kinase 2 and the stress-activated protein kinase SAPK2 (p38).

Recombinant Human HSP-27 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 205 amino acids and having a molecular mass of 22.7 kDa. Hsp27 was over-expressed in E. coli and purified by conventional chromatography.

Physical Appearance

Sterile Filtered colorless solution.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

The HSP27 protein solution contains 20mM Hepes pH-7.5, 1mM DTT and 100mM KCI

Stability

HSP-27 although stable at 4 $^{\circ}$ for 1 week, should be stored desiccated below -18 $^{\circ}$. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

Sequence

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