HSP27 (low endotoxin) (human), (recombinant)

Recombinant human HSP27 (low endotoxin) that functions as a molecular chaperone and inhibitor of protein aggregation.

Hsp27 is one of the most common members of the highly conserved and ubiquitously expressed family of small heat shock proteins (sHsp), which also includes alphaB-crystallin. It is characterized by a conserved C-terminal alpha-crystallin domain consisting of two anti-parallel beta-sheets that promote oligomer formation required for its primary chaperone function as inhibitor of irreversible protein aggregation. Hsp27 oligomerization is modulated by post-translational phosphorylation of Hsp27 at three serine residues, Ser15, Ser78, and Ser82, by a variety of protein kinases including MAPKAPK-3, PKAc-alpha, p70 S6K, PKD I, and PKC-delta. Hsp27 has been shown to inhibit actin polymerization by binding of unphosphorylated Hsp27 monomers to actin intermediate filaments. Anti-apoptotic functions of Hsp27 have also been identified through interactions with DAXX7, activation of Akt, and inhibition of apoptosome formation. Evidence suggests altered expression of Hsp27 is implicated in the pathogenesis of breast, ovarian, and prostate cancer.

Citations: 2 View Online »

Manuals, SDS & CofA View Online »

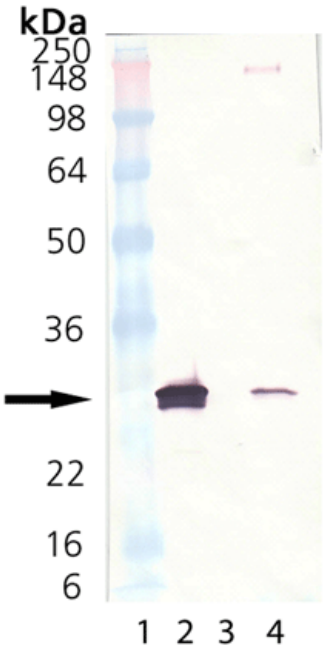


Figure 2: Western Blot Analysis – Lane 1: MW Marker; Lane 2: 100ng Hsp27; Lane 3: 20µg HeLa lysate; Lane 4: 20µg Heat-shocked HeLa lysate.

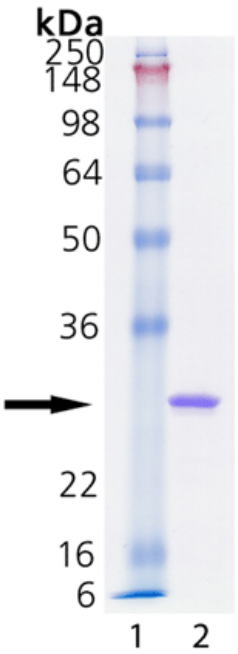


Figure 1: SDS-PAGE Analysis – Lane 1: MW Marker; Lane 2: 1µg Hsp27

Handling & Storage

Long Term Storage	-80°C
Shipping	Dry Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name	HspB1, Heat shock protein 27
Application Notes	Western blot control.
Endotoxin Content	<50EU/mg purified protein (LAL test)
Formulation	Liquid. In Dulbecco's PBS.
GenBank ID	L39370
MW	~27kDa
Purity	≥90% (SDS-PAGE; Western blot)
Purity Detail	Purified by multi-step chromatography.
Source	Produced in *E. coli*.
UniProt ID	P04792

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