

# Recombinant mouse HSP27 protein

Catalog Number: ATGP3866

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-209aa

### UniProt No.

P14602

### NCBI Accession No.

NP\_038588

### Alternative Names

27kDa, Hsp25, Heat shock 27kDa protein, 28 kDa heat shock protein, CMT2F, DKFZp586P1322, epididymis secretory protein Li 102, Estrogen regulated 24 kDa protein, Estrogen-regulated 24 kDa protein, Heat shock 25kDa protein 1, Heat shock 27 kDa protein, Heat shock 27kD protein 1, Heat shock 27kDa protein 1, Heat shock 28kDa protein 1, Heat Shock Protein 27, Heat shock protein beta 1, Heat shock protein beta-1, heat shock protein family B (small) member 1, HEL-S-102, HMN2B, HS.76067, Hsp 25, HSP 27, Hsp 28, Hsp B1, HSP27, Hsp28, HspB1, HSPB1\_HUMAN, SRP27, Stress responsive protein 27, Stress-responsive protein 27

## PRODUCT SPECIFICATION

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### Molecular Weight

25.4 kDa (232aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by absorbance at 280nm)

### Formulation

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

### Purity

> 90% by SDS-PAGE

### 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

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### Description

HSP27, also known as heat shock protein beta-1, is one of the small heat shock proteins and constitutively

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expressed in various tissues. HSP27 expression is increased to high levels after various types of stress including elevated temperatures, toxic metals, drugs and oxidants. HSP27 and its phosphorylation state participate in the regulation of multiple physiological and pathophysiological cell functions. However, the exact roles of HSP27 in osteoblasts remain unclear. In the present study, we investigated the role of HSP27 in the platelet-derived growth factor-BB(PDGF-BB)-stimulated migration of osteoblast-like MC3T3-E1 cells. Recombinant mouse HSP27, fused to His-tag at N-terminus, was expressed in E.coli and purified by conventional chromatography techniques.

## Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGS>MTERRVP FLLRSPSWE PFRDWYPAHS RLFDAQFGVP RLPDEWSQWF  
SAAGWPGYVR PLPAATAEGP AAVTLAAPAF SRALNRQLSS GVSEIRQTAD RWRVSLDVNH FAPEELTVKT KEGVVEITGK  
HEERQDEHGY ISRCFTRKYT LPPGVDPTLV SSSLSPGTL TVEAPLPKAV TQSAEITIPV TFEARAQIGG PEAGKSEQSG AK

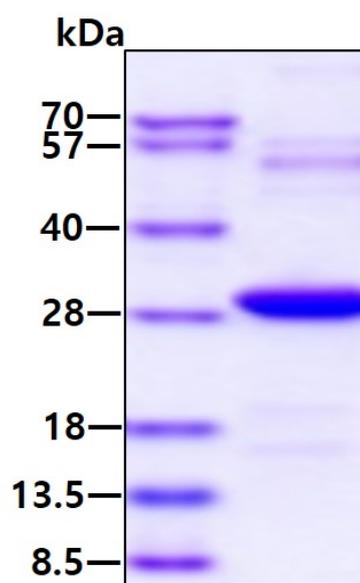
## General References

Kainuma S., et al. (2017) *Int. J. Mol. Med.* 40(4):1057-66.

Butt E., et al. (2001) *J. Biol. Chem.* 276(10): 7108-113.

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.