HSP25 (mouse), (recombinant)

Recombinant mouse HSP25 that acts as a small heat shock protein, preventing protein aggregation and supporting cellular stress responses.

Mouse Hsp25, human Hsp27, and αβ-crystallin are part of a diverse family of small heat shock proteins (sHsps) which are produced in all organisms. The overall homology between the different sHsps is low and they are grouped together based on conserved sequences in the C-terminal half of the protein and short conserved phenylalanine-rich stretches near the N terminus. Mammalian sHsps are expressed constitutively under physiological conditions but stress factors such as heat shock induce a strong up-regulation of protein levels by 10-20-fold to maximum concentrations of 0.1% of the cellular protein. They function as chaperonelike proteins by binding unfolded polypeptides and preventing uncontrolled protein aggregation. sHsps all share the striking feature of forming high molecular weight oligomeric complexes of variable size. The quaternary structure of sHsps is essential for their function and regulation of activity but its basic properties are still rather poorly understood. Data indicates that Hsp25 is a dynamic tetramer of tetramers with a unique ability to refold and reassemble into its active quaternary structure after denaturation. Current studies demonstrate that Hsp25 helps facilitate the glutathioneredox cycle by enhancing glutathione utilization and maintaining the cellular glutathione pool in favor of the reduced states.

Citations: 3

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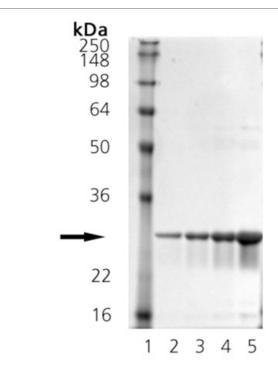
Ordering Information

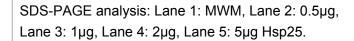
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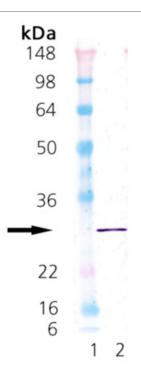
ADI-SPP-510-D	50µg
ADI-SPP-510-F	200μg

Manuals, SDS & CofA

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Western Blot analysis: Lane 1: MW marker, Lane 2: HSP25 protein probed with anti-HSP25 pAb.

Handling & Storage

Long Term Storage -80°C

Shipping Dry Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name HspB1, Heat shock protein 25

Application Notes Western blot control.

Formulation Liquid. In Dulbecco's PBS.

GenBank ID L07577

MW ~28kDa

Purity ≥90% (SDS-PAGE; Western blot)

Purity Detail Purified by multi-step chromatography.

Source Produced in *E. coli*.

UniProt ID P14602

Last modified: October 9, 2025

