HSP70 ELISA kit

Widely used ELISA HSP70 kit for chaperone and stress research.

The HSP70 EIA kit is a colorimetric immunometric enzyme immunoassay kit with results in 4.5 hours. Absorbance is read at 450 nm. This kit is ideal for measuring intracellular HSP70 (HSP72). Save time, money, and precious sample with fully quantitative results and increased sensitivity compared to Western blot analysis.

The Hsp70 family of heat shock protiens contains multiple homologs ranging in size from 66-78 kDa, and are the eukaryotic equivalents of the bacterial DnaK. The most studied Hsp70 members include the cytosolic stress-induced Hsp70 (Hsp72), the constitutive cytosolic Hsc70 (Hsp73), and the ER-localized BiP (Grp78). Hsp70 family members contain highly conserved N-terminal ATP-ase and C-terminal protein binding domains. Binding of peptide to Hsp70 is assisted by Hsp40, and stimulates the inherent ATPase activity of Hsp70, facilitating ATP hydrolysis and enhanced peptide binding. Hsp70 nucleotide exchange and substrate binding coordinates the folding of newly synthesized proteins, the re-folding of misfolded or denatured proteins, coordinates trafficking of proteins across cellular membranes, inhibits protein aggregation, and targets the degradation of proteins via the proteasomal pathway.

Citations: 45

View Online »

Ordering Information

Order Online »

ADI-EKS-700B

96 wells

Manuals, SDS & CofA

View Online »

- Sensitive measurement of HSP70, measuring as low as 200 pg/ml
- Fully quantitative results compared to Western blot analysis
- Highly specific, with minimal cross-reactivity with other HSP
- Validated in stressed and nonstressed samples

Handling & Storage

Use/Stability Store all components at 4°C, except standard at -20°C.

Shipping Dry Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name Heat shock protein 70, HSP72

Application Colorimetric detection, ELISA

Application NotesFor the quantitative determination of HSP70 in cell lysates

and tissue of human, mouse, and rat origin. Prod. No. ADI-EKS-715 is recommended for the detection of Hsp70 in

serum and plasma samples.

Assay Time 4.5 hours

Compatibility This product is compatible with the Absorbance 96 Plate

Reader.

Contents Microtiter plate, 5X Extraction reagent, Standard, Sample

diluent 2, Wash buffer concentrate, Antibody, Conjugate,

TMB Substrate, Stop solution 2

Sensitivity 200 pg/ml (range 780 – 50,000 pg/ml)

Species Reactivity Human, Mouse, Rat

UniProt ID P0DMV8 (HSPA1A), P0DMV9 (HSPA1B)

Wavelength 450 nm

Last modified: May 29, 2024

