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.

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Ordering Information

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ADI-EKS-700B	96 wells

Manuals, SDS & CofA

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- 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 non-stressed 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 Notes	For 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

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ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

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