**Product datasheet**

**Human anti-HSP70 IgG/A/M ELISA Kit ab133063**

2 References 1 Image

### Overview

**Product name**
Human anti-HSP70 IgG/A/M ELISA Kit

**Detection method**
Colorimetric

**Precision**

<table>
<thead>
<tr>
<th>Sample</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>CV%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>16</td>
<td></td>
<td></td>
<td>&lt; 10%</td>
</tr>
</tbody>
</table>

**Sample type**
Serum

**Assay type**
Indirect

**Sensitivity**
6.79 ng/ml

**Range**
31.25 ng/ml - 1000 ng/ml

**Assay time**
4h 00m

**Assay duration**
Multiple steps standard assay

**Species reactivity**
Reacts with: Human

**Product overview**
Abcam’s anti-HSP70 IgG/A/M in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the accurate quantitative measurement of anti-HSP70 antibodies in serum samples from human origin.

A recombinant Human Hsp70 protein has been precoated onto 96-well plates. Standards or test samples are added to the wells, incubated and then washed. An anti-Human GAM-HRP conjugated antibody is then added and incubated. The plate is washed once more and the TMB substrate is then added which HRP catalyzes, generating a blue coloration after incubation. A stop solution is then added which generates conversion to yellow color read at 450 nm which is proportional to the amount of analyte bound.

**Notes**
The Hsp70 family of heat shock proteins 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 ATPase 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.

Platform

Microplate

Properties

Storage instructions

Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>1 x 96 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>20X Wash Buffer Concentrate</td>
<td>1 x 100ml</td>
</tr>
<tr>
<td>Anti-HSP70 Microplate (12 x 8 wells)</td>
<td>1 unit</td>
</tr>
<tr>
<td>Anti-Human Hsp70 Standard</td>
<td>1 x 0.12ml</td>
</tr>
<tr>
<td>Anti-Human HSP70-HRP Conjugate</td>
<td>1 x 10ml</td>
</tr>
<tr>
<td>Plate Sealer</td>
<td>3 units</td>
</tr>
<tr>
<td>Sample Diluent 2</td>
<td>1 x 100ml</td>
</tr>
<tr>
<td>Stop Solution 2</td>
<td>1 x 10ml</td>
</tr>
<tr>
<td>TMB Substrate</td>
<td>1 x 10ml</td>
</tr>
</tbody>
</table>

Images

Representative Standard Curve using ab133063.

Typical Standard Curve

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