

## Product datasheet

# HSP70 ELISA Kit ab133060

★★★★☆ 1 Abreviews 2 References 1 Image

### Overview

**Product name** HSP70 ELISA Kit

**Detection method** Colorimetric

**Precision**

Intra-assay				
Sample	n	Mean	SD	CV%
Overall	24			< 5%

Inter-assay				
Sample	n	Mean	SD	CV%
Overall	9			< 13%

**Sample type** Tissue Extracts, Cell Lysate

**Assay type** Sandwich (quantitative)

**Sensitivity** 200 pg/ml

**Range** 780 pg/ml - 50000 pg/ml

**Recovery**

Sample specific recovery		
Sample type	Average %	Range
Tissue Extracts	>=90	% - %
Cell Lysate	>=90	% - %

**Assay time** 4h 30m

**Assay duration** Multiple steps standard assay

**Species reactivity** **Reacts with:** Mouse, Rat, Human

**Product overview** Abcam's HSP70 *in vitro* ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the accurate quantitative measurement of HSP70 in samples from Human, Mouse and Rat origins. This assay allows for the quantitative determination of inducible HSP70 from cell lysates and tissue extracts.

A HSP70 monoclonal antibody has been precoated onto 96-well plates. Standards or test

samples are added to the wells, incubated and then washed. A HSP70 polyclonal antibody is then added, incubated and washed. An HRP conjugated anti-IgG antibody is then added, 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 added which generates conversion to yellow color read at 450 nm which is proportional to the amount of analyte bound.

Get higher sensitivity in only 90 minutes with [Human HSP70 ELISA Kit \(ab187399\)](#) from our SimpleStep ELISA® range.

## Notes

Inducible heat shock protein 70 (HSP70) is a stress protein whose expression is upregulated when the cell or organism is placed under conditions of stress. HSP70 is essential for cellular recovery, survival, and maintenance of normal cellular function. It is also a molecular chaperone that prevents protein aggregation and refolds damaged proteins in response to cellular stress caused by environmental insults, pathogens, and disease. Current research is aimed at exploiting HSP70's cellular protective abilities as a therapeutic strategy against damaging cellular stress.

In most mammals, the expression of inducible HSP70 is strictly stress inducible and can only be detected following a significant stress upon the cell or organism. However, in humans and primates, inducible HSP70 is present at basal levels and is upregulated in response to stress. The role of HSP70 has been studied in a variety of medically relevant models or conditions such as hyperthermia, hypertension, toxic exposure to chemical agents, hypoxia, ischemia, inflammation, autoimmunity, apoptosis, cancer, organ transplantation, and bacterial and viral infections. HSP70 has also been studied in the normal processes of aging, spermatogenesis, menstruation, and physical activity such as exercise.

## Tested applications

**Suitable for:** Sandwich ELISA

## Platform

Microplate

## Properties

### Storage instructions

Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer Concentrate	1 x 100ml
5X Extraction Reagent	1 x 10ml
Anti-HSP70 Microplate (12 x 8 wells)	1 unit
Anti-rabbit IgG HSP70 Horseradish Peroxidase Conjugate	1 x 10ml
HSP70 Antibody	1 x 10ml
Recombinant HSP70 Standard	1 x 25µl
Sample Diluent 2	1 x 50ml
Stop Solution 2	1 x 10ml
TMB Substrate	1 x 10ml

## Cellular localization

Cytoplasm. Note: Localized in cytoplasmic mRNP granules containing untranslated mRNAs

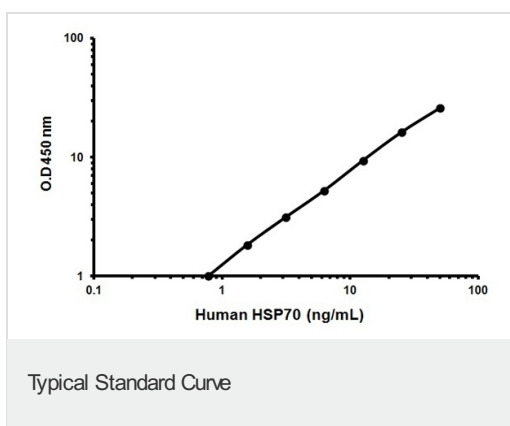
## Applications

Our [Abpromise guarantee](#) covers the use of **ab133060** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration.

## HSP70 ELISA Kit images



Representative Standard Curve using ab133060.

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <http://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors