# abcam

## Product datasheet

# Recombinant human Hsc70 protein ab78431

**5 References** 2 Images

**Description** 

Product name Recombinant human Hsc70 protein

Biological activity at the time of manufacture of 3.2 µM phosphate liberated/hr/µg

protein in a 200 µl reaction at 37°C (pH 8) in the presence of 20 µl of 1 mM ATP using a

Malachite Green assay.

**Purity** > 90 % Affinity purified.

ab78431 is affinity purified.

Expression system Escherichia coli

Accession P11142

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Human

Predicted molecular weight 73 kDa including tags

Amino acids 1 to 646

Tags His tag N-Terminus

Additional sequence information His tag

# **Specifications**

Our Abpromise guarantee covers the use of ab78431 in the following tested applications.

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

**Applications** Western blot

**ELISA** 

**Functional Studies** 

Competitive Binding Assays

SDS-PAGE

Form Liquid

**Preparation and Storage** 

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#### Stability and Storage

Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

pH: 8

Constituents: 1.753% Sodium chloride, 0.788% Tris HCI

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### **General Info**

**Function** Acts as a repressor of transcriptional activation. Inhibits the transcriptional coactivator activity of

CITED1 on Smad-mediated transcription. Chaperone. Isoform 2 may function as an endogenous

inhibitory regulator of HSC70 by competing the co-chaperones.

Tissue specificity Ubiquitous.

**Sequence similarities** Belongs to the heat shock protein 70 family.

**Domain** The N-terminal 1-386 residues constitute the ATPase domain, while residues 387-646 form the

peptide-binding domain.

**Post-translational** Phosphorylated upon DNA damage, probably by ATM or ATR.

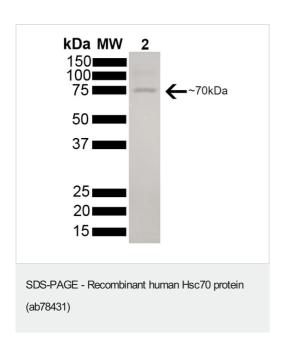
modifications ISGylated.

**Cellular localization**Cytoplasm. Melanosome. Localized in cytoplasmic mRNP granules containing untranslated

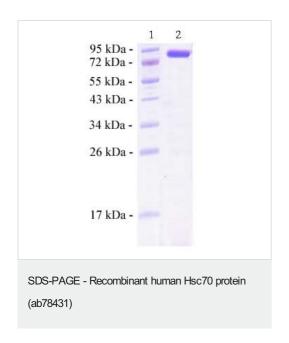
mRNAs. Translocates rapidly from the cytoplasm to the nuclei, and especially to the nucleoli, upon

heat shock. Identified by mass spectrometry in melanosome fractions from stage I to stage IV.

#### **Images**



SDS-PAGE of 73kDa Hsc70 protein.



Lane 1. Molecular weight ladder

Lane 2. Hsc70 protein

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