

**Goat Anti-HSPA8 (Isoform 1) Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1544a

## Specification

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### Goat Anti-HSPA8 (Isoform 1) Antibody - Product Information

Application	WB
Primary Accession	<a href="#">P11142</a>
Other Accession	<a href="#">NP_006588</a> , <a href="#">3312</a> , <a href="#">15481 (mouse)</a> , <a href="#">24468 (rat)</a>
Reactivity	Human
Predicted	Mouse, Rat, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	70898

### Goat Anti-HSPA8 (Isoform 1) Antibody - Additional Information

Gene ID [3312](#)

#### Other Names

Heat shock cognate 71 kDa protein, Heat shock 70 kDa protein 8, Lipopolysaccharide-associated protein 1, LAP-1, LPS-associated protein 1, HSPA8, HSC70, HSP73, HSPA10

#### Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

Goat Anti-HSPA8 (Isoform 1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-HSPA8 (Isoform 1) Antibody - Protein Information

Name HSPA8 ([HGNC:5241](#))

#### Function

Molecular chaperone implicated in a wide variety of cellular processes, including protection of the proteome from stress, folding and transport of newly synthesized polypeptides, chaperone-mediated autophagy, activation of proteolysis of misfolded proteins, formation and dissociation of protein complexes, and antigen presentation. Plays a pivotal role in the protein quality control system, ensuring the correct folding of proteins, the re-folding of misfolded proteins



[36586411](http://www.uniprot.org/citations/36586411)). In conjunction with LAMP2, facilitates MHC class II presentation of cytoplasmic antigens by guiding antigens to the lysosomal membrane for interaction with LAMP2 which then elicits MHC class II presentation of peptides to the cell membrane (PubMed:[15894275](http://www.uniprot.org/citations/15894275)). Participates in the ER-associated degradation (ERAD) quality control pathway in conjunction with J domain-containing co- chaperones and the E3 ligase STUB1 (PubMed:[23990462](http://www.uniprot.org/citations/23990462)). It is recruited to clathrin-coated vesicles through its interaction with DNAJC6 leading to activation of HSPA8/HSC70 ATPase activity and therefore uncoating of clathrin-coated vesicles (By similarity).

#### Cellular Location

Cytoplasm. Melanosome. Nucleus, nucleolus. Cell membrane. Lysosome membrane; Peripheral membrane protein; Cytoplasmic side. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs (PubMed:17289661). Translocates rapidly from the cytoplasm to the nuclei, and especially to the nucleoli, upon heat shock (PubMed:1586970)

#### Tissue Location

Ubiquitous..

### Goat Anti-HSPA8 (Isoform 1) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Goat Anti-HSPA8 (Isoform 1) Antibody - Images



AF1544a (2 µg/ml) staining of A431 cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-HSPA8 (Isoform 1) Antibody - Background

The product encoded by this gene belongs to the heat shock protein 70 family which contains both heat-inducible and constitutively expressed members. The latter are called heat-shock cognate proteins. This gene encodes a heat-shock cognate protein. This protein binds to nascent polypeptides to facilitate correct folding. It also functions as an ATPase in the disassembly of clathrin-coated vesicles during transport of membrane components through the cell. Two alternatively spliced variants have been characterized to date.

#### **Goat Anti-HSPA8 (Isoform 1) Antibody - References**

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Proteome analysis of the thalamus and cerebrospinal fluid reveals glycolysis dysfunction and potential biomarkers candidates for schizophrenia. Martins-de-Souza D, et al. J Psychiatr Res, 2010 May 14. PMID 20471030.

Nucleolar targeting of the chaperone hsc70 is regulated by stress, cell signaling, and a composite targeting signal which is controlled by autoinhibition. Ba?ski P, et al. J Biol Chem, 2010 Jul 9. PMID 20457599.

Genetic variations in HSPA8 gene associated with coronary heart disease risk in a Chinese population. He M, et al. PLoS One, 2010 Mar 16. PMID 20300519.

Heat shock cognate protein 70 is essential for Akt signaling in endothelial function. Shiota M, et al. Arterioscler Thromb Vasc Biol, 2010 Mar. PMID 20018937.