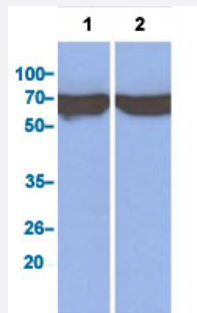


HSPA1A monoclonal antibody, clone 4E11

Catalog # MAB1094

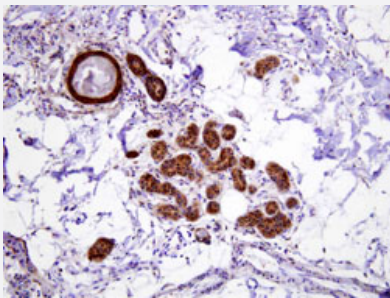
Size 100 uL

Applications



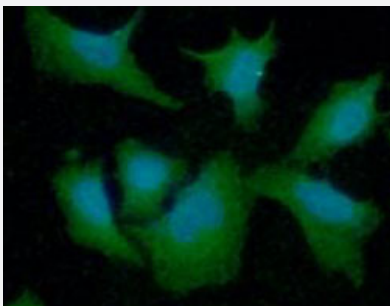
Western Blot (Cell lysate)

Western blot analysis of Lane 1: 293T cell lysate; Lane 2: HeLa cell lysate.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry of human eccrine gland were incubated with HSPA1A monoclonal antibody , clone 4E7 (1:100) for 2 hours at room temperature. Antigen retrieval was performed in 0.1 M sodium citrate buffer and detected using Diaminobenzidine (DAB).



Immunofluorescence

Immunofluorescent staining of A549 cells line, stained with DAPI (Blue) for nucleus staining and HSPA1A monoclonal antibody, clone 4E7 with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).

Specification

Product Description

Mouse monoclonal antibody raised against full length recombinant HSPA1A.

Immunogen

Recombinant protein corresponding to full length human HSPA1A.

Host	Mouse
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Isotype	IgG1, kappa
Recommend Usage	ELISA Immunocytochemistry Immunofluorescence Immunohistochemistry Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of Lane 1: 293T cell lysate; Lane 2: HeLa cell lysate.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry of human eccrine gland were incubated with HSPA1A monoclonal antibody , clone 4E7 (1:100) for 2 hours at room temperature. Antigen retrieval was performed in 0.1 M sodium citrate buffer and detected using Diaminobenzidine (DAB).

- Immunofluorescence

Immunofluorescent staining of A549 cells line, stained with DAPI (Blue) for nucleus staining and HSPA1A monoclonal antibody, clone 4E7 with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).

- Enzyme-linked Immunoabsorbent Assay

Gene Info — HSPA1A

Entrez GeneID

[3303](#)

GeneBank Accession#	NM_005345
Protein Accession#	NP_005336
Gene Name	HSPA1A
Gene Alias	FLJ54303, FLJ54370, FLJ54392, FLJ54408, FLJ75127, HSP70-1, HSP70-1A, HSP70I, HSP72, HSPA1, HSPA1B
Gene Description	heat shock 70kDa protein 1A
Omim ID	140550
Gene Ontology	Hyperlink
Gene Summary	This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. In conjunction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. It is also involved in the ubiquitin-proteasome pathway through interaction with the AU-rich element RNA-binding protein 1. The gene is located in the major histocompatibility complex class III region, in a cluster with two closely related genes which encode similar proteins. [provided by RefSeq]
Other Designations	OTTHUMP00000029287 dnaK-type molecular chaperone HSP70-1 heat shock 70kD protein 1A heat shock 70kDa protein 1B heat shock-induced protein

Publication Reference

- [Proteomic study identified HSP 70kDa protein 1A as a possible therapeutic target, in combination with histone deacetylase inhibitors, for lymphoid neoplasms.](#)

Fujii K, Suzuki N, Ikeda K, Hamada T, Yamamoto T, Kondo T, Iwatsuki K.

Journal of Proteomics 2012 Feb; 75(4):1401.

Application: WB-Ce, Human, Lymphoid neoplasm cell

- [The chaperone function of hsp70 is required for protection against stress-induced apoptosis.](#)

Mosser DD, Caron AW, Bourget L, Meriin AB, Sherman MY, Morimoto RI, Massie B.

Molecular and Cellular Biology 2000 Oct; 20(19):7146.

Application: Flow Cyt, WB, Human, PEER cells

- [Protein folding in the cell.](#)

Gething MJ, Sambrook J.

Nature 1992 Jan; 355(6355):33.

Application: WB-Ce, WB-Re, WB-Tr, Bacteria, Firefly, Human, Mammalian cells, Recombinant proteins

- [Involvement of ATP in the nuclear and nucleolar functions of the 70 kd heat shock protein.](#)

Lewis MJ, Pelham HR.

The EMBO Journal 1985 Dec; 4(12):3137.

Application: IF, WB-Ce, WB-Tr, Human, Monkey, Rat, COS-7, HEK 293, HeLa, rat-1 cells

Pathway

- [Antigen processing and presentation](#)
- [Endocytosis](#)
- [MAPK signaling pathway](#)
- [Prion diseases](#)

Disease

- [Abortion](#)
- [Altitude Sickness](#)
- [Alzheimer disease](#)
- [Brain Ischemia](#)
- [Cardiovascular Diseases](#)
- [Cerebrovascular Accident](#)
- [Cognition](#)
- [Connective Tissue Diseases](#)
- [Constriction](#)
- [Coronary Disease](#)
- [Dementia](#)
- [Depressive Disorder](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)

- [Diabetic Nephropathies](#)
- [Disease Progression](#)
- [Drug Hypersensitivity](#)
- [Duodenal Ulcer](#)
- [Edema](#)
- [Epidermal Necrolysis](#)
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- [Osteoporosis](#)
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- [Skin Diseases](#)
- [Spondylarthropathies](#)
- [Spondylitis](#)
- [Stevens-Johnson Syndrome](#)
- [Stomach Neoplasms](#)
- [Stress](#)
- [Stroke](#)
- [Tuberculosis](#)
- [Uveitis](#)