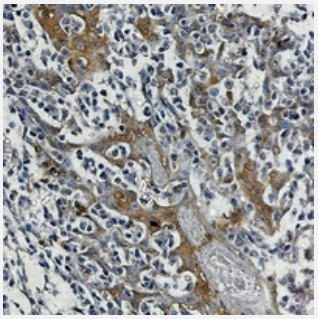
RecomAb™

HSPA1A recombinant monoclonal antibody

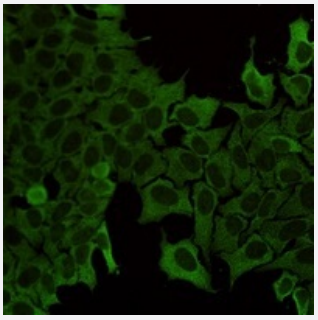
Catalog # RAB02510 Size 100 uL

Applications



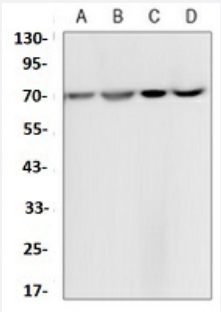
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of human tonsil formalin fixed paraffin embedded tissue section using HSP70 recombinant monoclonal antibody (Cat # RAB02510). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.121). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescence

Immunofluorescent analysis of HeLa cells with HSP70 recombinant monoclonal antibody (Cat # RAB02510). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.



Western Blot

Western blot analysis of K562 (A), rat brain (B), C6 (C), NIH3T3 (D) whole cell lysates with HSP70 recombinant monoclonal antibody (Cat # RAB02510).

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Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human HSPA1A.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide of human Hsp70.
Theoretical MW (kDa)	70
Reactivity	Human, Mouse, Rat
Specificity	Recognizes endogenous levels of HSP70 protein.
Form	Liquid
Preparation Method	Mammalian cell (HEK293) expression system
Purification	Immunogen affinity chromatography
Isotype	IgG
Recommend Usage	Immunocytochemistry (1:50-1:100) Immunofluorescence (1:50-1:100) Immunohistochemistry (1:50-1:100) Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50mM Tris-Glycine, pH 7.4 (0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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

  Immunohistochemical analysis of human tonsil formalin fixed paraffin embedded tissue section using HSP70 recombinant monoclonal antibody (Cat # RAB02510). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.121). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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- Immunofluorescence

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- Immunocytochemistry

- Western Blot

  Western blot analysis of K562 (A), rat brain (B), C6 (C), NIH3T3 (D) whole cell lysates with HSP70 recombinant monoclonal antibody (Cat # RAB02510).

Gene Info — HSPA1A

Entrez GeneID	3303
Protein Accession#	P0DMV8
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 conjuction 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

Pathway

- Antigen processing and presentation

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- 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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- Exanthema
- Fetal Diseases
- Genetic Predisposition to Disease
- Glaucoma
- Hearing
- Hearing Loss
- Helicobacter Infections
- Hypertension
- Infection
- Inflammation
- Kidney Failure
- Leprosy
- Lupus Erythematosus
- Meniere Disease
- Metabolic Syndrome X
- Multiple Sclerosis
- Musculoskeletal Diseases
- Neoplasms
- Obesity
- Optic Nerve Diseases
- Osteoporosis
- Parkinson disease
- Precancerous Conditions
- Pre-Eclampsia
- Pregnancy Complications
- Premature Birth

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- Psychiatric Status Rating Scales
- Psychometrics
- Pulmonary Disease
- Pulmonary Edema
- Recurrence
- Sarcoidosis
- Schizophrenia
- Shock
- Skin Diseases
- Spondylarthropathies
- Spondylitis
- Stevens-Johnson Syndrome
- Stomach Neoplasms
- Stress
- Stroke
- Tuberculosis
- Uveitis

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