

Product datasheet for **CF500731**

HSP70-1A (HSPA1A) Mouse Monoclonal Antibody [Clone ID: OTI2C12]

Product data:

| | |
|--------------------------------|--|
| Product Type: | Primary Antibodies |
| Clone Name: | OTI2C12 |
| Applications: | FC, IF, IHC, WB |
| Recommended Dilution: | WB 1:2000, IHC 1:50, IF 1:100 |
| Reactivity: | Human, Dog, Monkey, Mouse, Rat |
| Host: | Mouse |
| Isotype: | IgG1 |
| Clonality: | Monoclonal |
| Immunogen: | Full length human recombinant protein of human HSPA1A (NP_005336) produced in HEK293T cell. |
| Formulation: | Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose) |
| Reconstitution Method: | For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific) |
| Purification: | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G) |
| Conjugation: | Unconjugated |
| Storage: | Store at -20°C as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Predicted Protein Size: | 70.0 kDa |
| Gene Name: | heat shock protein family A (Hsp70) member 1A |
| Database Link: | NP_005336 Entrez Gene 24472 Rat Entrez Gene 193740 Mouse Entrez Gene 3303 Human P0DMV8 |



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Background:

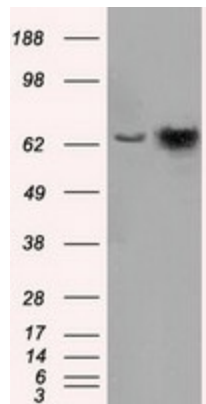
This intronless gene encodes a 70kDa heat shock protein which is a member of the heat shock protein 70 family. In conjunction with other heat shock proteins, this protein stabilizes existing proteins against aggregation and mediates the folding of newly translated proteins in the cytosol and in organelles. 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.

Synonyms:

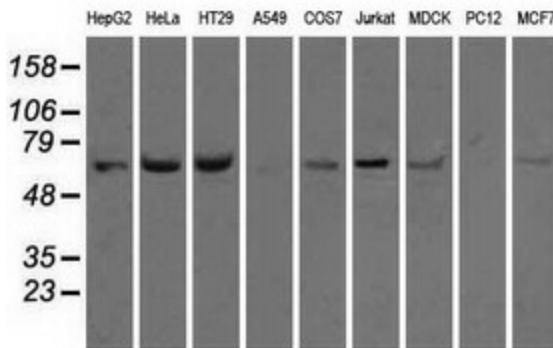
HEL-S-103; HSP70-1; HSP70-1A; HSP70.1; HSP70I; HSP72; HSPA1

Protein Pathways:

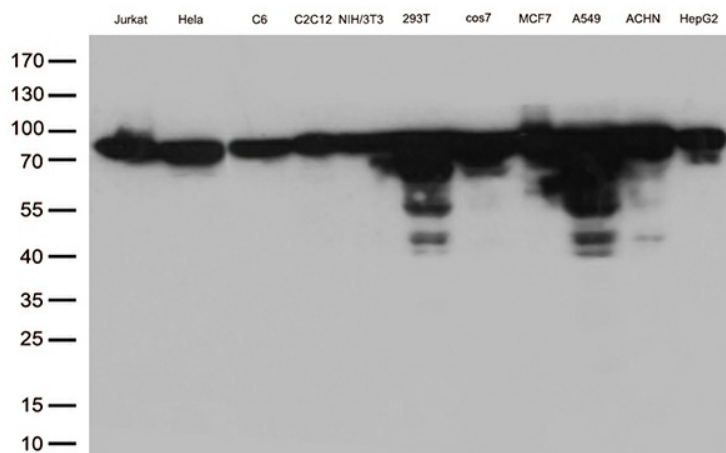
Antigen processing and presentation, Endocytosis, MAPK signaling pathway, Prion diseases, Spliceosome

Product images:


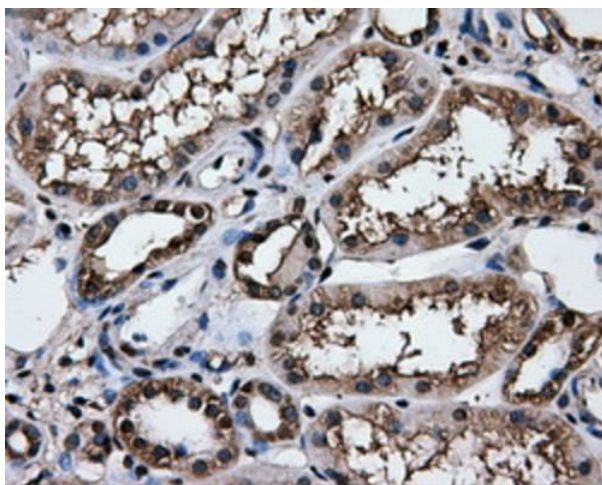
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY HSPA1A ([RC200270], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HSPA1A (1:2000).



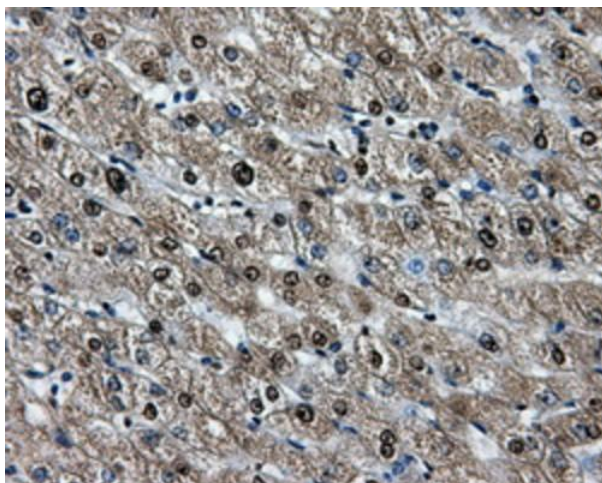
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-HSPA1A monoclonal antibody.



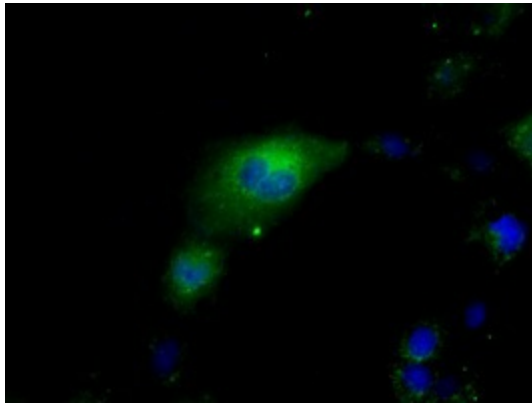
Western blot analysis of extracts (35ug) from 11 cell lines lysates by using anti-HSPA1A monoclonal antibody (1:500).



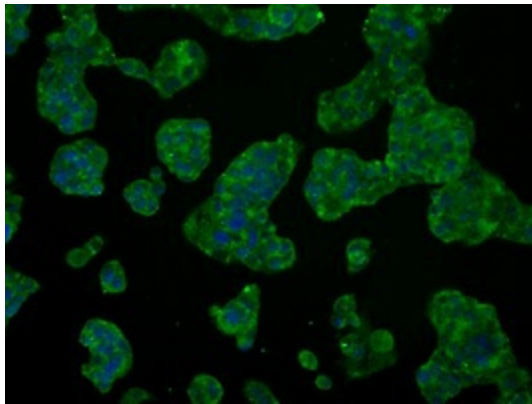
Immunohistochemical staining of paraffin-embedded kidney tissue within the normal limits using anti-HSPA1A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



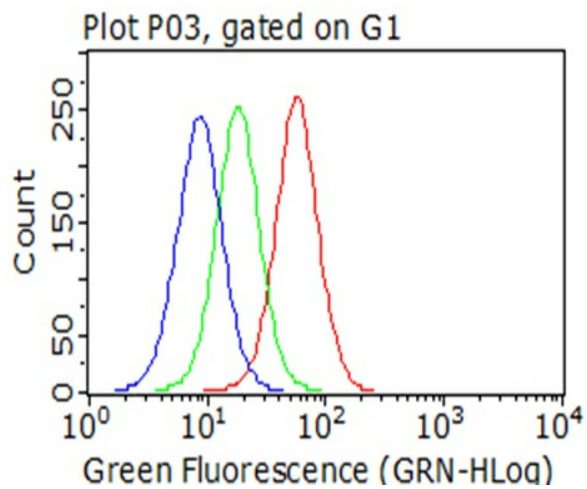
Immunohistochemical staining of paraffin-embedded liver tissue within the normal limits using anti-HSPA1A mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



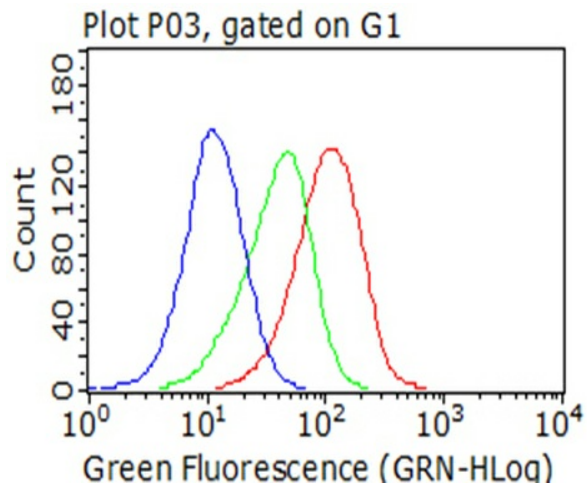
Anti-HSPA1A mouse monoclonal antibody ([TA500731]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY HSPA1A ([RC200270]) (1:100).



Immunofluorescent staining of HepG2 cells using anti-HSPA1A mouse monoclonal antibody ([TA500731]) (1:50).



Flow cytometric analysis of permeabilized HeLa cells, using anti-HSPA1A antibody ([TA500731], Red), compared to an isotype control (green), and a PBS control (blue) (1:100).



Flow cytometric analysis of permeabilized Jurkat cells, using anti-HSPA1A antibody ([TA500731], Red), compared to an isotype control (green), and a PBS control (blue) (1:100).