

OriGene Technologies, Inc.

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Product datasheet for TA500731

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, Monkey, Mouse, Rat, Dog

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human HSPA1A (NP_005336) produced in

HEK293T cell.

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

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 RatEntrez Gene 193740 MouseEntrez Gene 3303 Human

Background: 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.

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

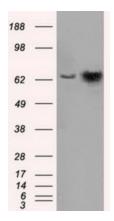




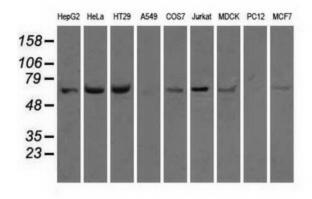
Protein Pathways:

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

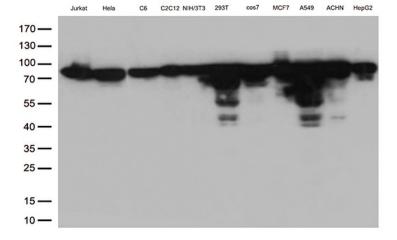
Product images:



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).

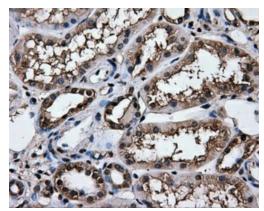


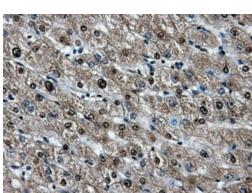
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-HSPA1A monoclonal antibody.

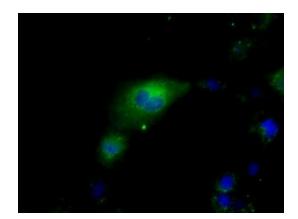


Western blot analysis of extracts (35ug) from 11 cell lines lysates by using anti-HSPA1A monoclonal antibody (1:500).







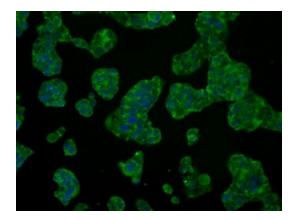


Immunohistochemical staining of paraffinembedded Kidney tissue within the normal limits using anti-HSPA1Amouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500731, Dilution 1:50)

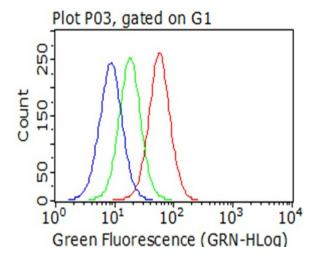
Immunohistochemical staining of paraffinembedded liver tissue within the normal limits using anti-HSPA1Amouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA500731, Dilution 1:50)

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

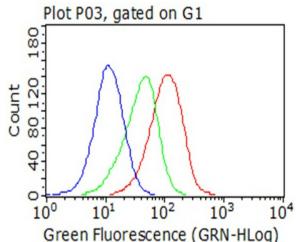




Immunofluorescent staining of HepG2 cells using anti-HSPA1A mouse monoclonal antibody (TA500731) (1:50).



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).