

## [KD Validated] Anti-HSPA1A Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

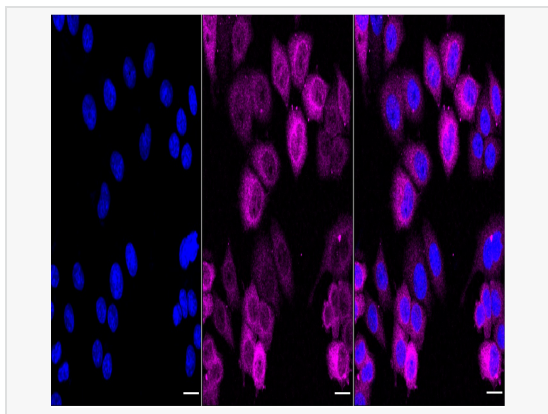
Catalog # R021510

### Product Information

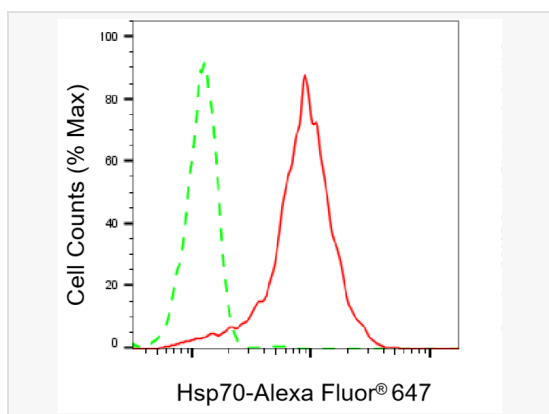
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	49Q22D14
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Hsp70
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-HSPA1A Rabbit mAb [49Q22D14] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

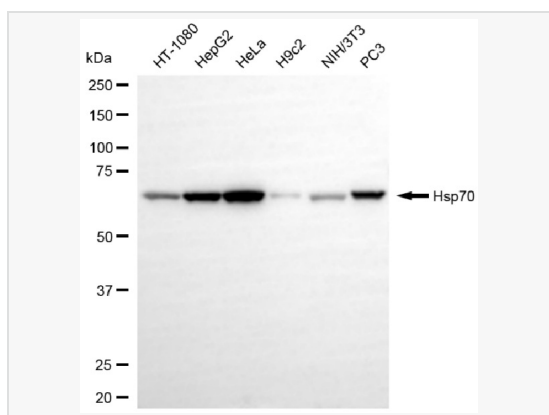
Synonyms	HSPA1A; Heat Shock Protein Family A (Hsp70) Member 1A; HSP70-1; HSPA1; Heat Shock 70 kDa Protein 1A; Heat Shock 70kDa Protein 1A; Heat Shock 70 kDa Protein 1; Heat Shock 70kD Protein 1A; HSP70.1; HSP72; Epididymis Secretory Sperm Binding Protein; DnaK-Type Molecular Chaperone HSP70-1; Epididymis Secretory Protein Li 103; Heat Shock 70 kDa Protein 1A/1B; Heat Shock 70 kDa Protein 1/2; Heat Shock 70 kDa Protein 1B; Heat Shock 70 kDa Protein 2; Heat Shock-Induced Protein; HSP70-1/HSP70-2; HSP70.1/HSP70.2; HEL-S-103; HSP70-1A; HSP70-2; HSP70.2; HSP70I; HSP70; HSX70.
Calculated MW	Calculated MW: 70 kDa; Observed MW: 70 kDa
Uniprot ID	P0DMV8
Gene ID	3303
Background	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.



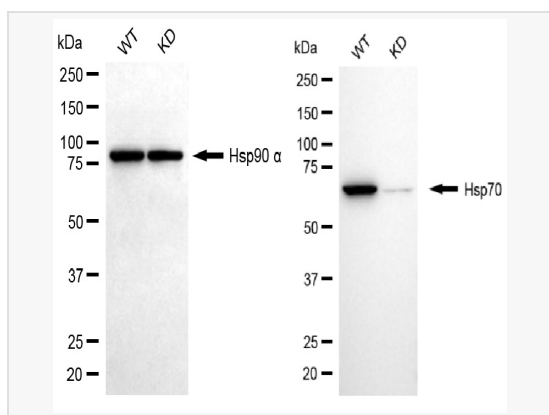
Immunocytochemical staining of HepG2 cells with Hsp70 antibody (R021510, 1:1,000). Nuclei were stained blue with DAPI; Hsp70 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20  $\mu$ m.



Flow cytometric analysis of Hsp70 expression in HepG2 cells using Hsp70 antibody (R021510, 1:2,000). Green, isotype control; red, Hsp70.



Western blotting analysis using hsp70 antibody (R021510). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with hsp70 antibody (R021510, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using Hsp70 antibody (R021510). Hsp70 expression in wild type (WT) and HSPA1A knockdown (KD) HSHC cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with Hsp70 antibody (R021510, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.