

Product Name: KD-Validated Hsp60 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01517**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 61.1kDa

Antigen Information

Gene Name	HSPD1 HSPD1; Heat Shock Protein Family D (Hsp60) Member 1; HSP60; 60 KDa Heat Shock Protein, Mitochondrial; Heat Shock 60kDa Protein 1 (Chaperonin); Mitochondrial Matrix Protein P1; P60 Lymphocyte Protein; 60 KDa Chaperonin; Chaperonin 60; HuCHA60; HSP-60; CPN60;
Alternative Names	GROEL; SPG13; Spastic Paraplegia 13 (Autosomal Dominant); Epididymis Secretory Sperm Binding Protein; Heat Shock 60kD Protein 1 (Chaperonin); Short Heat Shock Protein 60 Hsp60s1; Heat Shock Protein 65; Heat Shock Protein 60; EC 5.6.1.7; GroEL; HSP65; Hsp60; HLD4
Gene ID	3329.0
SwissProt ID	P10809
Immunogen	A synthesized peptide derived from human Hsc60

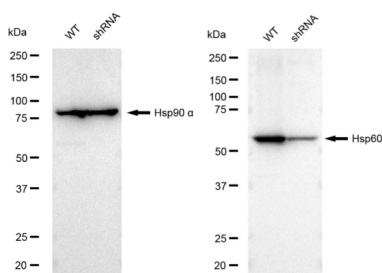
Background

This gene encodes a member of the chaperonin family. The encoded mitochondrial protein may function as a signaling molecule in the innate immune system. This protein is essential for the folding and assembly of newly imported proteins in the mitochondria. This gene is adjacent to a related family member and the region between the 2 genes functions as a bidirectional promoter. Several pseudogenes have been associated with this gene. Two transcript variants encoding the same protein have been identified for this gene. Mutations associated with this gene cause autosomal recessive spastic paraplegia 13. [provided by RefSeq, Jun 2010]

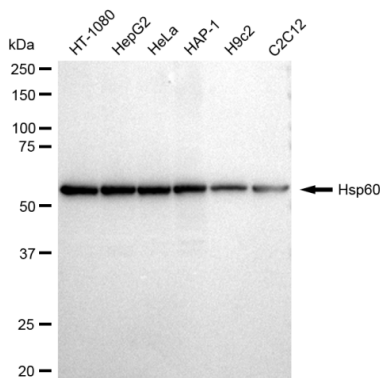
Research Area

Tags & Cell Markers, Signal Transduction, Kits/ Lysates/ Other

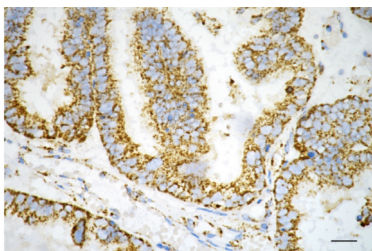
Image Data



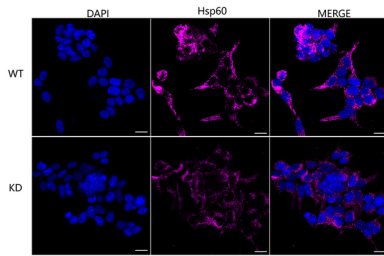
Western blotting analysis using Hsp60 antibody (KVA01517). Hsp60 expression in wild type (WT) and Hsp60 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Hsp60 antibody (KVA01517, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



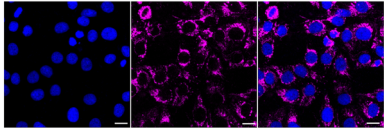
Western blotting analysis using Hsp60 antibody (KVA01517). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Hsp60 antibody (KVA01517, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



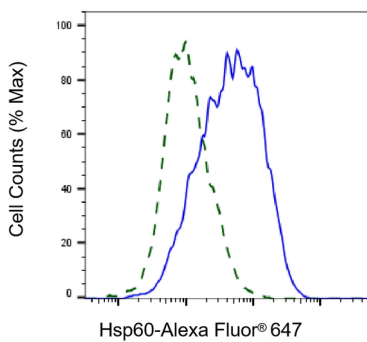
Immunohistochemistry was performed on paraffin-embedded human ovarian carcinoma using hsp60 antibody (KVA01517, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



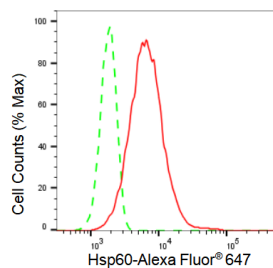
Immunocytochemical staining of HeLa cells using Hsp60 antibody (KVA01517, 1:1,000), Top panel: wild-type (WT); Bottom panel: Hsp60 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Hsp60 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm. Permeabilization: Triton.



Immunocytochemical staining of HT-1080 cells with Hsp60 antibody (KVA01517, 1:1,000). Nuclei were stained blue with DAPI; Hsp60 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: High. Scale bar: 20 μm.



Validation of Hsp60 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Hsp60 antibody (KVA01517, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Hsp60 expression in HT-1080 cells using Hsp60 antibody (KVA01517, 1:2,000). Green, isotype control; red, Hsp60.