Product Name: **KD-Validated Heat Shock Transcription Factor 1 Recombinant Rabbit Monoclonal Antibody**
Catalog #: **KVAb01523**
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human
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: 57.3kDa

Antigen Information

Gene Name	HSF1
Alternative Names	HSF1; Heat Shock Transcription Factor 1; HSTF1; Heat Shock Factor Protein 1; HSTF; HSF
Gene ID	3297.0
SwissProt ID	Q00613
Immunogen	A synthesized peptide derived from human HSF1

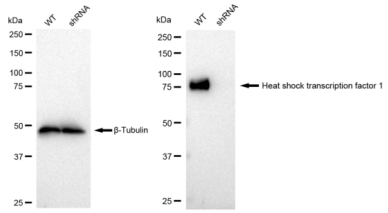
Background

The product of this gene is a transcription factor that is rapidly induced after temperature stress and binds heat shock promoter elements (HSE). This protein plays a role in the regulation of lifespan. Expression of this gene is repressed by phosphorylation, which promotes binding by heat shock protein 90. [provided by RefSeq, Jul 2017]

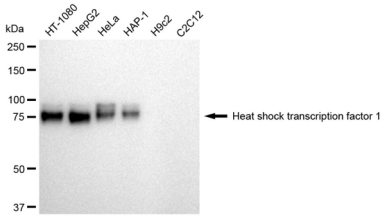
Research Area

Tags & Cell Markers,Epigenetics and Nuclear Signaling,Cardiovascular

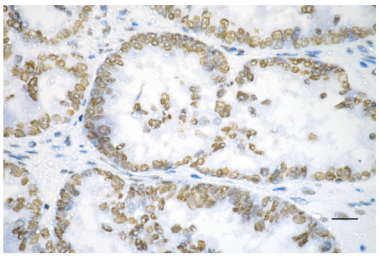
Image Data



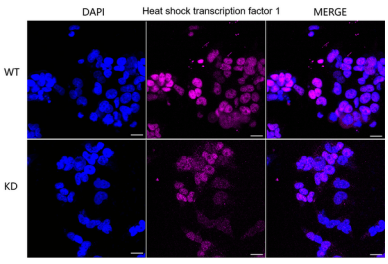
Western blotting analysis using Heat shock transcription factor 1 antibody (KVAb01523). Heat shock transcription factor 1 expression in wild type (WT) and heat shock transcription factor 1 shRNA knockdown (KD) 293T cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with Heat shock transcription factor 1 antibody (KVAb01523, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



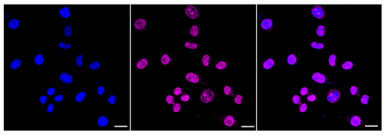
Western blotting analysis using Heat shock transcription factor 1 antibody (KVAb01523). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Heat shock transcription factor 1 antibody (KVAb01523, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



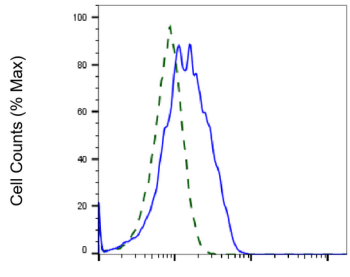
Immunohistochemistry was performed on paraffin-embedded human ovarian carcinoma using heat shock transcription factor 1 antibody (KVAb01523, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



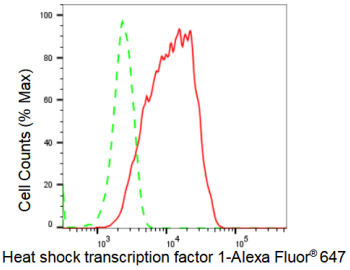
Immunocytochemical staining of 293T cells using Heat shock transcription factor 1 antibody (KVAb01523, 1:1,000), Top panel: wild-type (WT); Bottom panal: Heat shock transcription factor 1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Heat shock transcription factor 1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with Heat shock transcription factor 1 antibody (KVAb01523, 1:1,000). Nuclei were stained blue with DAPI; Heat shock transcription factor 1 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 µm.



Validation of Heat shock transcription factor 1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) 293T cells were stained with Heat shock transcription factor 1 antibody (KVAb01523, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of Heat shock transcription factor 1 expression in HepG2 cells using Heat shock transcription factor 1 antibody (KVAb01523, 1:2,000). Green, isotype control; red, Heat shock transcription factor 1.