Product Name: KO-Validated ATF6 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb00064
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
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
Molecular Weight	Calculated MW: 74.6kDa

Antigen Information

Gene Name	ATF6
Alternative Names	ATF6; Activating Transcription Factor 6; ATF6A; Cyclic AMP-Dependent Transcription Factor ATF-6 Alpha; CAMP-Dependent Transcription Factor ATF-6 Alpha; Activating Transcription Factor 6 Alpha; ATP6alpha; ATF6-Alpha; ACHM7
Gene ID	22926.0
SwissProt ID	P18850
Immunogen	Recombinant protein of human ATF6

Background

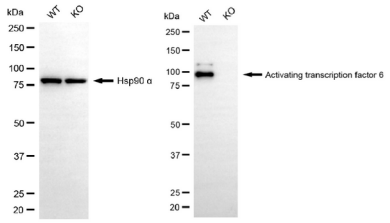
This gene encodes a transcription factor that activates target genes for the unfolded protein response (UPR) during endoplasmic reticulum (ER) stress. Although it is a transcription factor, this protein is unusual in that it is synthesized as a

transmembrane protein that is embedded in the ER. It functions as an ER stress sensor/transducer, and following ER stress-induced proteolysis, it functions as a nuclear transcription factor via a cis-acting ER stress response element (ERSE) that is present in the promoters of genes encoding ER chaperones. This protein has been identified as a survival factor for quiescent but not proliferative squamous carcinoma cells. There have been conflicting reports about the association of polymorphisms in this gene with diabetes in different populations, but another polymorphism has been associated with increased plasma cholesterol levels. This gene is also thought to be a potential therapeutic target for cystic fibrosis. [provided by RefSeq, Aug 2011]

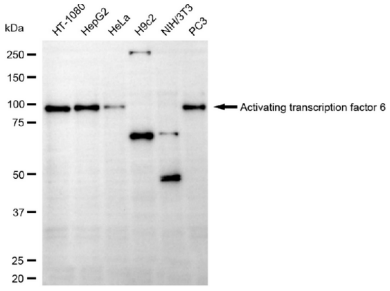
Research Area

Epigenetics and Nuclear Signaling

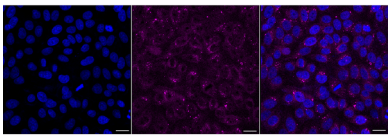
Image Data



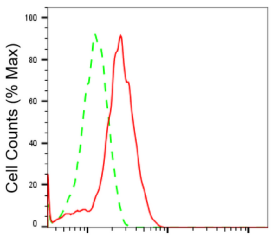
Western blotting analysis using activating transcription factor 6 antibody (KVAb00064). Activating transcription factor 6 expression in wild-type (WT) and activating transcription factor 6 (ATF6) knockout (KO) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with activating transcription factor 6 antibody (KVAb00064, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using activating transcription factor 6 antibody (KVAb00064). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with activating transcription factor 6 antibody (KVAb00064, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with Activating transcription factor 6 antibody (KVAb00064, 1:1,000). Nuclei were stained blue with DAPI; Activating transcription factor 6 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.



Activating transcription factor 6-Alexa Fluor® 647

Flow cytometric analysis of Activating transcription factor 6 expression in HepG2 cells using Activating transcription factor 6 antibody (KVAb00064, 1:2,000). Green, isotype control; red, Activating transcription factor 6.