

Product Name: KO-Validated NK2 homeobox 1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb00153

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,M
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: 38.6kDa

Antigen Information

Gene Name	NKX2-1
Alternative Names	NKX2-1; NK2 Homeobox 1; TTF-1; TTF1; Thyroid Transcription Factor 1; NKX2A; TITF1; Thyroid-Specific Enhancer-Binding Protein; Homeobox Protein NK-2 Homolog A; Homeobox Protein Nkx-2.1; Thyroid Nuclear Factor 1; T/EBP; BCH; NK-2 Homolog A; Benign Chorea; NKX2.1; NMTC1; NK-2; TEBP; BHC
Gene ID	7080.0
SwissProt ID	P43699
Immunogen	A synthesized peptide derived from human TTF1

Background

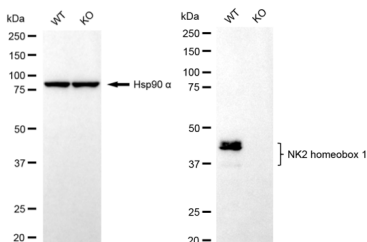
This gene encodes a protein initially identified as a thyroid-specific transcription factor. The encoded protein binds to the

thyroglobulin promoter and regulates the expression of thyroid-specific genes but has also been shown to regulate the expression of genes involved in morphogenesis. Mutations and deletions in this gene are associated with benign hereditary chorea, choreoathetosis, congenital hypothyroidism, and neonatal respiratory distress, and may be associated with thyroid cancer. Multiple transcript variants encoding different isoforms have been found for this gene. This gene shares the symbol/alias 'TTF1' with another gene, transcription termination factor 1, which plays a role in ribosomal gene transcription. [provided by RefSeq, Feb 2014]

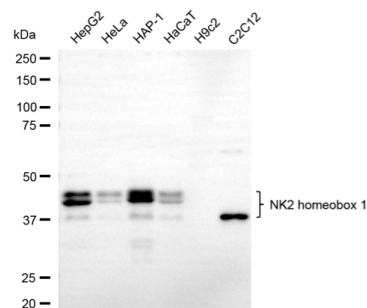
Research Area

Epigenetics and Nuclear Signaling

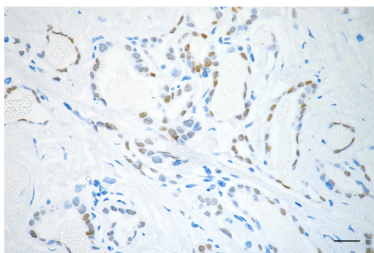
Image Data



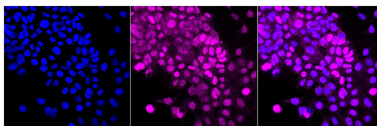
Western blotting analysis using NK2 homeobox 1 antibody (KVA00153). NK2 homeobox 1 expression in wild type (WT) and NK2 homeobox 1 (NKX2-1) knockout (KO) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with NK2 homeobox 1 antibody (KVA00153, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



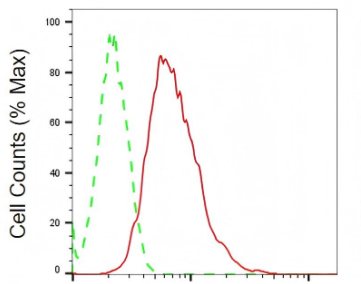
Western blotting analysis using NK2 homeobox 1 antibody (KVA00153). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with NK2 homeobox 1 antibody (KVA00153, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human papillary thyroid carcinoma using NK2 homeobox 1 antibody (KVA00153, 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 HAP-1 cells with NK2 homeobox 1 antibody (KVA00153, 1:1,000). Nuclei were stained blue with DAPI; NK2 homeobox 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.



NK2 homeobox 1-Alexa Fluor® 647

Flow cytometric analysis of NK2 homeobox 1 expression in HAP-1 cells using NK2 homeobox 1 antibody (KVAb00153, 1:2,000). Green, isotype control; red, NK2 homeobox 1.