

**NKX2-1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP10734a**

**Specification**

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**NKX2-1 Antibody (N-term) - Product Information**

Application	WB, FC, E
Primary Accession	<a href="#">P43699</a>
Other Accession	<a href="#">P23441</a> , <a href="#">P50220</a> , <a href="#">NP_003308.1</a>
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	2-1

**NKX2-1 Antibody (N-term) - Additional Information**

**Gene ID** 7080

**Other Names**

Homeobox protein Nkx-21, Homeobox protein NK-2 homolog A, Thyroid nuclear factor 1, Thyroid transcription factor 1, TTF-1, Thyroid-specific enhancer-binding protein, T/EBP, NKX2-1, NKX2A, TTF1, TTF1

**Target/Specificity**

This NKX2-1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human NKX2-1.

**Dilution**

WB~~1:2000  
FC~~1:25

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

NKX2-1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**NKX2-1 Antibody (N-term) - Protein Information**

**Name** NKX2-1 ([HGNC:11825](#))

### Synonyms NKX2A, TTF1, TTF1

**Function** Transcription factor that binds and activates the promoter of thyroid specific genes such as thyroglobulin, thyroperoxidase, and thyrotropin receptor. Crucial in the maintenance of the thyroid differentiation phenotype. May play a role in lung development and surfactant homeostasis. Forms a regulatory loop with GRHL2 that coordinates lung epithelial cell morphogenesis and differentiation. Activates the transcription of GNRHR and plays a role in enhancing the circadian oscillation of its gene expression. Represses the transcription of the circadian transcriptional repressor NR1D1 (By similarity).

### Cellular Location

Nucleus {ECO:0000250|UniProtKB:P50220}.

### Tissue Location

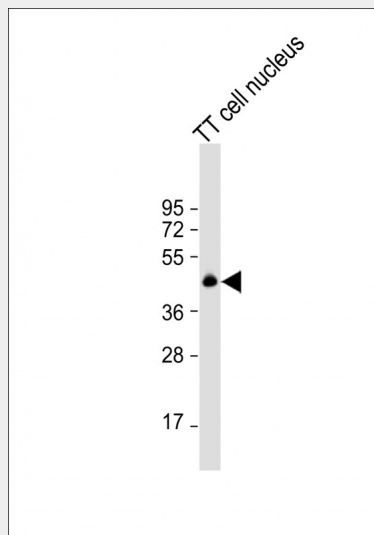
Thyroid and lung.

## NKX2-1 Antibody (N-term) - Protocols

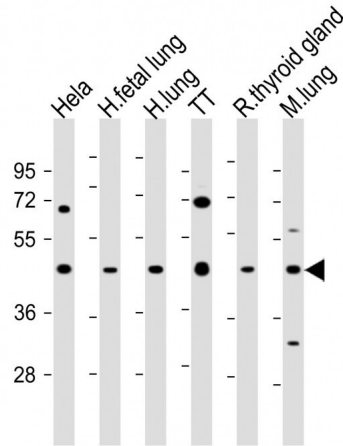
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

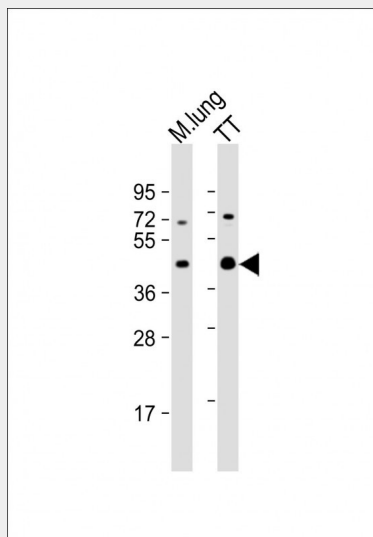
## NKX2-1 Antibody (N-term) - Images



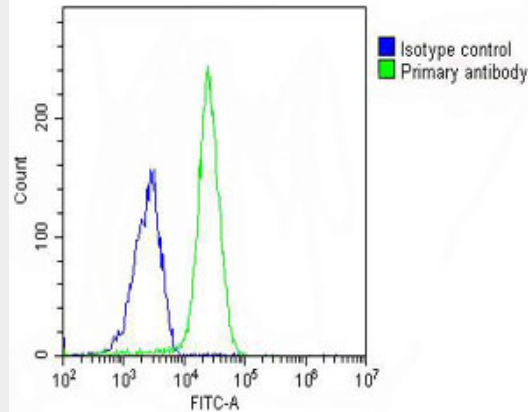
Anti-NKX2-1 Antibody (N-term) at 1:1000 dilution + TT cell nucleus lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



All lanes : Anti-NKX2-1 Antibody (N-term) at 1:2000 dilution Lane 1: HeLa whole cell lysate Lane 2: human fetal lung lysate Lane 3: human lung lysate Lane 4: TT whole cell lysate Lane 5: rat thyroid gland lysate Lane 6: mouse lung lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-NKX2-1 Antibody (N-term) at 1:2000 dilution Lane 1: mouse lung lysate Lane 2: TT whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing A549 cells stained with AP10734a (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP10734a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10, 000 events was performed.

#### **NKX2-1 Antibody (N-term) - Background**

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

#### **NKX2-1 Antibody (N-term) - References**

- Kim, J.H., et al. Acta Cytol. 54(3):277-282(2010)
- Xu, B., et al. Appl. Immunohistochem. Mol. Morphol. 18(3):244-249(2010)
- Narumi, S., et al. J. Clin. Endocrinol. Metab. 95(4):1981-1985(2010)
- Guillot, L., et al. Hum. Mutat. 31 (2), E1146-E1162 (2010) :
- Cantara, S., et al. Thyroid Res 3 (1), 4 (2010) :