

**TTF-1 / NKX2.1 (Thyroid & Lung Epithelial Marker) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone NX2.1/690 ]**  
**Catalog # AH12419**

**Specification**

**TTF-1 / NKX2.1 (Thyroid & Lung Epithelial Marker) Antibody - With BSA and Azide -  
Product Information**

Application	,14,3,4,
Primary Accession	<a href="#">P43699</a>
Other Accession	<a href="#">7080</a> , <a href="#">94367</a>
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	40kDa KDa

**TTF-1 / NKX2.1 (Thyroid & Lung Epithelial Marker) Antibody - With BSA and Azide -  
Additional Information**

**Gene ID** 7080

**Other Names**

Homeobox protein Nkx-2.1, 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, TITF1, TTF1

**Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

**Precautions**

TTF-1 / NKX2.1 (Thyroid & Lung Epithelial Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**TTF-1 / NKX2.1 (Thyroid & Lung Epithelial Marker) Antibody - With BSA and Azide -  
Protein Information**

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

**Synonyms** NKX2A, TITF1, 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

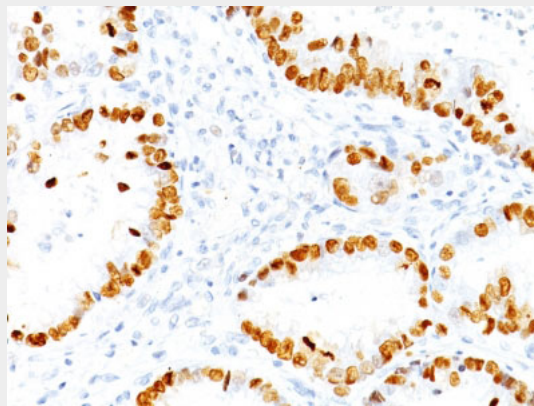
Thyroid and lung.

### TTF-1 / NKX2.1 (Thyroid & Lung Epithelial Marker) Antibody - With BSA and Azide - Protocols

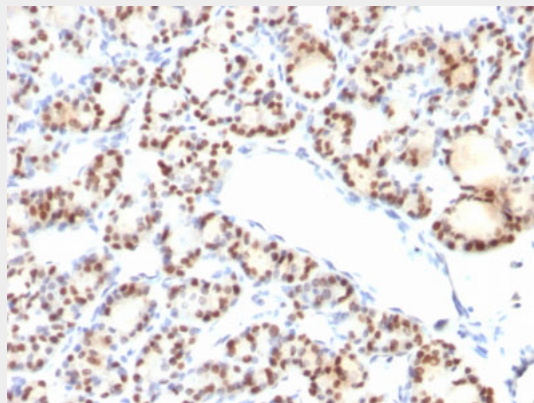
Provided below are standard protocols that you may find useful for product applications.

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

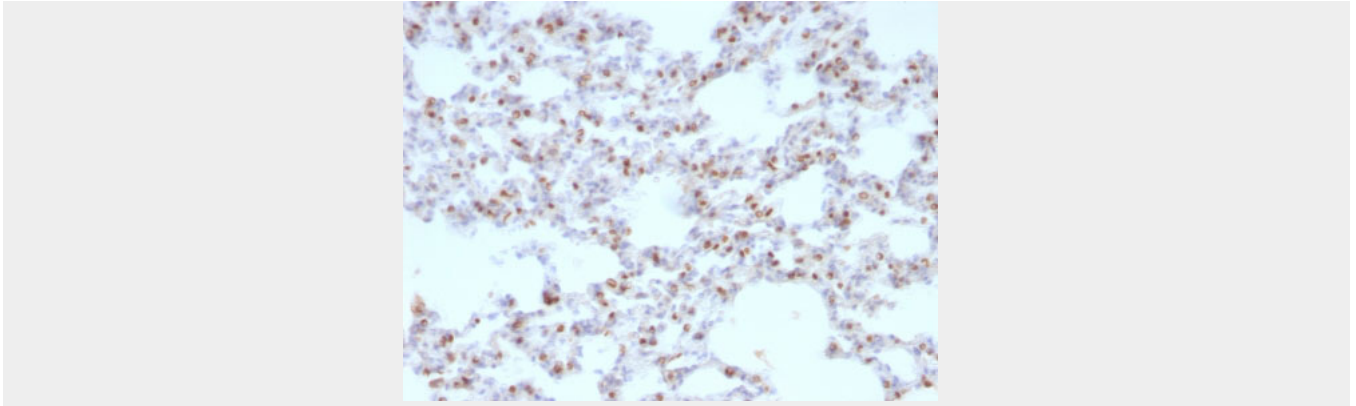
### TTF-1 / NKX2.1 (Thyroid & Lung Epithelial Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Lung Adenocarcinoma stained with TTF-1 Monoclonal Antibody (NX2.1/690)



Formalin-fixed, paraffin-embedded human Thyroid stained with TTF-1 Monoclonal Antibody (NX2.1/690)



Formalin-fixed, paraffin-embedded Rat Lung stained with TTF-1 Monoclonal Antibody (NX2.1/690)

### **TTF-1 / NKX2.1 (Thyroid & Lung Epithelial Marker) Antibody - With BSA and Azide - Background**

Recognizes a protein of 40kDa, identified as Thyroid transcription factor-1 (TTF-1). TTF-1 is a member of the NKx2 family of homeodomain transcription factors. It is expressed in epithelial cells of the thyroid gland and the lung. Nuclei from liver, stomach, pancreas, small intestine, colon, kidney, breast, skin, testes, pituitary, prostate, and adrenal glands are unreactive. Anti-TTF-1 is useful in differentiating primary adenocarcinoma of the lung from metastatic carcinomas originating in the breast, mediastinal germ cell tumors, and malignant mesothelioma. It can also be used to differentiate small cell lung carcinoma from lymphoid infiltrates. Loss of TTF-1 expression in non-small cell lung carcinoma has been associated with aggressive behavior of such neoplasms. TTF-1 reactivity is also seen in thyroid malignancies.

### **TTF-1 / NKX2.1 (Thyroid & Lung Epithelial Marker) Antibody - With BSA and Azide - References**

Wert, S.E., et al. 2002. Increased expression of TTF-1 in respiratory epithelial cells inhibits alveolarization and causes pulmonary inflammation. *Dev. Biol.* 242: 75-87. |