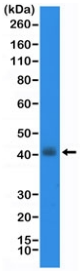
Thyroid transcription factor 1 Antibody for WB / TTF-1 / NKX2.1 [clone RM373] (R20392)

Catalog No.	Formulation	Size
R20392-0.1ML	Antibody in PBS with 50% glycerol, 1% BSA and 0.09% sodium azide	100 ul

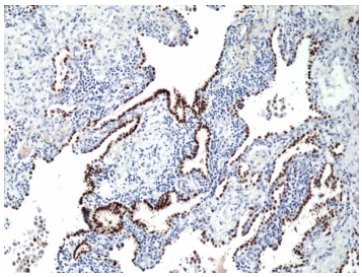
Recombinant RABBIT MONOCLONAL

Bulk quote request

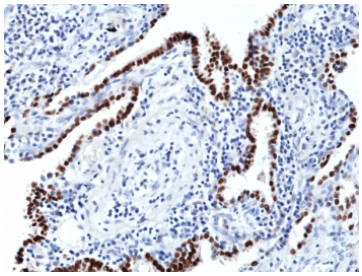
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	RM373
Purity	Protein A purified from animal origin-free supernatant
UniProt	P43699
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1:500-1:1000 Western Blot : 1:1000-1:20000
Limitations	This recombinant Thyroid transcription factor 1 antibody is available for research use only.



Thyroid transcription factor 1 Antibody for WB western blot analysis of human TT cell lysate. Lane 1: human TT cell lysate. The recombinant rabbit monoclonal clone RM373 antibody detects a band at approximately 38-45 kDa, consistent with the predicted molecular weight of Thyroid transcription factor 1 (NKX2-1). NKX2-1 is a nuclear homeobox transcription factor expressed in epithelial cells of lung and thyroid lineage, and detection of this band in TT cell lysate reflects expression of the transcription factor in thyroid-derived cells. Antibody dilution: 1:20,000.



IHC staining of FFPE human lung cancer tissue with recombinant Thyroid transcription factor 1 antibody at 1:500.



IHC staining of FFPE human lung cancer tissue with recombinant Thyroid transcription factor 1 antibody at 1:500.

Description

Thyroid transcription factor 1 (NKX2-1) is a nuclear homeobox transcription factor that regulates epithelial lineage development in the lung, thyroid gland, and forebrain. The protein functions as a DNA-binding transcriptional regulator controlling gene expression programs involved in epithelial differentiation and organ development. The Thyroid transcription factor 1 Antibody for WB targets this lineage-associated transcription factor and enables detection of NKX2-1 protein expression in western blot analysis of epithelial cell and tissue lysates.

Thyroid transcription factor 1 antibody, also referred to as NKX2-1 antibody or TTF-1 antibody in the literature, detects a nuclear transcription factor expressed in pulmonary epithelial cells and thyroid follicular epithelial cells. In western blot assays, NKX2-1 can be detected in lysates derived from epithelial tissues or cultured cells expressing this transcription factor. Detection of NKX2-1 by western blot allows researchers to evaluate transcription factor expression levels and confirm the presence of the protein in experimental samples.

Western blot analysis of NKX2-1 provides a useful approach for studying transcription factor expression in epithelial tissues such as lung and thyroid. Because NKX2-1 functions as a nuclear transcription factor, the protein is typically detected in nuclear or whole-cell lysates prepared from epithelial cells expressing the transcription factor. Western blot detection allows characterization of NKX2-1 protein expression, evaluation of transcription factor regulation, and comparison of protein levels across different cell lines or tissue samples.

In lung epithelial cells, NKX2-1 regulates transcription of genes associated with respiratory epithelial differentiation, including surfactant proteins produced by alveolar epithelial cells. In thyroid epithelial cells, the transcription factor regulates genes involved in thyroid hormone biosynthesis and differentiation of thyroid follicular epithelial cells. Western blot analysis therefore provides a method for examining NKX2-1 expression in epithelial tissues where the transcription factor contributes to lineage specification and gene regulatory pathways.

Clone RM373 antibody is a recombinant rabbit monoclonal antibody developed for sensitive detection of NKX2-1 protein in research assays including western blot. A Thyroid transcription factor 1 antibody such as clone RM373 provides a valuable reagent for western blot studies investigating transcription factor expression, epithelial lineage biology, and regulation of NKX2-1 protein in lung and thyroid epithelial cells.

Application Notes

The stated application concentrations are suggested starting points. Titration of the recombinant Thyroid transcription factor 1 Antibody for WB may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A peptide corresponding to N-terminus of human TTF1 was used as the immunogen for the recombinant Thyroid transcription factor 1 antibody.

Storage

Store the recombinant Thyroid transcription factor 1 antibody at -20oC.

Alternate Names

NKX2-1 antibody, TTF-1 antibody, TTF1 antibody, TITF1 antibody, Thyroid transcription factor antibody