

Anti-TTF1 NKX2-1 Rabbit Monoclonal Antibody

Catalog # ABO13344

Specification

Anti-TTF1 NKX2-1 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Host Isotype Reactivity Clonality Format **Description** Anti-TTF1 NKX2-1 Ral WB, IHC, IF, ICC, FC <u>P43699</u> Rabbit Rabbit IgG Rat, Human, Mouse Monoclonal Liquid

Anti-TTF1 NKX2-1 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

Anti-TTF1 NKX2-1 Rabbit Monoclonal Antibody - 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 (HGNC:11825), NKX2A, TITF1, TTF1

Calculated MW 38596 MW KDa

Application Details WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200
FC 1:50

Subcellular Localization Nucleus.

Tissue Specificity Thyroid and lung.

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human TTF1

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term



storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-TTF1 NKX2-1 Rabbit Monoclonal Antibody - 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.

Anti-TTF1 NKX2-1 Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-TTF1 NKX2-1 Rabbit Monoclonal Antibody - Images





Immunohistochemical analysis of paraffin-embedded human thyroid, using TTF1 Antibody.



Immunofluorescent analysis of Hela cells, using TTF1 Antibody .



Figure 1. Western blot analysis of NKX2-1 using anti-NKX2-1 antibody (M01322-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: human 293T whole cell lysates,

Lane 3: human U20S whole cell lysates,

Lane 4: human A431 whole cell lysates,

Lane 5: rat lung tissue lysates,

Lane 6: mouse lung tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NKX2-1 antigen affinity purified monoclonal antibody (Catalog # M01322-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for NKX2-1 at approximately 39-42 kDa. The expected band size for NKX2-1 is at 39 kDa.