



# TTF-1 Rabbit mAb

<b>Catalog No</b>	YP-rAb-17539
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human,Mouse,Rat
<b>Applications</b>	WB,IHC,IF,ELISA
<b>Gene Name</b>	NKX2-1 NKX2A TITF1 TTF1
<b>Protein Name</b>	Homeobox protein Nkx-2.1
<b>Purification Process</b>	Protein A
<b>Specificity</b>	Endogenous
<b>Formulation</b>	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
<b>Source</b>	Monoclonal, Rabbit,IgG
<b>Dilution</b>	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
<b>Concentration</b>	0.5 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-15° C to -25° C/1 year(Do not lower than -25° C)
<b>Synonyms</b>	NKX2-1 ; NKX2A ; TITF1 ; TTF1 ; Homeobox protein Nkx-2.1 ; Homeobox protein NK-2 homolog A ; Thyroid nuclear factor 1 ; Thyroid transcription factor 1 ; TTF-1
<b>Observed Band</b>	40kD
<b>Calculated Molecular Weight</b>	40kD
<b>Cell Pathway</b>	Nuclear
<b>Tissue Specificity</b>	Thyroid/ Lung
<b>Function</b>	Disease:Defects in NKX2-1 are the cause of benign hereditary chorea (BHC) [MIM:118700]; also known as hereditary chorea without dementia. BHC is an autosomal dominant movement disorder. The early onset of symptoms (usually before the age of 5) and the observation that in some BHC families the symptoms tend to decrease in adulthood suggests that the disorder results from a developmental disturbance of the brain. BHC is non-progressive and patients have normal or slightly below normal intelligence. There is considerable inter- and intrafamilial variability, including dysarthria, axial dystonia and gait disturbances.,Disease:Defects in NKX2-1 are the cause of choreoathetosis, hypothyroidism, and neonatal respiratory distress (CHNRD) [MIM:610978]. This syndrome include neurological, thyroid, and respiratory problems.,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. PTM: Phosphorylated on serine residues. Similarity: Belongs to the NK-2 homeobox family. Similarity: Contains 1 homeobox DNA-binding domain. Tissue specificity: Thyroid and lung.

### Background

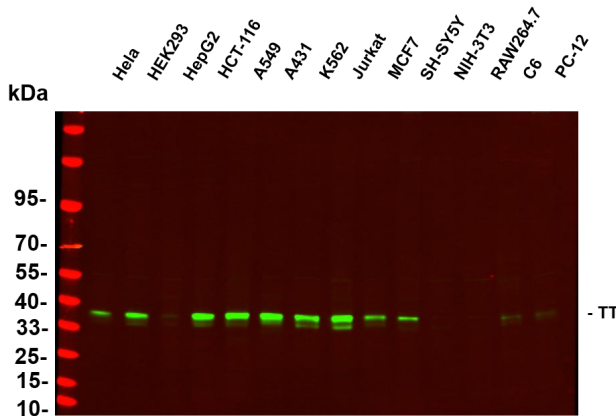
This gene encodes a protein initially identified as a thyroid-specific transcription factor. The encoded protein binds to the thyroglobulin promoter and regulates the expression of thyroid-specific genes but has also been shown to regulate the expression of genes involved in morphogenesis. Mutations 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],

### matters needing attention

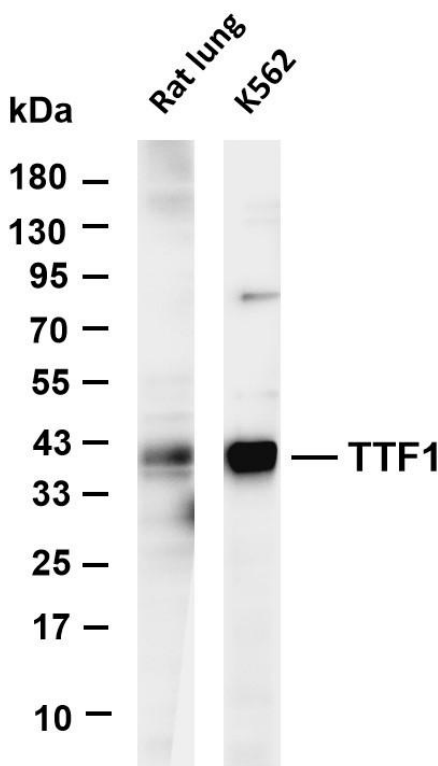
Avoid repeated freezing and thawing!

### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

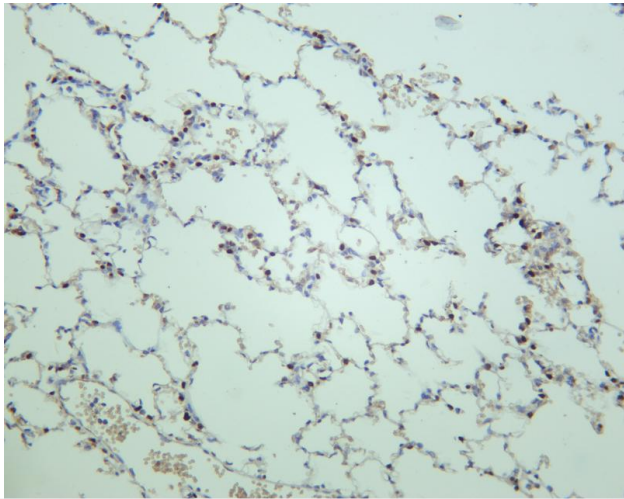


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4~C, over night with a 1:5000 dilution. The Dylight 800-conjugated Goat anti-Rabbit antibody

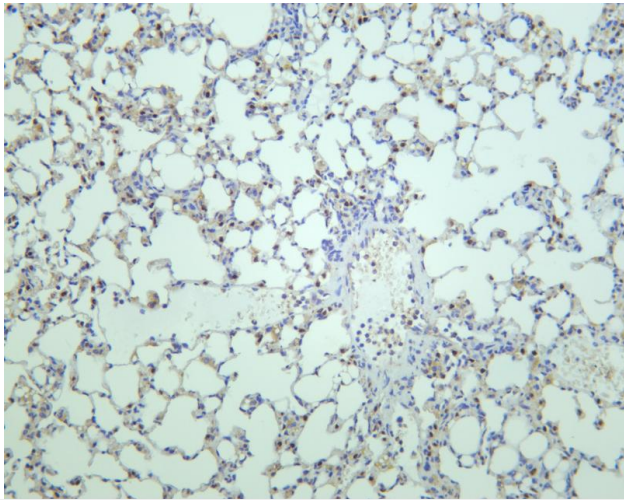


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-TTF1 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Rat lung Lane 2: K562 Predicted band size: 40kDa Observed band size: 40kDa

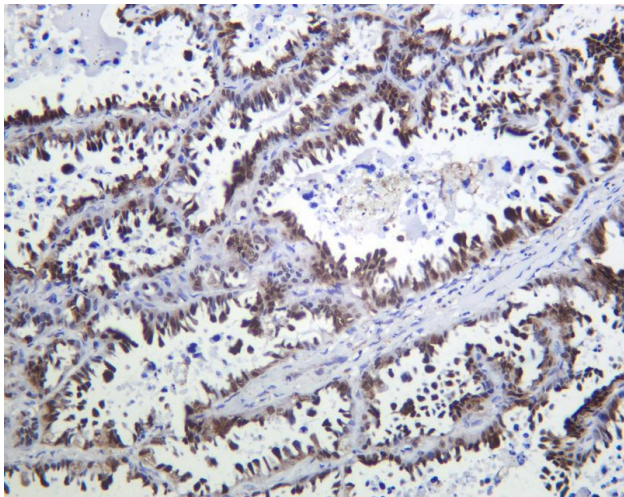




Rat lung was stained with anti-TTF1 rabbit antibody



Mouse lung was stained with anti-TTF1 rabbit antibody



Human lung adenocarcinoma was stained with anti-TTF-1 Rabbit antibody

