abcam

Product datasheet

Anti-TTF1 antibody [SP141] ab227652

Recombinant RabMAb

1 References 12 Images

Overview

Product name	Anti-TTF1 antibody [SP141]
Description	Rabbit monoclonal [SP141] to TTF1
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt, IHC-P, Flow Cyt (Intra), ICC/IF, IHC-Fr
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human thyroid, lung, lung carcinoma, Mouse lung, and Rat lung tissue; Flow Cyt: HeLa cells. Flow Cyt (Intra): Human thyroid.
General notes	**This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.**

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP141
Isotype	IgG

Applications

The Abpromise guarantee	Our **Abpromise guarantee** covers the use of ab227652 in the following tested applications.

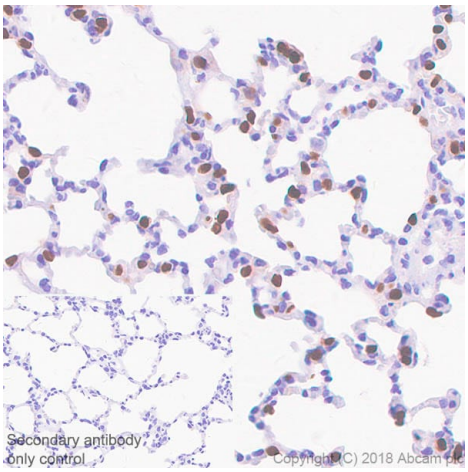
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use at an assay dependent concentration.
IHC-P		1/100. Perform heat mediated antigen retrieval with 1 mM EDTA buffer pH 8.0 before commencing with IHC staining protocol. Primary antibody incubation for 30 minutes at room temperature.
Flow Cyt (Intra)		1/100. Primary antibody incubation for 30 minutes at 4°C.
ICC/IF		1/25.
IHC-Fr		1/20.

Target

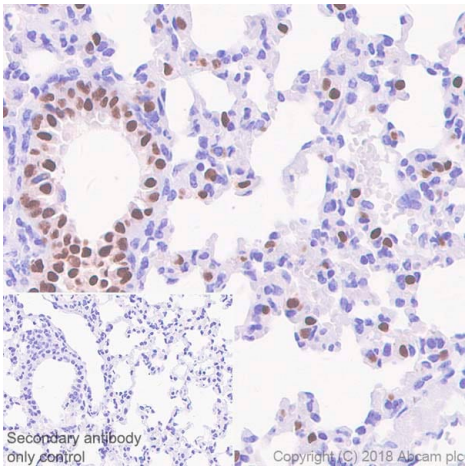
Function	Transcription factor that binds and activates the promoter of thyroid specific genes such as thyroglobulin, thyroperoxidase, and thyrotropin receptor. Crucial in the maintenance of the thyroid differentiation phenotype. May play a role in lung development and surfactant homeostasis.
Tissue specificity	Thyroid and lung.
Involvement in 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 (usully 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 distonia and gait disturbances. 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.
Sequence similarities	Belongs to the NK-2 homeobox family. Contains 1 homeobox DNA-binding domain.
Post-translational modifications	Phosphorylated on serine residues.
Cellular localization	Nucleus.

Images



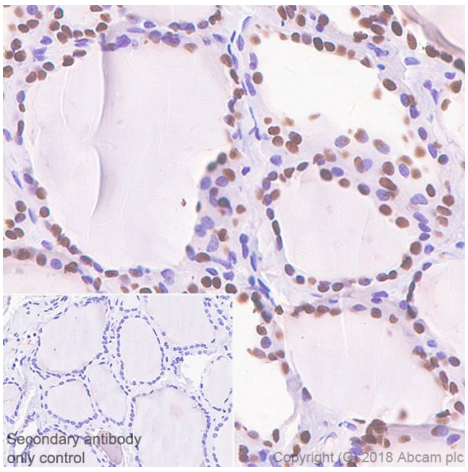
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] (ab227652)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat lung tissue sections labeling TTF1 with ab227652 at 1/100 dilution (1.70 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



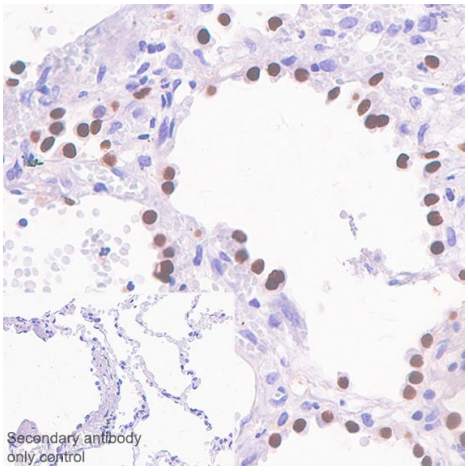
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] (ab227652)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse lung tissue sections labeling TTF1 with ab227652 at 1/100 dilution (1.70 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



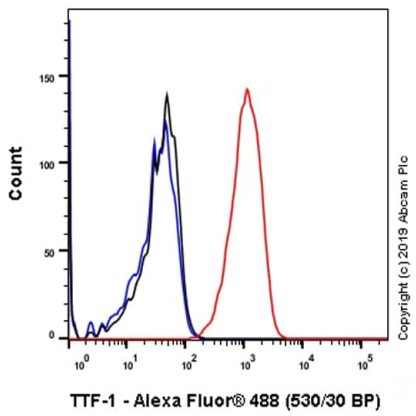
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] (ab227652)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human thyroid tissue sections labeling TTF1 with ab227652 at 1/100 dilution (1.70 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



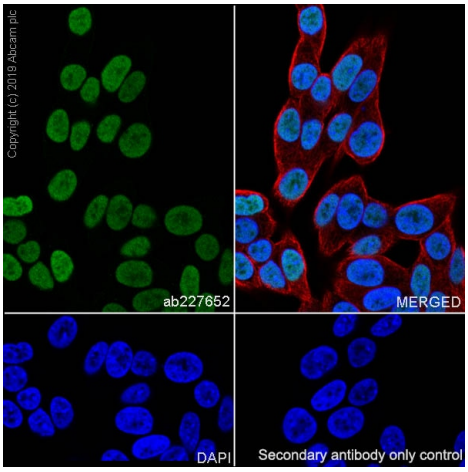
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] (ab227652)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung tissue sections labeling TTF1 with ab227652 at 1/100 dilution (1.70 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



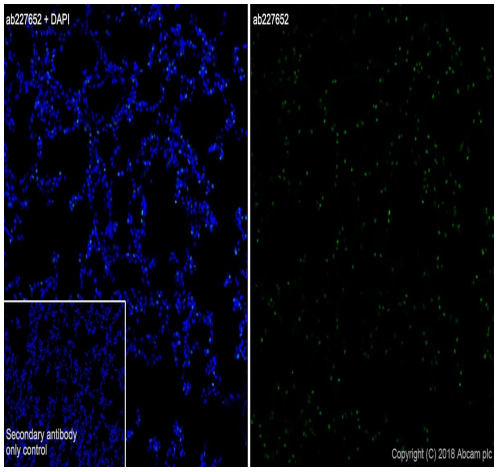
Flow Cytometry (Intracellular) - Anti-TTF1 antibody [SP141] (ab227652)

Flow Cytometry analysis of TT (Human thyroid carcinoma epithelial cell) cells labeling TTF1 with purified ab227652 at 1:170 dilution (1 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1:2000 dilution. Isotype control - Rabbit monoclonal IgG (**ab172730**) / Black. Unlabeled control - Unlabelled cells / blue.



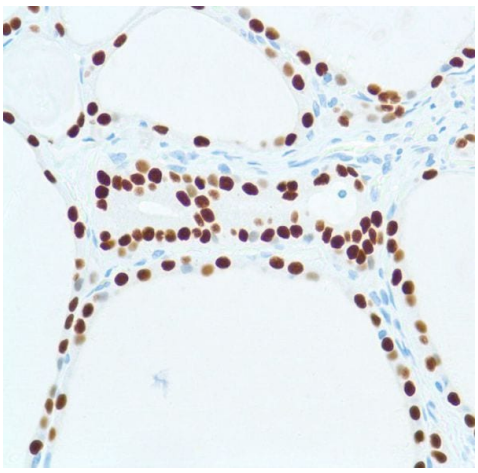
Immunocytochemistry/ Immunofluorescence - Anti-TTF1 antibody [SP141] (ab227652)

Immunocytochemistry/ Immunofluorescence analysis of TT (Human thyroid carcinoma epithelial cell) cells labeling TTF1 with purified ab227652 at 1:25 (6.8 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



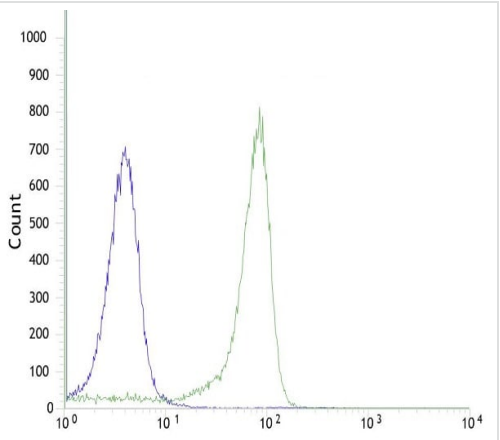
Immunohistochemistry (Frozen sections) - Anti-TTF1 antibody [SP141] (ab227652)

Immunohistochemistry (Frozen sections) analysis of rat lung tissue sections labeling TTF1 with purified ab227652 at 1:20 (8.5 µg/ml). Heat mediated antigen retrieval was performed using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). Fixed with 4% paraformaldehyde and permeabilised using 0.2% Triton X-100. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody. Negative control:PBS instead of the primary antibody. DAPI was used as a Nuclear stain.



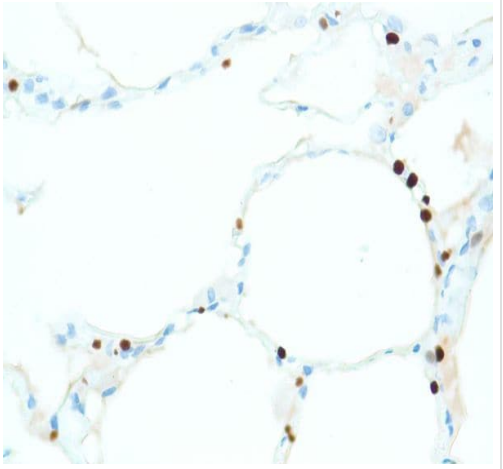
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] (ab227652)

Formalin-fixed, paraffin-embedded human thyroid tissue stained for TTF1 using ab227652 at 1/100 dilution in immunohistochemical analysis.



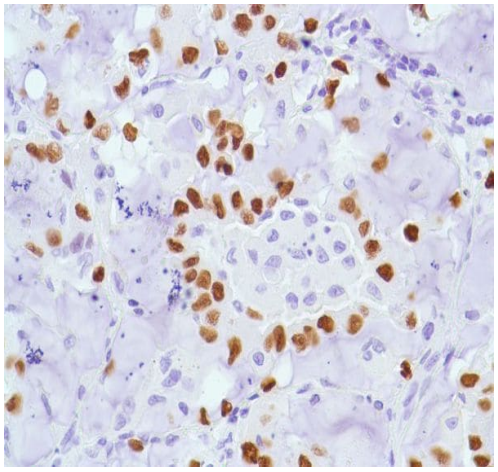
Flow Cytometry (Intracellular) - Anti-TTF1 antibody [SP141] (ab227652)

Flow cytometric analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling TTF1 with ab227652 at 1/100 dilution (green) compared with a rabbit IgG negative control (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] (ab227652)

Formalin-fixed, paraffin-embedded human lung tissue stained for TTF1 using ab227652 at 1/100 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] (ab227652)

Formalin-fixed, paraffin-embedded human lung adenocarcinoma tissue stained for TTF1 using ab227652 at 1/100 dilution in immunohistochemical analysis.

Anti-TTF1 antibody [SP141] (ab227652)

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