

Anti-TTF1 antibody [SP141] - BSA and Azide free ab242428

Recombinant RabMAb

11 Images

Overview

Product name	Anti-TTF1 antibody [SP141] - BSA and Azide free
Description	Rabbit monoclonal [SP141] to TTF1 - BSA and Azide free
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	<p>ab242428 is the carrier-free version of ab227652.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
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 ab242428 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. Primary antibody incubation for 30 minutes at 4°C.
IHC-P		Use at an assay dependent concentration. 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)		Use at an assay dependent concentration.
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 (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.

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.

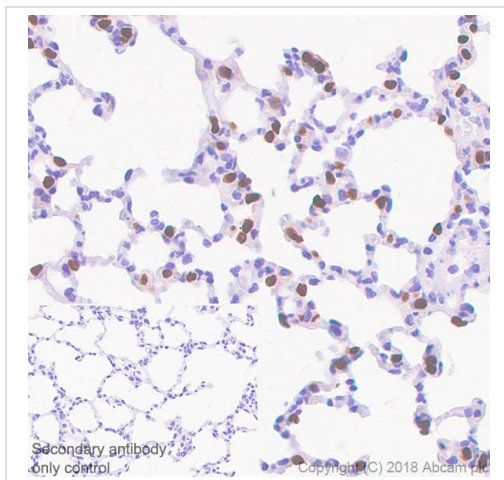
Post-translational modifications

Phosphorylated on serine residues.

Cellular localization

Nucleus.

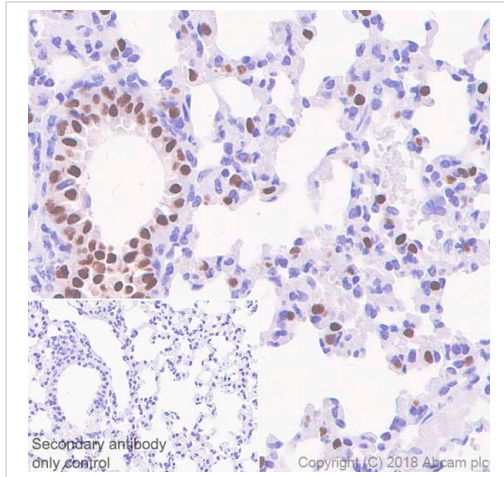
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab227652**).

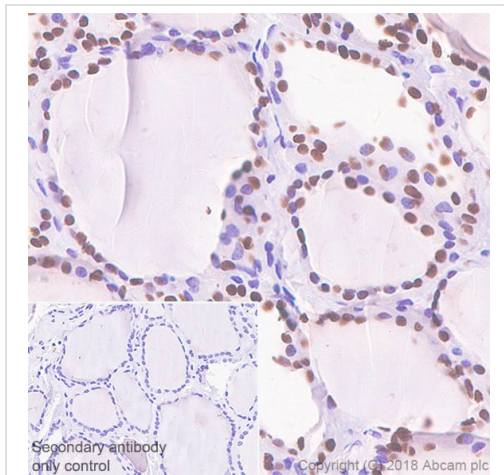
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] - BSA and Azide free (ab242428)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] - BSA and Azide free (ab242428)

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.

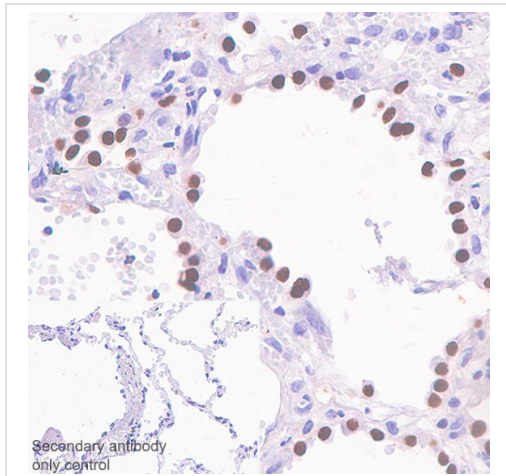
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab227652**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] - BSA and Azide free (ab242428)

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.

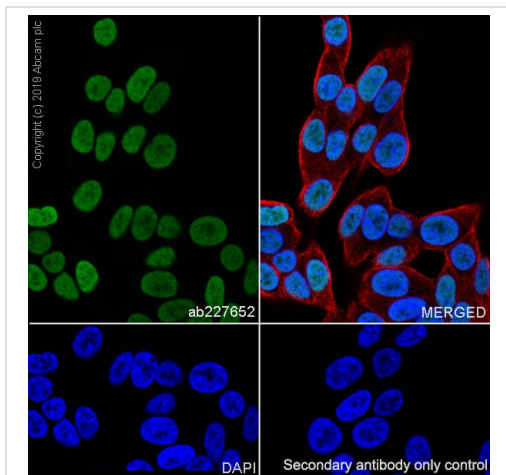
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab227652**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] - BSA and Azide free (ab242428)

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.

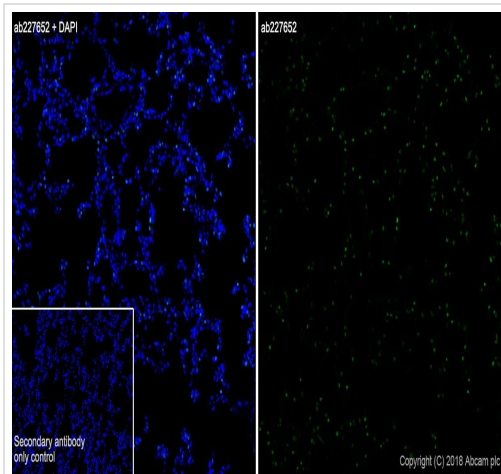
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab227652**).



Immunocytochemistry/ Immunofluorescence - Anti-TTF1 antibody [SP141] - BSA and Azide free (ab242428)

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.

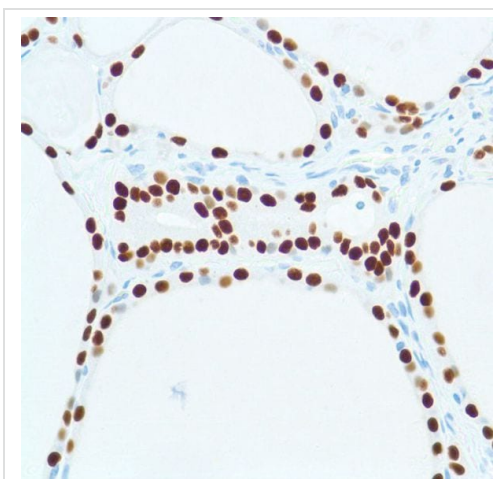
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab227652**).



Immunohistochemistry (Frozen sections) - Anti-TTF1 antibody [SP141] - BSA and Azide free (ab242428)

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.

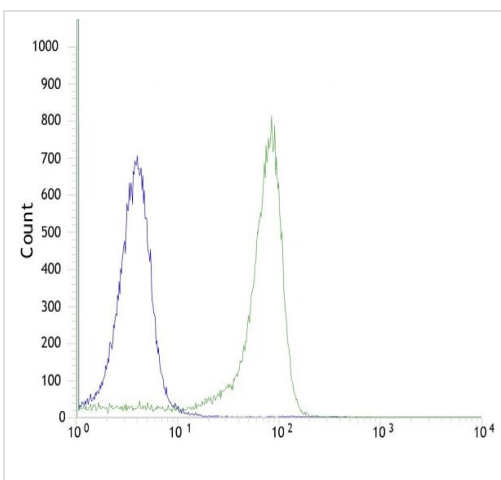
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab227652**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] - BSA and Azide free (ab242428)

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

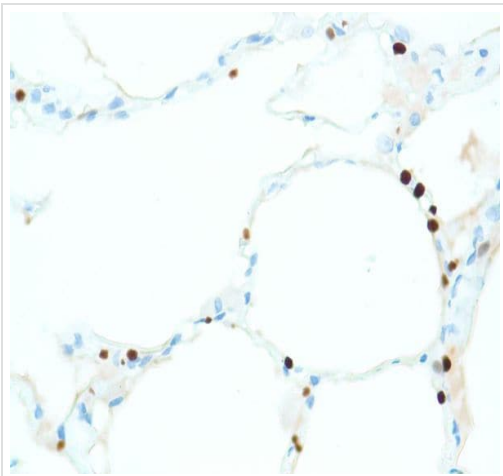
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, and sodium azide (**ab227652**).



Flow Cytometry - Anti-TTF1 antibody [SP141] - BSA and Azide free (ab242428)

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).

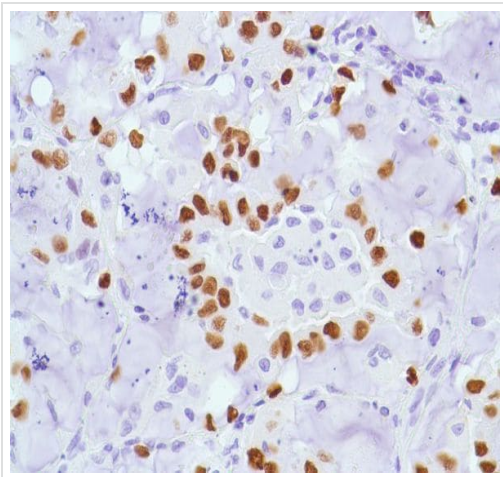
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, and sodium azide (**ab227652**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] - BSA and Azide free (ab242428)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, and sodium azide ([ab227652](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [SP141] - BSA and Azide free (ab242428)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, and sodium azide ([ab227652](#)).

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-TTF1 antibody [SP141] - BSA and Azide free
(ab242428)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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