abcam

Product datasheet

Anti-TTF1 antibody [EP1584Y] - BSA and Azide free ab216648

Recombinant RabMAb

19 References 6 Images

Overview

Product name	Anti-TTF1 antibody [EP1584Y] - BSA and Azide free
Description	Rabbit monoclonal [EP1584Y] to TTF1 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB, IHC-Fr **Unsuitable for:** Flow Cyt,ICC/IF or IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	A synthetic peptide corresponding to residues near the N-terminus of human TTF1.
Positive control	HeLa cell lysate. Human thyroid carcinoma and lung adenocarcinoma tissue.
General notes	Ab216648 is the carrier-free version of ab76013. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. 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. ab216648 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents. This product is a recombinant rabbit monoclonal antibody.

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: 7.20 Constituent: PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EP1584Y
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab216648** in the following tested applications.

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

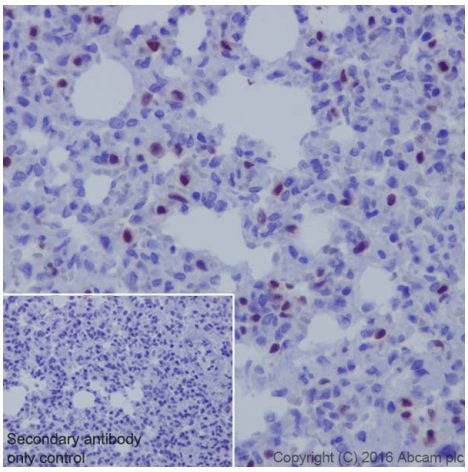
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Detects a band of approximately 38-42 kDa (predicted molecular weight: 38-42 kDa).Can be blocked with TTF1 peptide (ab187893).
IHC-Fr		Use at an assay dependent concentration.

Application notes	Is unsuitable for Flow Cyt,ICC/IF or IP.

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.

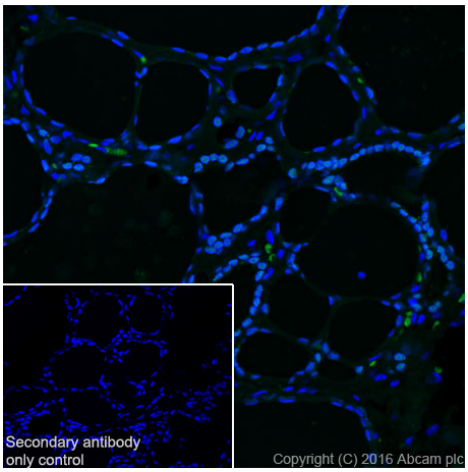
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [EP1584Y] - BSA and Azide free (ab216648)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat lung tissue sections labeling TTF1 with purified ab76013 at 1/250 dilution (0.6 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, PH9. Hematoxylin was used to counter stain. ab97051, a Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1/500 dilution. PBS instead of the primary antibody was used as the negative control.

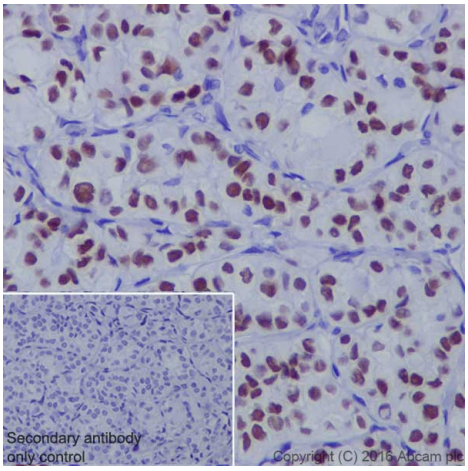
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76013).



Immunocytochemistry/ Immunofluorescence - Anti-TTF1 antibody [EP1584Y] - BSA and Azide free (ab216648)

Immunocytochemistry/ Immunofluorescence analysis of human thyroid cells labeling TTF1 with purified ab76013 at 1/500 dilution (0.3µg/ml). Cells were fixed with 4% paraformaldehyde and permeabilized with 0.2% tritonX-100. Antigen retrieval was performed using a heated citrate solution (10mM citrate PH 6.0 + 0.05% Tween-20). ab150077, a Goat anti rabbit IgG(Alexa Fluor® 488) secondary antibody was used at 1/1000 dilution. PBS instead of the primary antibody was used as a control. DAPI nuclear staining.

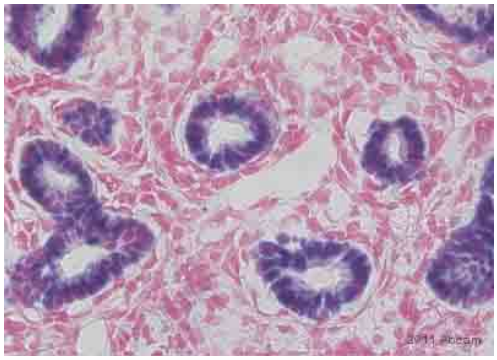
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76013).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [EP1584Y] - BSA and Azide free (ab216648)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human thyroid carcinoma tissue sections labeling TTF1 with purified ab76013 at 1/250 dilution (0.6 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, PH9. Hematoxylin was used to counter stain. ab97051, a Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1/500 dilution. PBS instead of the primary antibody was used as the negative control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76013).

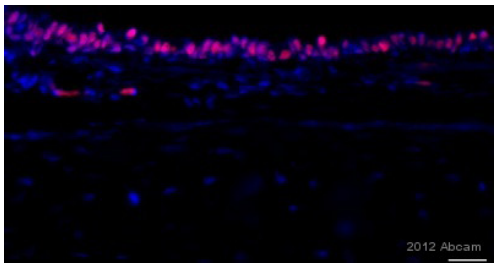


Immunohistochemistry (Frozen sections) - Anti-TTF1 antibody [EP1584Y] - BSA and Azide free (ab216648)

This image is courtesy of an anonymous Abreview.

Unpurified ab76013 staining TTF1 in murine fetal lung tissue by Immunohistochemistry (Frozen sections).Tissue was fixed in formaldehyde and permeabilized using PBST. Samples were then blocked using 1.5% serum for 20 minutes at 25°C, then incubated with ab76013 at a 1/400 dilution for 12 hours at 4°C. A biotin conjugated goat anti-rabbit IgG was used as the secondary at a 1/200 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76013).



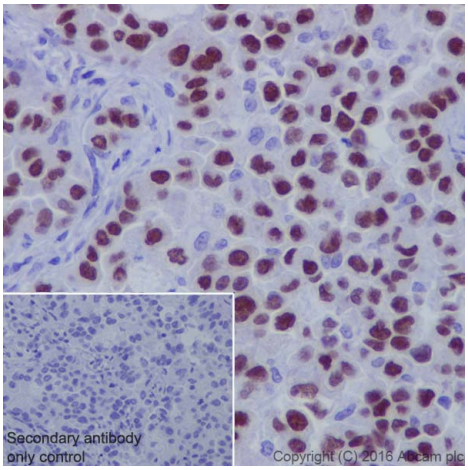
Immunocytochemistry/ Immunofluorescence - Anti-TTF1 antibody [EP1584Y] - BSA and Azide free (ab216648)

This image is courtesy of an anonymous Abreview.

Immunofluorescence analysis of rat bronchi cells, staining TTF1 with unpurified ab76013.

Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 1% BSA for 30 minutes at 27°C. Samples were incubated with primary antibody (1/500 in blocking buffer) for 1 hour at 16°C. An AlexaFluor®594-conjugated goat anti-rabbit polyclonal IgG (1/500) was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab76013).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TTF1 antibody [EP1584Y] - BSA and Azide free (ab216648)

This IHC data was generated using the same anti-TTF1 antibody clone, EP1584Y, in a different buffer formulation (cat# ab76013).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung carcinoma tissue sections labeling TTF1 with purified ab76013 at 1/250 dilution (0.6 µg/ml). Heat mediated antigen retrieval was performed using EDTA Buffer, PH9. Hematoxylin was used to counter stain. ab97051, a Goat Anti-Rabbit IgG H&L (HRP) secondary antibody was used at 1/500 dilution. PBS instead of the primary antibody was used as the negative control.

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