

TTF-1

Recombinant Rabbit Monoclonal Antibody

Product Datasheet

Catalog# BX50074

Clone# BP6079

Predicted Molecular Wt: 39kDa
Species Cross-reactivity: Human
Applications: IHC-P

Purity: ProA affinity purified IgG
Form: Liquid
Swissprot ID: P43699

Background:

Thyroid transcription factor-1 (synonymes: Homeobox protein Nkx-2.1) is a 371 amino acid protein, 39 KDa, which belongs to the NKX homeobox transcription factor family. TTF-1 stimulate or repress transcription of particular genes by binding to their regulatory sequences. TTF-1 plays a role in regulating genes in the thyroid, lung and brain. Its molecular targets in the thyroid gland are thyroglobulin, thyroperoxidase and thyrotropin receptor. TTF-1 activates transcription of the genes encoding these proteins. In lung, TTF-1 promotes the transcription of the surfactant proteins A to D, and the Clara cell secretory protein. In brain, the molecular targets of TTF-1 are unknown. Besides being a tissue-specific transcription promoter in adult organs, TTF-1 has been suggested a role in morphogenesis and cytodifferentiation. Among thyroid neoplasms, TTF1 is seen in virtually all tumours of follicular derivation.

In diagnostic pathology, TTF-1 is useful as marker for pulmonary adenocarcinoma and pulmonary neuroendocrine malignancy, including small cell lung carcinoma. It can be used to differentiate primary lung adenocarcinoma from metastasis of extrapulmonary origin.

Subcellular location:

Nucleus

Recommended method:

Heat induced epitope retrieval with Tris-EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C-25°C) for 30 minutes.

Immunogen:

Synthetic peptide corresponding to residues within aa50-150 of TTF-1 was used as an immunogen.

Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

Storage conditions:

-20°C

Storage instructions:

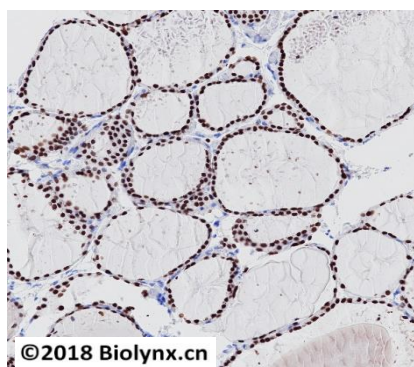
Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

Recommended Dilutions:

IHC-P: 1:100-1:200

Background References:

- Agoff SN, Lamps LW, Philip AT, et al. Mod Pathol 2000;13:238-242.
- Bingle CD. Int J Biochem Cell Biol 1997;29:1471-1473.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of thyroid labelling TTF-1 with BP6079. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0.

Product QC'd by:



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