

## 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:

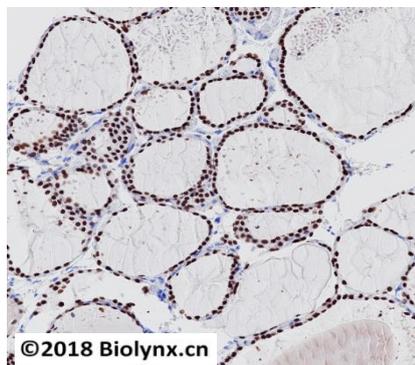
Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

### Recommended Dilutions:

IHC-P: 1:100-1:200

### Background References:

1. Agoff SN, Lamps LW, Philip AT, et al. Mod Pathol 2000;13:238-242.
2. 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: 

For research use only. Not for use in diagnostic or therapeutic applications.