

TTF-1 (SPT24)


Mouse anti-human Thyroid Transcription Factor 1 (TTF-1) Monoclonal Antibody (Clone SPT24)

REFERENCES AND PRESENTATIONS¹

- **ready-to-use (manual or LabVision AutoStainer)**
MAD-000486QD-3
MAD-000486QD-7
MAD-000486QD-12
- **Ready-to-use (MD-Stainer)²**
MAD-000486QD-3/V
MAD-000486QD/V
- **concentrated**
MAD-000486Q - 1:50 recommended dilution

COMPOSITION

Anti-human TTF1 mouse monoclonal antibody purified from serum and prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide

INTENDED USE : Immunohistochemistry (IHC) on paraffin embedded tissues. Not tested on frozen tissues or Western-Blotting

CLONE: SPT24

Ig ISOTYPE: Mouse IgG1/Kappa

IMMUNOGEN: A recombinant protein molecule corresponding to a fragment of 123 AA of the N-terminal region of human TTF-1.

SPECIES REACTIVITY: In vitro diagnostics in humans. Not tested in other species

DESCRIPTION AND APPLICATIONS:

This antibody recognizes a protein identified as thyroid transcription factor 1 (TTF-1), a member of the Nkx2 family homeodomain transcription factors. This antibody was designed against a short recombinant peptide and shows great sensitivity and provides a stronger and less cytoplasmic unspecific staining or cross-reaction with tissues other than thyroid and lung. The clone SPT24 identifies the presence of TTF-1 in thyroid follicular epithelium, as well as type II pneumocytes and Clara cells of the lung



and their corresponding tumors. It can also be observed in certain brain reactive glial cells and some cases of colon adenocarcinomas. It shows no nuclear staining in a variety of normal tissues and no cytoplasmic reactivity was described in hepatocarcinomas as compared with other clones.

IHC POSITIVE CONTROL: Lung, Thyroid

VISUALIZATION: Nuclear

IHC RECOMMENDED PROCEDURE:

- 4µm thick section should be taken on charged slides; dry overnight at 60°C
- Deparaffinise, rehydrate and HIER (heat induced epitope retrieval) – boil tissue in the Pt Module using Vitro S.A EDTA buffer pH8³ for 20 min at 95°C. Upon completion rinse with 3-5 changes of distilled or deionised water followed by cooling at RT for 20 min
- Endogenous peroxidase block - Blocking for 10 minutes at room temperature using peroxidase solution (ref. MAD-021540Q-125)
- Primary antibody: incubate for 10 minutes [The antibody dilution (when concentrated) and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory]
- For detection use Master Polymer Plus Detection System (HRP) (DAB included; ref. MAD-000237QK)
- Counterstaining with haematoxylin and final mounting of the slide

STORAGE AND STABILITY:  Stored at 2-8°C. Do not freeze.  Once the packaging has been opened it can be stored until the expiration date of the reagent indicated on the label. If the reagent has been stored under other conditions to those indicated in this document, the user must first check its correct performance taking into account the product warranty is no longer valid.

WARNINGS AND PRECAUTIONS:

1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water.
2. This product is harmful if swallowed.

¹ These references are for presentation in vials of Low Density Polyethylene (LDPE) dropper. In case the products are used in automated stainers, a special reference is assigned as follows:

- / L: Cylindrical screw-cap vials (QD-3 / L, QD-7 / L, QD-12 / L).

- / N: Polygonal screw-cap vials (QD-3 / N, QD-7 / N, QD-12 / N).

For different presentations (references / volumes) please contact the supplier.

² For Technical specifications for MD-Stainer, please contact your distributor.

³ Ref: MAD-004072R/D



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Rev.: 2020-09-21

3. Consult local or state authorities with regard to recommended method of disposal.
4. Avoid microbial contamination of reagents.

SAFETY RECOMMENDATIONS










This product is intended for laboratory professional use only. The product is NOT intended to be used as a drug or for domestic purposes. The current version of the Safety Data Sheet for this product can be downloaded by searching the reference number at www.vitro.bio or can be requested at regulatory@vitro.bio.

BIBLIOGRAPHY

1. Katoh R, Kawaoi A, Miyagi E, et al. Thyroid transcription factor-1 in normal, hyperplastic, and neoplastic follicular thyroid cells examined by immunohistochemistry and nonradioactive in situ hybridization. *Mod Pathol*; 13: 570–576. 2000.
2. Pan C-C, Chen PC-H, Tsay S-H et al. Cytoplasmic immunoreactivity for thyroid transcription factor-1 in hepatocellular carcinoma: a comparative immunohistochemical analysis of four commercial antibodies using a tissue array technique. *Am J Clin Pathol*; 121(3): 343-349. 2004.
3. Stenhouse G, Fyfe N, King G, et al. Thyroid transcription factor 1 in pulmonary adenocarcinoma. *J Clin Pathol*; 57: 383–387. 2004.
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5. Penman D, Downie I, Roberts F. Positive immunostaining for thyroid transcription factor-1 in primary and metastatic colonic adenocarcinoma: a note of caution. *J Clin Pathol*; 59: 663-664. 2006.
6. Matoso A, Singh K, Jacob R, Greaves WO, Tavares R, Noble L, Resnick MB, Delellis RA, Wang LJ. Comparison of thyroid transcription factor-1 expression by 2 monoclonal antibodies in pulmonary and nonpulmonary primary tumors. *Appl Immunohistochem Mol Morphol*. 2010 Mar;18(2):142-9

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

	Expiration date
	Temperature limit
	Manufacturer
	Sufficient content for <n> assays
	Catalog number
	Lot code
	Refer to the instructions of use
	Medical product for <i>in vitro</i> diagnosis.
	Material safety data sheet