P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

TTF-1; Clone 8G7G3/1
(Concentrate)

Availability/Contents:

Item #	Volume
A00144-C	1 ml

Description:

Species:	Mouse
Designation:	Mouse Monoclonal
Clone:	8G7G3/1
Isotype:	IgG1
Immunogen:	BALB/c mice were injected with recombinant rat TTF-1.
Format:	This antibody is provided in a phosphate buffered saline containing 1% BSA.
Specificity:	This antibody reacts with TTF-1 protein found in adenocarcinomas of the lung and tumors originating in the thyroid. TTF-1 positive cells are found in Type II pneumocytes and Clara cells in the lung. In the thyroid, follicular and parafollicular cells are positive. In lung cancers, Adenocarcinomas are usually positive, while Squamous Cell Carcinomas and Large Cell Carcinomas are rarely positive. In addition, Small-Cell Carcinomas (of any primary site) are usually positive.
Background:	Thyroid transcription factor (TTF-1) is a protein that regulates transcription of genes specific to thyroid, lung and diencephalon. It is also known as thyroid-specific enhancer binding protein and NKX-2. The protein plays a crucial role in normal lung function and morphogenesis. TTF-1 is expressed consistently throughout the life stages and uniformly in the terminal respiratory unit, which is comprised of peripheral airway cells and small-sized bronchioles. The TTF-1 gene encodes a transcription termination factor that is localized to the nucleolus and plays a critical role in ribosomal gene transcription. The encoded protein mediates the termination of RNA polymerase I transcription by binding to Sal box terminator elements downstream of pre-rRNA coding regions. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. TTF-1 is useful in differentiating primary Adenocarcinoma for the lung from Metastatic Carcinomas of the breast and Malignant Mesothelioma. The antibody can also be useful to differentiate Small-Cell Lung Carcinoma from lymphoid infiltrates.
Species Reactivity:	Human. Others not tested.
Positive Control:	Adenocarcinoma of the Lung or Thyroid.
Cellular Localization:	Nuclear.
Titer/Working Dilution:	Immunohistochemistry: 1:100 – 1:200
Microbiological State:	This product is not sterile.

Storage: 2° C 8° C

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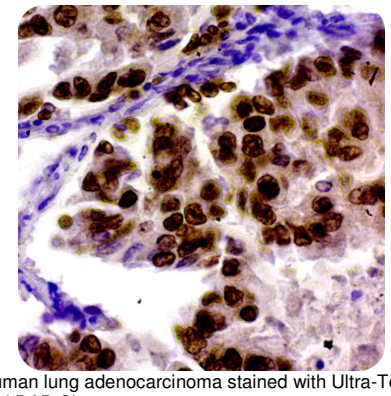
Uses/Limitations:

Not to be taken internally.
For In Vitro Diagnostic Use.
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Do not use if reagent becomes cloudy.
Do not use past expiration date.
Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com



Human lung adenocarcinoma stained with Ultra-Tek HRP and DAB Chromogen.

Procedure:

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).

2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.

3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).
Do not pipette by mouth.
Avoid contact of reagents and specimens with skin and mucous membranes.
Avoid microbial contamination of reagents or increased nonspecific staining may occur.
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

1. Turner BM, Cagle PT, Sainz IM, Fukuoka J, et al. Arch Pathol Lab Med. 2012; 136:163-171.
2. Ye J, Findeis-Hosey JJ, Yang Q, McMahon LA, et al. Appl Immunohistochem Mol Morphol. 2011; 19(4):313-317.
3. Perner S, Wagner PL, Soltermann A, LaFargue C, et al. J Pathol. 2009; 217:65-72.
4. Comperat E, Zhang F, Perrtini C, et al. Mod Pathol. 2005; 18:1371-1376.
5. Stenhouse G, Fyfe N, King G, Chapman A, Kerr KM. J Clin Pathol. 2004;57:383-387.
6. Yatabe Y, Mitsudomi T, Takahashi T. Am J Surg Pathol. 2002;26(6):767-773.

Warranty: No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

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