Cell Marque
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UltraMarque™
Thyroid Transcription Factor – 1 (TTF-1) (8G7G3/1)

For In Vitro Diagnostic Use
English: Instructions for use

Presentation
Anti-Thyroid Transcription Factor – 1 (anti-TTF-1) is mouse monoclonal antibody from tissue culture supernatant, diluted in phosphate buffered saline, pH 7.6, with protein base, and preserved with sodium azide.

Applications
Anti-TTF-1 is useful in differentiating primary adenocarcinoma of the lung from metastatic carcinomas from the breast[1], mediastinal germ cell tumors and malignant mesothelioma[2]. It can also be used to differentiate Small cell lung carcinoma from lymphoid infiltrates.[3] Loss of TTF-1 expression in non-small cell lung carcinoma has been associated with aggressive behavior of such neoplasms.

Reactivity	Paraffin, Frozen
Control	Adenocarcinoma of Lung, Normal lung, Thyroid
Visualization	Nuclear
Stability	Up to 36 months; store at 2-8°C
Isotype	IgG_1/K

Availability

Description	Catalog No.	Dilution/Comments
1 ml, prediluted	CMA571	Ready to use
6 ml, prediluted	CMA572	Ready to use
15 ml, prediluted	CMA573	Ready to use
0.05 ml, concentrate	CMC571	1:100-1:500*
0.5 ml, concentrate	CMC572	1:100-1:500*
1 ml, concentrate	CMC573	1:100-1:500*
Positive Control Slides	CMS571	5 slides per pack

Specimen Preparation
1. Paraffin embedded tissue that has been fixed in neutral formalin (preferably) for 6 to 24 hours for optimal results.
2. Cut 3-4µm sections and place on positively charged slides.
3. Dry overnight at 37°C or 2-4 hours at 58°C.
4. Pretreat.

Pretreatment Options
1. Deparaffinize, rehydrate, and epitope retrieve.
2. The preferred method of pretreatment is the use of Heat Induced Epitope Retrieval (HIER) techniques using Cell Marque's Declere® with citrate or Trilogy™ with EDTA in conjunction with a pressure cooker. The preferred method allows for simultaneous deparaffinization, rehydration, and epitope retrieval. Upon completion, rinse with 5 changes of distilled or deionized water.

Recommended Manual Staining Procedure
1. If using HRP Label, place slides in peroxide block for 10 to 15 minutes; rinse.
2. Apply the antibody and incubate for 60 minutes at room temperature; rinse.
3. Apply the Link, incubate for 10 minutes at room temperature; rinse.
4. Apply the Label, incubate for 10 minutes at room temperature; rinse.
5. Apply ample amount of chromogen and incubate for 1 to 10 minutes at room temperature.
6. Rinse with 4 to 5 changes of deionized water.
7. Counterstain and coverslip.

References
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2. Di Loreto C, et al. Cancer Lett 1998 Feb13;124(1):73-8
3. Di Loreto C. et al, J Clin Pathol 1997 Jan;50(1):30-2
4. Holzinger A et al. Hybridoma. 1996 Feb;15(1):49-53
5. Agoff SN et al. Mod Pathol. 2000 Mar;13(3):238-42
6. Katoh R et al. Mod Pathol. 2000 May;13(5):570-6
7. Jang KY et al. Anal Quant Cytol Histol. 2001 Dec;23(6):400-4
8. Srodon M, Westra WH. Hum Pathol. 2002 Jun;33(6):642-5
9. Abutaily AS et al. J Clin Pathol. 2002 Sep;55(9):662-8
10. Bejarano PA, Mousavi F. Arch Pathol Lab Med. 2003 Feb;127(2):193-5
11. Saad RS et al. Appl Immunohistochem Mol Morphol. 2003 Jun;11(2):107-12
12. Tan D et al. Hum Pathol. 2003 jun;34(6):597-604

*The dilutions set forth above are estimates; actual results may differ because of variability in methods and protocols. Validation of antibody performance/protocol is the responsibility of the end user.

EC REP CE Partners 4U 395 1 DB, 13 NL +31 (0) 6-515.536.26 CE

Material Safety Data Sheet

1. Components

Sodium Azide	0.1%

2. Physical Data

Appearance	Liquid
Solubility in water	N/A
Specific gravity	N/A
Melting point	N/A
Evaporation rate	N/A

3. Fire and Explosion Data

Flash point	N/A
Extinguishing media	Water, foam, carbon dioxide
Special fire fighting procedures	Use respirator. Toxic gases may be evolved: CO, CO2, nitrogen oxides
Unusual fire and explosion hazards	None

4.Health Hazard Data

orl-hmn TDLO:	710 ug/kg	orl-rat: LD50	27mg/kg
inv-mus LD50:	19mg/kg	skn-rbt: LD50:	20mg/kg

Threshold limit value	300ug/m3
Acute effects of overexposure	May cause local discomfort
Emergency procedures	Wash affected area with H2O for at least 15 min.
Skin contact	May cause local discomfort
Eye contact	May cause irritation
Inhalation	May cause irritation
Ingestion	Harmful if swallowed

5. Reactivity Data

Stability	Stable
Conditions to avoid	Acidic pH
Hazardous Polymerization	Will not occur
Hazardous decomposition products	CO, CO2, nitrogen oxides

6. Spill or Leak Procedures

Spilled or released material	Flush to sewer if allowed or collect on absorbent and dispose in approved land fill.
Waste disposal method	Flush to sewer if allowed

7. Special Protection Information

Respiratory protection	N/A
Ventilation	Use only with adequate ventilation
Protective gloves needed	Yes
Eye protection needed	Yes
Handling and storage precautions	Store in refrigerator