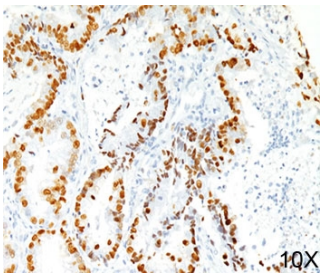
TTF-1 Antibody 8G7G3/1 / Lung & Thyroid Marker Antibody [clone 8G7G3/1] (V2274)

Catalog No.	Formulation	Size
V2274-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2274-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2274SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2274IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

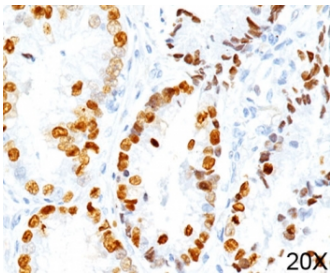
Citations (14)

Bulk quote request

Species Reactivity	Human, Mouse, and Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	8G7G3/1
Purity	Protein G affinity chromatography
Buffer	1X PBS, pH 7.4
Gene ID	7080
Localization	Nuclear
Applications	Flow cytometry: 0.5-1ug/million cells Immunofluorescence: 0.5-1ug/ml Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Limitations	This TTF-1 Antibody 8G7G3/1 / Lung & Thyroid Marker Antibody is available for research use only.



TTF-1 Antibody Clone 8G7G3/1 Lung Adenocarcinoma IHC. Human lung adenocarcinoma stained using TTF-1 Antibody Clone 8G7G3/1 demonstrates strong nuclear immunoreactivity for Thyroid transcription factor 1 (NKX2-1) in malignant pulmonary epithelial cells. Nuclear staining highlights tumor cells of pulmonary epithelial origin and reflects the well-established use of clone 8G7G3/1 antibody as a diagnostic immunohistochemistry marker for pulmonary adenocarcinoma. TTF-1 expression in tumor cell nuclei assists pathologists in identifying lung adenocarcinoma and distinguishing primary pulmonary carcinoma from metastatic tumors involving the lung.



TTF-1 Antibody Clone 8G7G3/1 Human Lung Adenocarcinoma Tissue IHC. Human lung adenocarcinoma stained using TTF-1 Antibody Clone 8G7G3/1 shows strong nuclear staining for Thyroid transcription factor 1 (NKX2-1) in malignant pulmonary epithelial cells. Nuclear immunoreactivity highlights pulmonary epithelial tumor cells and reflects the diagnostic role of clone 8G7G3/1 antibody in immunohistochemistry panels used for lung adenocarcinoma evaluation. Detection of nuclear NKX2-1 expression supports pulmonary epithelial lineage and helps distinguish primary lung carcinoma from metastatic malignancies.

Description

TTF-1 Antibody 8G7G3/1 / Lung & Thyroid Marker Antibody recognizes thyroid transcription factor 1 (TTF-1), also known as NKX2.1, a homeobox-containing transcription factor that plays essential roles in embryonic development and maintenance of differentiated epithelial tissues. TTF-1 regulates the transcription of numerous genes involved in thyroid development, pulmonary epithelial differentiation, and forebrain patterning, making it one of the most widely studied lineage-specific transcription factors in developmental biology and diagnostic pathology. Because of its highly restricted tissue distribution, TTF-1 serves as an important marker for identifying tissues of pulmonary and thyroid origin. TTF-1 Antibody 8G7G3/1 / Lung & Thyroid Marker Antibody is widely used for both research and diagnostic applications.

During embryogenesis, TTF-1 directs specification and differentiation of the thyroid gland, lung epithelium, ventral forebrain, and hypothalamus by regulating gene expression programs that establish organ identity. In the mature lung, TTF-1 controls genes required for surfactant production and maintenance of alveolar epithelial cells, while in the thyroid it regulates expression of thyroglobulin, thyroid peroxidase, and additional proteins essential for thyroid hormone biosynthesis. Through these activities, TTF-1 maintains normal tissue homeostasis and preserves differentiated cellular phenotypes throughout life.

TTF-1 is one of the most extensively utilized immunohistochemical markers in surgical pathology. Nuclear expression is routinely used to identify primary lung adenocarcinomas and small cell carcinomas while helping distinguish these tumors from metastatic malignancies arising at other anatomical sites. The marker is also widely employed for evaluation of thyroid neoplasms and developmental disorders affecting thyroid and pulmonary tissues. Because of its diagnostic value and well-characterized expression pattern, clone 8G7G3/1 has become one of the most frequently cited and extensively validated TTF-1 antibodies in the scientific literature.

NSJ Bioreagents' TTF-1 Antibody 8G7G3/1 / Lung & Thyroid Marker Antibody provides researchers and pathologists with a dependable reagent for immunohistochemistry, immunofluorescence, western blotting, and additional immunodetection applications. Backed by the extensive publication history of clone 8G7G3/1, this antibody supports studies of lung and thyroid differentiation, developmental biology, transcriptional regulation, and cancer research while delivering reliable detection of TTF-1 expression in normal and neoplastic tissues.

Explore additional biomarkers for tumor diagnosis and cancer research on our Cancer Antibodies page.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and

substrates may require the TTF-1 Antibody 8G7G3/1 / Lung & Thyroid Marker Antibody to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Rat full length recombinant protein was used as the immunogen for this TTF-1 antibody.

Storage

Store the TTF-1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

TTF-1 antibody, NKX2.1 antibody, Thyroid Transcription Factor 1 antibody, NK2 Homeobox 1 antibody, TITF1 antibody, Lung & Thyroid Marker antibody

References (1)

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