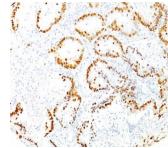


TTF-1 / NKX2.1 Monoclonal Mouse Antibody (8G7G3/1)



Product Description

Recognizes a protein of 40 kDa, identified as Thyroid transcription factor-1 (TTF-1). TTF-1 is a member of the NKx2 family of homeodomain transcription factors. It is expressed in epithelial cells of the thyroid gland and the lung. Nuclei from liver, stomach, pancreas, small intestine, colon, kidney, breast, skin, testes, pituitary, prostate, and adrenal glands are unreactive. Anti-TTF-1 is useful in differentiating primary adenocarcinoma of the lung from metastatic carcinomas originating in the breast, mediastinal germ cell tumors, and malignant mesothelioma. It can also be used to differentiate small cell lung carcinoma from lymphoid infiltrates. Loss of TTF-1 expression in non-small cell lung carcinoma has been associated with aggressive behavior of such neoplasms. TTF-1 reactivity is also seen in thyroid malignancies.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0448, Anti-NKX2.1 (8G7G3/1)

Product attributes

Antibody number	#0448
Antibody reactivity (target)	NKX2.1, TTF-1
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	8G7G3/1
Isotype	IgG1, kappa
Molecular weight	40 kDa
Synonyms	BCH, Benign chorea, BHC, Homeobox protein Nkx2.1, NK2 homeobox 1, NKX2.1, NKX2A, TEBP, Thyroid nuclear factor-1, Thyroid specific enhancer binding protein, Thyroid transcription factor-1 (TTF-1), Tin man, TITF1, TTF-1
Human gene symbol	NKX2-1
Entrez gene ID	7080
SwissProt	P43699
Unigene	94367
Immunogen	Rat full length TTF-1 recombinant protein
Verified antibody applications	IHC (FPPE) (verified)
Antibody target cellular localization	Nucleus
Species reactivity	Human, Mouse, Rat
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 0.5-1 ug/mL. Immunohistology formalin-fixed 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Predicted to show broad species reactivity. Optimal dilution for a specific application should be determined by user
Positive control	MAD109, MLE-15, H441-4, or H345 cells. Normal thyroid or lung.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Transcription factors
Tumor expression	Lung cancer, Thyroid cancer

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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