



# Mouse Anti-Human NKX3.1 monoclonal antibody, clone JID751 (CABT-L2906)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	This antibody is intended for qualified laboratories to qualitatively identify by light microscopy the presence of associated antigens in sections of formalin-fixed, paraffin-embedded tissue sections using IHC test methods.
<b>Specificity</b>	Human NKX3.1
<b>Isotype</b>	IgG
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	JID751
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	IHC
<b>Reconstitution</b>	The prediluted antibody does not require any mixing, dilution, reconstitution, or titration; the antibody is ready-to-use and optimized for staining. The concentrated antibody requires dilution in the optimized buffer, to the recommended working dilution range.
<b>Positive Control</b>	Prostate Adenocarcinoma, Prostate
<b>Format</b>	Liquid
<b>Size</b>	Predilut: 7 ml, Concentrate: 100 µl, Concentrate: 1 ml
<b>Buffer</b>	Predilute: Antibody Diluent Buffer

Concentrate: Tris Buffer, pH 7.3 - 7.7, with 1% BSA

<b>Preservative</b>	< 0.1% Sodium Azide
<b>Storage</b>	Store at 2-8°C. Do not freeze.
<b>Ship</b>	Wet ice

## BACKGROUND

**Introduction** NKX3.1, also known as BAPX2 or NKX3A, is a homeobox protein located mainly in the prostate epithelium, and is also present in testis, ureter, and pulmonary bronchial mucous glands. The protein functions as a negative regulator of epithelial cell growth in prostate tissue, and as an androgen-regulated, prostatic tumor suppressor. NKX3.1 is clinically indicated in the majority of primary prostatic adenocarcinomas, as well as invasive ductal carcinomas and invasive lobular carcinomas of the breast. Underexpression of NKX3.1 is typical of human prostate carcinomas and prostatic intraepithelial neoplasia, and negative staining with Anti-NKX3.1 is common in urothelial carcinoma. Anti-NKX3.1 can be useful as an aid to distinguish between high grade prostate adenocarcinoma and high grade infiltrating urothelial carcinoma. It is also useful for identifying metastatic tumors and, when used in combination with Anti-ERG, this antibody may be a superior aid for identifying tumors of prostatic origin.

**Keywords** NKX3-1;NK-3 transcription factor, locus 1 (Drosophila);Bax;NKX3A;NKX3.1;Nkx-3.1;bagpipe;homeobox protein Nkx-3.1;homeobox protein NK-3 homolog A;Drosophila NK-3 transcription factor, locus 1;

## GENE INFORMATION

<b>Gene Name</b>	NKX3-1 NK3 homeobox 1 [ Homo sapiens (human) ]
<b>Official Symbol</b>	NKX3-1
<b>Synonyms</b>	NKX3-1; NK3 homeobox 1; NKX3; BAPX2; NKX3A; NKX3.1; homeobox protein Nkx-3.1; NK homeobox, family 3, A; homeobox protein NK-3 homolog A; NK3 transcription factor homolog A; NK3 transcription factor related, locus 1;
<b>Entrez Gene ID</b>	<a href="#">4824</a>
<b>Protein Refseq</b>	NP_001243268
<b>UniProt ID</b>	<a href="#">Q99801</a>
<b>Chromosome Location</b>	8p21.2
<b>Pathway</b>	Coregulation of Androgen receptor activity; FOXA1 transcription factor network; Pathways in

cancer; Prostate cancer; SIDS Susceptibility Pathways;

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**Function**

MADS box domain binding; RNA polymerase II core promoter sequence-specific DNA binding transcription factor activity; androgen receptor activity; core promoter binding; contributes\_to cysteine-type endopeptidase activator activity involved in apoptotic process; estrogen receptor activity; estrogen receptor binding; histone deacetylase binding; protein binding; protein kinase activator activity; protein self-association; sequence-specific DNA binding; sequence-specific DNA binding transcription factor activity; transcription factor binding; transcription regulatory region DNA binding; transcription regulatory region sequence-specific DNA binding;

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