

Instructions For Use

RA0840-C-IFU-RUO

Rev. Date: Feb 24, 2025

Revision: 1

Page 1 of 2

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

Recombinant NKX3.1 (Metastatic Prostate Adenocarcinoma Marker); Clone rNKX3.1/6620

(Concentrate)

Availability/Contents: <u>Item #</u> <u>Volume</u>

RA0840-C.1 0.1 ml RA0840-C.5 0.5 ml RA0840-C1 1 ml

Description:

Species: Mouse

Immunogen: Recombinant fragment (around aa 92-224) of human NKX3.1 protein (exact sequence is

proprietary)

Clone: rNKX3.1/6620 Isotype: IgG1 / Kappa

Entrez Gene ID: 4824 Hu Chromosome Loc.: 8p21.2

Synonyms: Homeobox protein Nkx-3.1, Homeobox protein NK-3 homolog A, NK3 Homeobox 1; Homeobox

Protein NK-3 Homolog A; NKX3-1; NKX3A; NK3 Transcription Factor Related, Locus 1

(Drosophila); NK3 Transcription Factor Related, Locus 1; NK Homeobox (Drosophila), Family 3, A; NK3 Transcription Factor Homolog A; NK Homeobox, Family 3, A; Homeobox Protein Nkx-

3.1; BAPX2; NKX3

Mol. Weight of Antigen: 35kDa

Format: 200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM

PBS with 0.05% BSA & 0.05% azide.

Specificity: Recognizes a protein of 35kDa, identified as NKX3.1.

Background: NKX3.1 is a prostate specific gene encoding a transcription factor that plays an important role in

normal prostate development and carcinogenesis. It is a prostatic tumor suppressor gene located on chromosome 8p21.2, which frequently undergoes a loss of heterozygosity. NKX3.1 expression is highly restricted in prostate epithelial cells and therefore can be used as a diagnostic biomarker for prostate cancer and other metastatic lesions of prostatic origin. Furthermore, NKX3.1 shows better sensitivity than Prostate Specific Antigen (PSA) for identifying metastatic prostatic adenocarcinoma. This suggests that immunohistochemical staining of NKX3.1, along with other prostate-restricted markers, may be valuable for the definitive determination of prostatic origin in poorly differentiated metastatic carcinomas.

Species Reactivity: Human

Positive Control: Highly expressed in the prostate and at a lower level in the testis.

Cellular Localization: Nucleus

Titer/ Working Dilution: Immunohistochemistry (Frozen and Formalin-fixed): 1-2µg/ml

Microbiological State: This product is not sterile.

Storage: 2° C 8° C

ScyTek Laboratories, Inc. 205 South 600 West Logan, UT 84321 U.S.A



Instructions For Use RA0840-C-IFU-RUO

Rev. Date: Feb 24, 2025

Revision: 1

Page 2 of 2

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

Uses/Limitations: Not to be taken internally.

For Research Use Only.

This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded

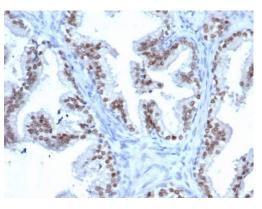
tissue sections, to be viewed by light

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



Formalin-fixed, paraffin-embedded human prostate stained with NKX3.1 Recombinant Mouse Monoclonal Antibody (rNKX3.1/6620).

Procedure:

- 1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Tris-EDTA Solution (10x) pH 9.0 (ScyTek catalog# TES500) or Citrate Plus (10x) HIER Solution (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 <u>reportable concentration</u> according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

1.

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.

Storage: 2° C 8° C

ScyTek Laboratories, Inc. 205 South 600 West Logan, UT 84321 U.S.A.