

Rabbit Anti-NKX3.1 [EPR14970]: RM0386, RM0386RTU7

Intended Use: For Research Use Only

Description: NKX3.1 is a protein found in humans and is encoded by the NKX3-1 gene located on chromosome 8. The homeodomain containing transcription factor NKX3A is a putative prostate tumor suppressor that is expressed in a largely prostate-specific and androgen-regulated manner. NKX3.1 protein has been found to be positive in the vast majority of primary prostatic adenocarcinomas. A recent study showed that NKX3.1 staining was highly sensitive and specific for high-grade prostatic adenocarcinomas. The sensitivity for identifying metastatic prostatic adenocarcinomas overall was 98.6% (68/69 cases positive) for NKX3.1, and 94.2% (65/69 cores positive) for PSA. The specificity of NKX3.1 was 99.7% (1/349) in various cancers. NKX3.1 stains nuclei in both normal and prostate cancer; thus providing a robust stain that is easy-to-interpret, similar to other transcription factors such as TTF-1 or CDX2. In the appropriate clinical setting, the addition of IHC staining for NKX3.1, along with other prostate-restricted markers, may prove to be a valuable adjunct to definitively determine prostatic origin in poorly differentiated metastatic carcinomas. NKX3.1 used in combination with ERG monoclonal antibody, may represent one of the most sensitive and specific markers for identifying tumors of prostatic origin.

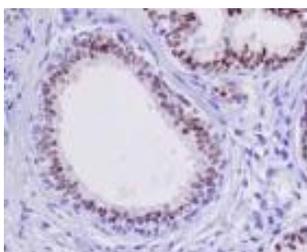
Specifications

Clone: EPR14970 equivalent to EP356
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Localization: Nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and <0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, WB
 Package:

Description	Catalog No.	Size
NKX3.1 Concentrated	RM0386	1 ml
NKX3.1 Prediluted	RM0386RTU7	7 ml

IHC Procedure

Positive Control: Normal prostate, prostate cancer
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human prostate tissue stained with anti-NKX3.1 using DAB

References:

1. Metastatic carcinoma of unknown primary: diagnostic approach using immunohistochemistry. Conner JR et al. Adv Anat Pathol. 2015.
2. NKX3.1 is expressed in ER-positive and AR-positive primary breast carcinomas. Asch-Kendrick RJ et al. J Clin Pathol. 2014.
3. Alterations of C-MYC, NKX3.1, and E-cadherin expression in canine prostate carcinogenesis. Fonseca-Alves CE, et al. Microsc Res Tech. Dec;76(12):1250-6, 2013.

Doc. 100-RM0386
Rev. A