

36-2860: Anti-NKX3.1 (Metastatic Prostate Adenocarcinoma Marker) Monoclonal Antibody(Clone: NKX3.1/3347)

Clonality :	Monoclonal
Clone Name :	NKX3.1/3347
Application :	ELISA,IHC
Reactivity :	Human
Gene :	NKX3-1
Gene ID :	4824
Uniprot ID :	Q99801
Alternative Name :	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
Isotype :	Mouse IgG2b, kappa
Immunogen Information :	Recombinant fragment(around aa 92-224) of human NKX3.1 protein (exact sequence is proprietary)

Description

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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

ELISA (For coating, order Ab without BSA); Immunohistochemistry (Formalin-fixed) (1-2µg/ml for 30 minutes at RT); (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

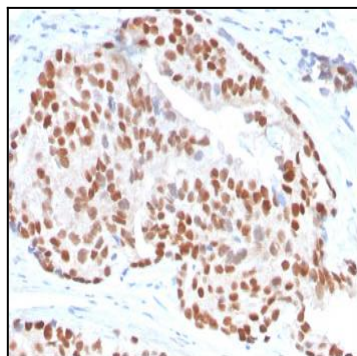


Fig. 1: Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with NKX3.1-Monospecific Mouse Monoclonal Antibody (NKX3.1/3347).

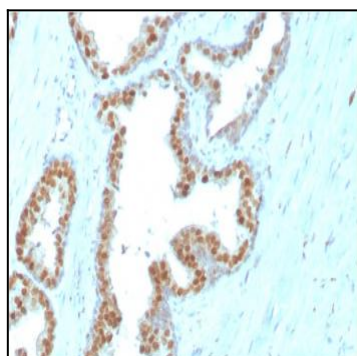


Fig. 2: Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with NKX3.1-Monospecific Mouse Monoclonal Antibody (NKX3.1/3347).

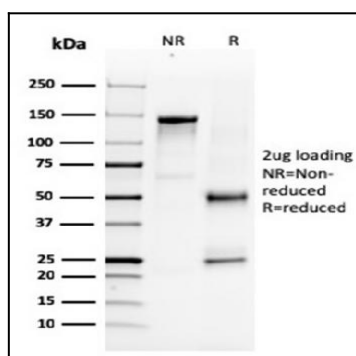


Fig. 3: SDS-PAGE Analysis Purified NKX3.1-Monospecific Mouse Monoclonal Antibody (NKX3.1/3347). Confirmation of Purity and Integrity of Antibody.

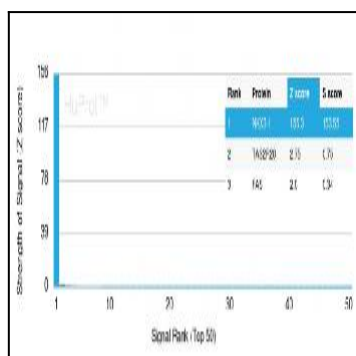


Fig. 4: Analysis of Protein Array containing more than 19,000 full-length human proteins using NKX3.1-Monospecific Mouse Monoclonal Antibody (NKX3.1/3347). Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.