

Mouse NKX6.1 Monoclonal Antibody | anti-NKX6.1 antibody

NKX6.1 (Marker for Pancreatic and Duodenal Neuroendocrine Tumors)

CATALOG # AAA214788	HOST Mouse	REACTIVITY Human. Others not known.	APPLICATIONS Immunohistochemistry
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PRODUCT SYNONYMS

NKX6.1; Monoclonal Antibody; NKX6.1 (Marker for Pancreatic and Duodenal Neuroendocrine Tumors); Homeobox protein NK-6 homolog A; Homeobox protein Nkx-6.1; NK homeo box; family 6; member A; NK homeobox (Drosophila); A; NK homeobox; NK6 homeobox 1; NK6 transcription factor homolog A; NK6 transcription factor related; locus 1; locus 1 (Drosophila); NKX6-1; NKX61; NKX61_HUMAN; NKX6A; anti-NKX6.1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human. Others not known.
Clonality	Monoclonal
Isotype	IgG2c, kappa
Clone Number	NKX61/2561
Specificity	Members of the Nkx family of homeodomain proteins are key regulators of growth and development in several tissues, including brain, heart and pancreas. During neural development, sonic hedgehog (Shh) is known to control cell fate and mitogenesis, which is correlated with Shh dose-dependent expression of several genes, including Nkx-6.1. Specifically, Nkx-6.1 is responsible for cellular differentiation in the ventral neural tube and spinal meninges in response to Shh. In the pancreas, Nkx-6.1 is exclusively expressed in the islets of Langerhans in differentiating and mature B cells, which produce Insulin. The presence of Pdx-1 is required for the expression of Nkx-6.1 as well as other pancreatic B cell specific genes, including Insulin, Glut2 and IAPP. Subsequently, Nkx-6.1 binds to the DNA consensus sequence, TTAATTAC, to direct the repression of specific genes in B cells. Nkx6.1 is highly expressed in pancreatic and duodenal well-differentiated neuroendocrine tumors (WDNETS) and in metastatic WDNETS, is a highly specific marker of tumors of pancreatic origin. It has thus been suggested that Nkx6.1 is a useful inclusion into IHC panels for identifying primary sites of WDNETS.
Purity/Purification	Purified Ab with BSA and Azide at 200ug/ml OR Purified Ab WITHOUT BSA and Azide at 1.0mg/ml
Form/Format	200ug/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.
Sequence Length	367
Applicable Applications for anti-NKX6.1 antibody	IHC (Immunohistochemistry)
Immunogen	Human full-length recombinant NKX6.1 protein
Positive Control	Human fetal small intestine lysate or pancreas tissue.
Cellular Localization	Nuclear
Chromosome Location	4q21.23
Preparation and Storage	Antibody with azide - store at 2 to 8 degree C. Antibody without azide - store at -20 to -80 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



Application Data

Analysis of Protein Array containing more than 19,000 full-length human proteins using NKX6.1 Mouse Monoclonal Antibody (NKX61/2561). 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 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.



SDS-PAGE

SDS-PAGE Analysis Purified NKX6.1 Mouse Monoclonal Antibody (NKX61/2561). Confirmation of Purity and Integrity of Antibody.



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Pancreas stained with NKX6.1 Mouse Monoclonal Antibody (NKX61/2561).

ADDITIONAL INFORMATION

References	Tseng IC, et al. Am J SurgPathol. 2015 Jun; 39(6):850-7.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	111120318
NCBI GeneID	4825
NCBI Accession #	NP_006159.2
NCBI GenBank Nucleotide #	NM_006168.2
UniProt Accession #	P78426
Molecular Weight	40-50kDa
NCBI Official Full Name	homeobox protein Nkx-6.1
NCBI Official Synonym Full Names	NK6 homeobox 1
NCBI Official Symbol	NKX6-1
NCBI Official Synonym Symbols	NKX6A; NKX6.1
NCBI Protein Information	homeobox protein Nkx-6.1
UniProt Protein Name	Homeobox protein Nkx-6.1
UniProt Gene Name	NKX6-1
UniProt Synonym Gene Names	NKX6A

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