

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

Mouse Monoclonal Antibody [Clone NKX61/2561]

Catalog No	Format	Size
4825-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4825-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4825-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

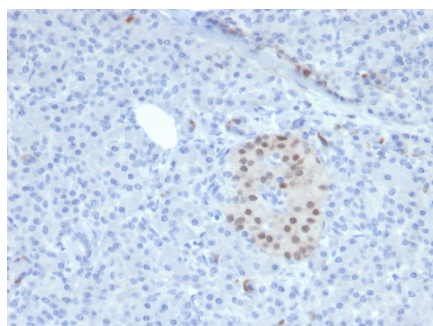
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

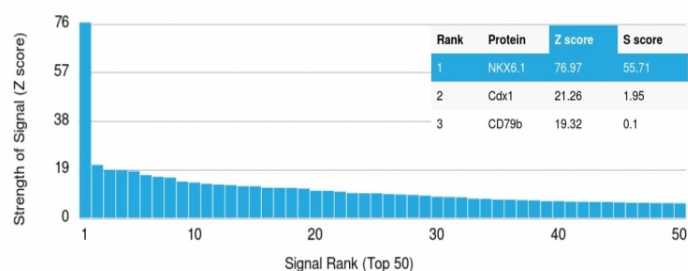
Clone	NKX61/2561
Gene Name	NKX6-1
Immunogen	Recombinant full-length human NKX6.1 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2c / Kappa
Mol. Weight of Antigen	40-50kDa
Cellular Localization	Nucleus
Species Reactivity	Human
Positive Control	Human fetal small intestine lysate or pancreas tissue.

*Optimal dilution for a specific application should be determined.

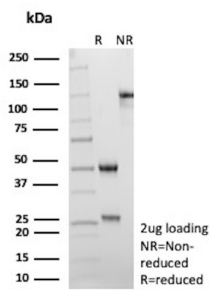
Product Images for NKX6.1 (Marker for Pancreatic and Duodenal Neuroendocrine Tumors) Antibody



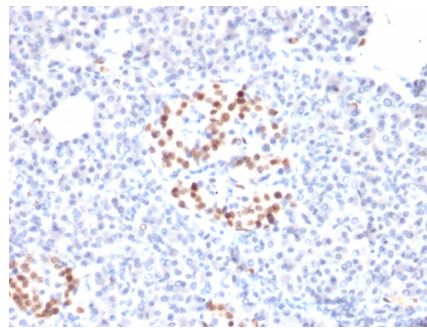
Formalin-fixed, paraffin-embedded human Pancreas stained with NKX6.1 Mouse Monoclonal Antibody (NKX61/2561).



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



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

Specificity & Comments

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.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

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.

Storage and Stability

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. No MSDS required.

Research Areas

Autophagy, Developmental Biology, Nuclear Marker, Stem Cell Differentiation