

Rabbit Anti-NKX6.1 Recombinant [NKX61/3148R]: RM0259, RM0259RTU7

Intended Use: For Research Use Only

Description: 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 NKX6.1. Specifically, NKX6.1 is responsible for cellular differentiation in the ventral neural tube and spinal meninges in response to Shh. In the pancreas, NKX6.1 is exclusively expressed in the islets of Langerhans in differentiating and mature B cells, which produce Insulin. The presence of PDX1 is required for the expression of NKX6.1 as well as other pancreatic B cell specific genes, including Insulin, Glut2 and IAPP. Subsequently, NKX6.1 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.

Specifications

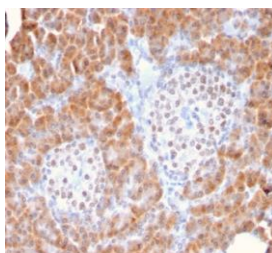
Clone:	NKX61/3148R
Source:	Rabbit
Isotype:	IgG
Reactivity:	Human
Localization:	Nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN ₃)
Storage:	Store at 2° - 8°C
Applications:	IHC
Package:	

Description	Catalog No.	Size
NKX6.1 Recombinant Concentrated	RM0259	1 ml
NKX6.1 Recombinant Prediluted	RM0259RTU7	7 ml

IHC Procedure

Positive Control:	Pancreas tissue, fetal small intestine lysate
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 pancreas stained with anti-NKX6.1 using DAB

References:

1. Transcriptional Regulation of Notch1 Expression by Nkx6.1 in Neural Stem/Progenitor Cells during Ventral Spinal Cord Development. Li Y et al. Sci Rep. Doc. 100-RM0259, 2016.
2. NKX6-1 Is a Novel Immunohistochemical Marker for Pancreatic and Duodenal Neuroendocrine Tumors. Tseng IC et al. Am J Surg Pathol. 2015.
3. Overexpression of NKX6.1 is closely associated with progressive features and predicts unfavorable prognosis in human primary hepatocellular carcinoma. Huang LL et al. Tumour Biol. 2015.

Doc. 100-RM0259
Rev. A