

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human NKX6.1 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human NKX2E, 2.2, 3.1 or recombinant mouse NKX3.1 is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 631438
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human NKX6.1 Met1-Pro120 Accession # P78426
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunocytochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

NKX6.1 (NK homeobox factor 6.1; also NKX6A) is a 39-43 kDa member of the homeodomain family of transcription factors. It is expressed in embryonic ventral neural tube where it drives neural progenitors to form motoneurons and V2-type interneurons. It is also expressed in both fetal and neonatal pancreas where it promotes a β-cell phenotype. NKX6.1 exhibits both transcriptional gene repression (NKX6.2 and Dbx2) and activation (cyclin A2 and B1). When overexpressed, it induces β-cell mitosis. Human NKX6.1 is 367 amino acids (aa) in length. It contains a repressor region composed of Pro and Ala (aa 136-173), a DNA binding homeobox (aa 236-295) and a Glu:Asp-rich transactivation domain (aa 305-337). Over aa 1-120, human NKX6.1 shares 96% aa identity with mouse NKX6.1.

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