

**DESCRIPTION**

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse NKX6.1 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human NKX3.1 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human NKX6.1 Met1-Pro120 Accession # NP_006159
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
<b>Formulation</b>	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.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

**PREPARATION AND STORAGE**

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	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 39-46 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.

**PRODUCT SPECIFIC NOTICES**

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