

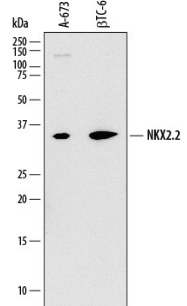
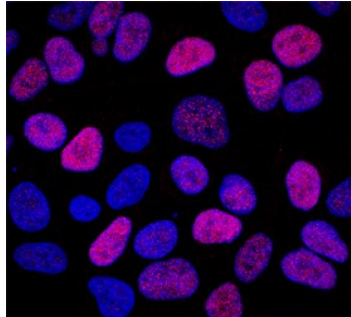
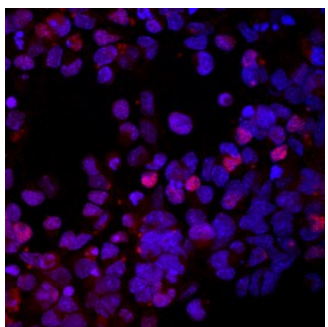
DESCRIPTION	
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human NKX2.2 in ELISA and Western Blot.
Source	Monoclonal Mouse IgG _{2B} Clone # 883411
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human NKX2.2 Met1-Lys128 Accession # O95096
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human and Mouse NKX2.2 by Western Blot. Western blot shows lysates of A-673 human Ewing's sarcoma cell line and βTC-6 mouse beta cell insulinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human/Mouse/Rat NKX2.2 Monoclonal Antibody (Catalog # MAB8167) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for NKX2.2 at approximately 35 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>NKX2.2 in A673 Human Cell Line. NKX2.2 was detected in immersion fixed A673 human Ewing sarcoma cell line using Mouse Anti-Human/Mouse/Rat NKX2.2 Monoclonal Antibody (Catalog # MAB8167) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
<p>Immunocytochemistry</p>  <p>NKX2.2 in Rat Cortical Stem Cells. NKX2.2 was detected in immersion fixed rat cortical stem cells differentiated for 7 days using Mouse Anti-Human/Mouse/Rat NKX2.2 Monoclonal Antibody (Catalog # MAB8167) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for Fluorescent ICC Staining of Stem Cells on Coverslips.</p>	

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

NKX2.2, also known as NKX2-2 or NKX2B, is an approximately 30 kDa, 273 amino acid homeobox nuclear transcription factor of the NKX2 protein family. It specifies differentiation of pancreatic islet cells such as alpha, beta, PP, and epsilon lineages. It also functions in developmental neuronal patterning of the ventral spinal cord in response to graded Sonic Hedgehog gradients and contributes pathfinding of commissural neurons. Within the region used as an immunogen, human NKX2.2 shares 96% and 97% amino acid sequence identity with mouse and rat NKX2.2, respectively.