DEVELOPMENTAL STUDIES HYBRIDOMA BANK
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F65A2

(Only cell products will be distributed.)

INVESTIGATOR

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IMMUNOGEN

Substance
- **Name** NK homeodomain protein, Nkx6.1
- **Origin** rat
- **Chemical Composition** GST- Nkx6.1 (a.a. 299-365) (i.e., the C-terminus)

Developmental Stage from E9

IMMUNIZATION PROTOCOL

Donor Animal
- **Species** mouse
- **Strain** RBF
- **Sex** --
- **Organ and tissue** --

Immunization
- **Dates immunized** June 2, 16, 30, 2003 and April 30, 2004
- **Amount of antigen** 20 μg / immunization
- **Route of immunization** I.P.
- **Adjuvant** CFA (1st) and IFA (2nd & 3rd); 4th booster 10 μg in saline

FUSION

Date May 3, 2004

Myeloma cell line
- **Species** mouse
- **Designation** Fox-NY

MONOCLONAL ANTIBODY

Isotype IgG1, kappa light chain

Specificity does not cross-react to Nkx6.2
- **Cell binding** --
- **Immunohistology** section of adult pancreas; staining of β-cell nuclei
- **Antibody competition** F65A2 competes for binding with F64A6B4, but can bind simultaneously with F55A10 or F55A12

Species Specificity mouse, rat, and human; other species not tested (see F55A10 for additional species)

ANTIGEN

Chemical properties NK homeobox protein Nkx6.1 is a transcription factor

Molecular weight 44-46 kDa

Characterization
- **Immunoprecipitation** --
- **Immunoblotting** Western blot gives a double band of 44 and 46 kDa
- **Purification** --
- **Amino acid sequence analysis** --

Functional effects transcription factor required for neural and pancreatic endocrine development

Immunohistochemistry early embryonic pancreatic epithelium; ventral neural tube; stomach mesenchyme and adult β cells

PUBLICATIONS :

Pedersen, I.L., Klinck, R., Hecksher-Sorensen, J., Zahn, S., Madsen, O.D., Serup, P., and Jorgensen, M.C. (2006). Generation and characterization of monoclonal antibodies against the transcription factor Nkx6.1. J. Histochem. Cytochem. 54(5), 567-574.

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ACKNOWLEDGMENTS STATEMENT

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