

Recombinant Mouse NKX61 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51855

Size: 10ug, 100ug

Protein Name: Homeobox protein Nkx-6.1 (Homeobox protein NK-6 homolog A)

Synonym: Nkx6-1, Nkx6.1, Nkx6a

UniProt ID: Q99MA9

UniProt Link: www.uniprot.org/uniprotkb/Q99MA9/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 365 AA

Molecular Weight: 38 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MLAVGAMEGPRQSAFLLSSPPLAALHSMAEMKTPLYPAAYPPLPTGPPSSSSSSSSSSSSPSPPLGS
HNPGGLKPPAAGGLSSLGSPQQLSAATPHGINDILSRPSMPVASGAALPSASPSGSSSSSSSSASA
TSASAAAAAAAAAAAAAAAASSPAGLLAGLPRFSSLSPPPPPPGLYFSPSAAVAAVGRYPKPLAELPG
RTPIFWPGVMQSPWRDARLACTPHQGSILLDKDGKRKHTRPTFSGQQIFALEKTFEQTKYLAGPE
RARLAYSLGMTESQVKVWFQNRRTKWRKKHAAEMATAKKKQDSETERLKGTSENEEDDDDDYNKP
LDPNSDDEKITQLLKKHKSSGGSLLLHASEAEGSS

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Homeobox protein Nkx-6.1 (Homeobox protein NK-6 homolog A) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Transcription factor which binds to specific A/T-rich DNA sequences in the promoter regions of a number of genes. Required for the development of insulin-producing beta cells in the islets of Langerhans at the secondary transition (PubMed:11076772). Involved in transcriptional regulation of the insulin gene. Together with NKX2-2 and IRX3, restricts the generation of motor neurons to the appropriate region of the neural tube. Belongs to the class II proteins of neuronal progenitor factors, which are induced by SHH signals.

Subcellular Localization: Nucleus .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.