

Recombinant Mouse DLX1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51677

Size: 10ug, 100ug

Protein Name: Homeobox protein DLX-1

Synonym: Dlx1

UniProt ID: Q64317

UniProt Link: www.uniprot.org/uniprotkb/Q64317/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 255 AA

Molecular Weight: 27 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MTMTTMPESLNSPVSGKAVFMEFGPPNQQMSPSPMSHGHYSMHCLHSAGHSQPDGAYSSASSFS
RPLGYPIVNSVSSHASSPYISSVQSYPGSASLAQSRLEDPGADSEKSTVVEGGEVRFNGKGGKIRK
PRTIYSSLQLQALNRRFQQQTQYLALPERAELAASLGLTQTQVKIWFQNKRSKFKKLMKQGGALEGS
ALANGRALSGSPVPPGWNPNSSSGKSGSSAGSYVPSYTSWYPSAHQEAMQQPQLM

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 DLX-1 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: Plays a role as a transcriptional activator or repressor (PubMed:21875655). Inhibits several cytokine signaling pathways, such as TGFB1, activin-A/INHBA and BMP4 by interfering with the transcriptional stimulatory activity of transcription factors, such as MSX2, FAST2, SMAD2 and SMAD3 during hematopoietic cell differentiation (By similarity). Plays a role in terminal differentiation of interneurons, such as amacrine and bipolar cells in the developing retina (PubMed:21875655). Likely to play a regulatory role in the development of the ventral forebrain (PubMed:1676488). May play a role in craniofacial patterning and morphogenesis and may be involved in the early development of diencephalic subdivisions (PubMed:1676488).

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.