# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-395aa

**UniProt No.** 060663

NCBI Accession No. NP\_002307

## **Alternative Names**

LIM homeobox transcription factor 1-beta isoform 1, LIM homeobox transcription factor 1 beta, LMX1.2, NPS1

# **PRODUCT SPECIFICATION**

**Molecular Weight** 46.5 kDa (418aa)

**Concentration** 1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 0.4M urea

### Purity

> 80% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE, Denatured

### **Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

### Description

LMX1B is a member of LIM-homeodomain family of proteins containing two N-terminal zinc-binding LIM domains, 1 homeodomain, and a C-terminal glutamine-rich domain. It functions as a transcription factor, and is essential for the normal development of dorsal limb structures, the glomerular basement membrane, the anterior segment of the eye, and dopaminergic and serotonergic neurons. Mutations in this gene are associated with nailpatella syndrome. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. Recombinant human LMX1B protein, fused to His-tag at N-terminus, was expressed in E. coli.



## **Amino acid Sequence**

MGSSHHHHHH SSGLVPRGSH MGSMDIATGP ESLERCFPRG QTDCAKMLDG IKMEEHALRP GPATLGVLLG SDCPHPAVCE GCQRPISDRF LMRVNESSWH EECLQCAACQ QALTTSCYFR DRKLYCKQDY QQLFAAKCSG CMEKIAPTEF VMRALECVYH LGCFCCCVCE RQLRKGDEFV LKEGQLLCKG DYEKEKDLLS SVSPDESDSV KSEDEDGDMK PAKGQGSQSK GSGDDGKDPR RPKRPRTILT TQQRRAFKAS FEVSSKPCRK VRETLAAETG LSVRVVQVWF QNQRAKMKKL ARRHQQQQEQ QNSQRLGQEV LSSRMEGMMA SYTPLAPPQQ QIVAMEQSPY GSSDPFQQGL TPPQMPGNDS IFHDIDSDTS LTSLSDCFLG SSDVGSLQAR VGNPIDRLYS MQSSYFAS

## **General References**

Vollrath D., Jaramillo-babb V L., et al. (1998). Hum. Mol. Genet. 7:1091-1098

# DATA



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.