



LD Biopharma, Inc.
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human Sox13-11R Protein
Catalog Number: hTF-0075
Manufacturer: LD Biopharma, Inc.

Introduction

Human Sox13 gene encodes a member of the SOX (SRY-related HMG-box) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. The encoded protein may act as a transcriptional regulator after forming a protein complex with other proteins. It has also been determined to be a type-1 diabetes autoantigen, also known as islet cell antibody 12.

Recombinant human Sox13 protein was constructed with C-terminal tag of 11 arginine domain, which efficiently delivery protein intracellularly. This protein was expressed in *E. coli* as inclusion bodies, refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified. Incubating this protein in culture mediums at concentration of 2-8 µg/ml may be used for studying of human HSC or other cell differentiation.

Gene Symbol: Sox13
Accession Number: NP_005677.2
Species: Human
Size: 50 µg / Vial
Composition: 1.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Glycerol.
Storage: In Liquid. Keep at -20°C for long term storage. Product is stable at 4 °C for at least 7 days.

Key References

Marfil, V., et al. *Interaction between Hhex and SOX13 modulates Wnt/TCF activity*. J. Biol. Chem. 285 (8), 5726-5737 (2010)

Hongyan Zhou, et al. *Generation of induced pluripotent stem cells using recombinant protein*. Cell Stem Cell. Vol 4. Issue 5: 381-384 (2009)



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Applications

1. Protein transduction for human cell differentiation.
2. Active recombinant protein, may be used for ELISA based DNA/Protein binding assay.
3. As specific protein substrate for kinase assay.
4. Immunogen for specific antibody production.

Quality Control

1. Purity: > 90% by SDS-PAGE.
2. DNA binding assay: Not tested yet.

Recombinant Protein Sequence

29aa_Tag_SMRSPISAQLALDGVGTMVNCTIKSEEKKEPCHEAPQGSATAAEPQPGDPARASQ
DSADPQAPAQGNFRGSWDCSSPEGNGSPEPKRPGVSEEAASGSQEKLDFNRNLKEVVPVPAIEKLLS
SDWKERFLGRNSMEAKDVKGTQESLAEKELQLLVMIHQQLSTLRDQLLTAHSEQKNMAAMLFEKQ
QQQMELARQQQEIQIAKQQQQLIQQQHKINLLQQQIQQVNMPYVMIPAFPPSHQPLPVTTPDSQLA
LPIQPIPCPKPVEYPLQLLHSPAPVVKRPGAMATHHPLQEPSQPLNLTAKPKAPELPNTSSSSPS
LKMSSCVPRPPSHGGPTRDLQSSPPSLPLGFLGEGDAVTKAIQDARQLLHSHSGALDGGSPNTPF
RKDLISLDSSPAKERLEDGCVHPLEEAMLSCDMDGSRHFPESRNSSHIKRPMNAFMVWAKDERR
KILQAFPMHNSSISKILGSRWKSMTNQEKQPYEEQARLSRQHLEKYPDYKYKPRPKRTCIVE
GKRLRVGEYKALMRTRRQDARQSYVIPPQAGQVQMSSSDVLYPRAAGMPLAQPLVEHYVPRSLD
PNMPVIVNTCSLREEGEGTDDRHSVADGEMYRYSEDEDESEGEKSDGELVVLTDL**EESSGGGGSP**
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