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Product Information

HumanKine™ LEFTY-B, human recombinant, expressed in HEK 293 cells

Catalog Number **H6791**
Storage Temperature –20 °C

Synonyms: LEFTY-1, LEFTY

Product Description

HumanKine™ LEFTY-B is expressed in human 293 cells as a glycosylated monomer with an apparent molecular mass of 38 kDa. Production in human 293 cells offers authentic glycosylation. Glycosylation contributes to stability in cell growth media and other applications.

LEFTY-B belongs to the TGFβ superfamily. LEFTY-B is required for left-right axis determination as a regulator of LEFTY-A and NODAL. In the presence of LEFTY- B, LEFTY-A and NODAL expression is restricted to the left side of organ systems during development. Clinical studies of patients with mutations in LEFTY-B gene confirm abnormalities in the thorax and cardiac anatomy.

This product is lyophilized from a solution containing 10 mM Tris-HCl, pH 7.4, with 50 mM NaCl and 0.5% CHAPS.

ED_{50}: ≤80 ng/mL

The specific activity was determined by dose dependent ability to inhibit BMP-4 (6.5 ng/mL) induction of alkaline phosphatase production in the MC-3T3-E1 cell line (mouse chondrogenic cell line).

Purity: ≥90%

Endotoxin level: ≤1 EU/µg

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile water containing 0.1% endotoxin-free recombinant human serum albumin

Storage/Stability

Store the product at –20 °C. The lyophilized product remains active for one year at –20 °C.

Upon reconstitution, the cytokine can be stored at 2–8 °C for short term only, or at –20 °C to –80 °C in aliquots for long term. Avoid repeated freeze-thaw cycles.

References

1. Tabibzadeh, S. et al., Stem Cells, **24**, 1998-2006 (2006).
2. Seth, A. et al., J. Bone Mineral Research, **15**, 1683-1696 (2000).

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