


CA1074	HumanKine™ LEFTY-1			
	Prod. No. S2332-10UG	lot #: PRXXXXXX XXXX	Orders & Support	866 372-7442 support@primorigen.com
	<i>For Research Use Only Not intended for use in humans or animals</i>		Web	www.primorigen.com

Pack Size	10 µg
Species	Human
Expression System	HEK 293*
	Animal-derived product free
Molecular Mass	38 kDa monomer, glycosylated
Activity	Typically 10 to 40 ng/mL ED50
Purity	≥ 95%
Endotoxin	≤ 1 EU/µg

Background:

Recombinant human LEFTY-1 expressed in engineered human cells. LEFTY-1 is a 38 kDa glycosylated monomer and belongs to the TGFβ superfamily. LEFTY-1 is required for left-right axis determination as a regulator of LEFTY-2 and NODAL. In the presence of LEFTY-1, LEFTY-2 and NODAL expression is restricted to the left side of organ systems during development. Clinical studies of patients with mutations in the LEFTY-1 gene confirm abnormalities in the thorax and cardiac anatomy.

Note: Representative data are shown below (not Lot-specific).

Formulation:

Lyophilized in 10mM Tris-HCl pH 7.4, 50mM NaCl, 0.5% CHAPS.

Reconstitution:

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

Storage and Stability:

Lyophilized products are stable for one year at -20°C to -80°C from date of receipt. Store only at -20°C to -80°C in working aliquots. Avoid repeated freeze-thaw cycles.

Quality Control Testing

Assay:

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 Confirmation:

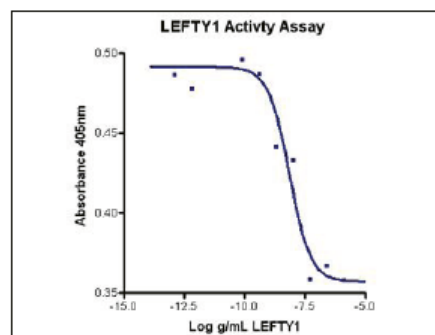
The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

References:

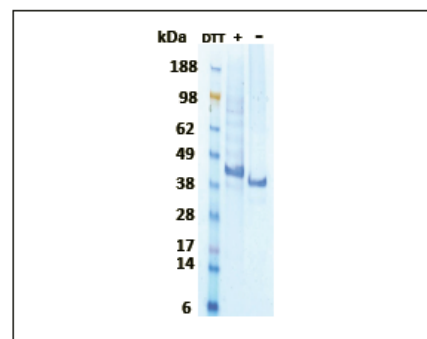
Tabibzadeh, S, et al (2006) Stem Cells 24, 1998-2006
Seth, A., et al (2000) J Bone Mineral Research 15, 1683-1696

**All HumanKine™ cytokines are expressed in HEK 293 cells.
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A. Activity Assay



B. SDS-PAGE



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