Datasheet

Cat. No. PH2053

Recombinant Human LECT2, Tag Free

Information

Accession #	O14960
Alternate Names	hLECT2; LECT2; LECT-2; leukocyte cell-derived chemotaxin 2; leukocyte cell-derived chemotaxin-2
Source	Human embryonic kidney cell, HEK293-derived human LECT2 protein
Protein sequence	Gly19-Leu151
M.Wt	14.6 kDa
Appearance	Solution protein
Stability & Storage	Avoid repeated freeze-thaw cycles. It is recommended that hat the protein be aliquoted for optimal storage.- 3 years from date of receipt, -20 to -70°C as supplied.
Concentration	0. 2 mg/mL
Formulation	Dissolved in sterile PBS buffer.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This solution can be diluted into other aqueous buffers.
Biological Activity	The EC50 for this effect is 0.1-2 ng/mL. Measured in a cell proliferation assay using MC3T3-E1 mouse preosteoblast cells.
Shipping Condition	Shipping with dry ice.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Quality Control

Purity	> 95%, determined by SDS-PAGE.
Endotoxin	<0.010 EU per 1 ug of the protein by the LAL method.

Description

LECT2 (leukocyte cell-derived chemotaxin-2), also known as Chondromodulin-II, is a neutrophil chemotactic protein predominantly expressed in the liver [1]. It was first identified in the heparin-binding components extracted from fetal bovine epiphyseal cartilage [2]. Human LECT2 cDNA encodes a 151 amino acid (aa) precursor that includes an 18 aa signal sequence [3]. The mature human LECT2 is a 16 kDa secreted hepatic protein that has a putative peptidase-M23 domain [3, 4]. Human LECT2 shares 87% and 86% aa sequence identity with mouse and rat LECT2, respectively. LECT2 stimulates the growth and matrix formation of chondrocytes in vitro [2, 5, 6]. In MC3T3-E1 cells, it promotes proliferation but inhibits alkaline phosphatase activity [5, 6]. In vivo study suggested LECT2 can directly suppress the development of type II collagen antibody–induced arthritis [4]. Recent studies have shown that LECT2 is an

important regulator of tumor growth during hepatocellular carcinoma development and progression; it inhibits the angiogenic effect of HUVECs in vitro and in vivo [7].

Reference

[1]. Yamagoe, S. et al. (1996) Immunol. Lett. 52:9.

[2]. Hiraki, Y. et al. (1996) J. Bio. Chem. 271:22657.

[3]. Slowik, V. and U. Apte (2017) Clin. Transl. Sci. 10:249.

[4]. Okumura, A. et al. (2013) FEBS Lett. 587:404.

[5]. Mori, Y. et al. (1997) FEBS Letters 406:310.

[6]. Shukunami, C. et al. (1999) J. Biochem. 125:436.

[7]. Chen, C.K. et al. (2016) Sci. Rep. 6:31398.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com