9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

EPYC Human

Epiphycan Human Recombinant
RCP0770

Product Overview

Name	EPYC Human
Description	
Epiphycan Human Recombinant	
Accession (Primary)	Q99645
Synonyms	
Epiphycan, SLRR3B, DSPG3, EPYC Dermatan sulfate proteoglycan 3, Proteoglycan-Lb, PG-Lb, Small chondroitin/dermatan sulfate proteoglycan, PGLB, epiphycan proteoglycan.	
Source	
HEK293 Cells.	
Physical Appearance	
Sterile Filtered colorless solution.	
Formulation	
EPYC protein solution (0.5mg/ml) containing 10% Glycerol and Phosphate-Buffered Saline (pH 7.4).	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.	
Purity	
Greater than 95.0% as determined by SDS-PAGE.	
Amino acid sequence	
APTLESINYD SETYDATLED LDNLYNYENI PVDKVEIEIA TVMPSGNREL LTPPPQPEKA QEEEEEEEST PRLIDGSSPQ EPEFTGVLGP HTNEDFPTCL LCTCISTTVY CDDHELDAIP PLPKNTAYFY SRFNRIKKIN KNDFASLSDL KRIDLTSNLI SEIDEDAFRK LPQLRELVLR DNKIRQLPEL PTTLTFIDIS NNRLGRKGIK QEAFKDMYDL HHLYLTDNNL DHIPLPLPEN LRALHLQNNN ILEMHEDTFC NVKNLTYIRK ALEDIRLDGN PINLSKTPQA YMCLPRLPVG SLV HHHHHH .	
Biological Activity	
>60% and is measured by the ability of the immobilized protein to support the adhesion of Saos-2 human osteosarcoma cells. When cells are added to human DSPG3 1.25 ug/ml and human fibronectin 0.5 ug/ml coated plates.	

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Background

Epiphycan, a small leucine-rich proteoglycan, has gained recognition as a crucial player in tissue development, repair, and homeostasis. This research aims to explore the significance of epiphycan and its potential therapeutic applications in various physiological and pathological contexts. By investigating the properties and functions of epiphycan, we can uncover new insights into its role in tissue biology and its potential as a target for therapeutic interventions. Epiphycan is a proteoglycan primarily expressed in skeletal tissues, such as the growth plate of long bones, articular cartilage, and intervertebral discs. It is an extracellular matrix component that interacts with various growth factors, cytokines, and other matrix proteins, influencing cell behavior and tissue organization. The unique structure of epiphycan, comprising a core protein and attached glycosaminoglycan chains, endows it with diverse regulatory functions. The involvement of epiphycan in tissue development and repair has been highlighted in several studies. It plays a critical role in chondrogenesis, modulating the differentiation and proliferation of chondrocytes. Furthermore, epiphycan has been implicated in the maintenance of articular cartilage integrity and the prevention of osteoarthritis progression. Its ability to interact with growth factors, such as transforming growth factor-beta (TGF-β) and bone morphogenetic proteins (BMPs), suggests its potential as a modulator of tissue regeneration and repair. This research will delve into the molecular mechanisms underlying epiphycan's functions and its interactions with various signaling pathways. The paper will explore the regulatory effects of epiphycan on cell behavior, matrix remodeling, and tissue architecture. Additionally, it will examine the implications of epiphycan dysregulation in pathological conditions, such as osteoarthritis, and discuss its potential as a therapeutic target for promoting tissue regeneration and repair. The study will also investigate the diagnostic and prognostic value of epiphycan in various diseases and conditions. Understanding the expression patterns and alterations of epiphycan in different tissues and disease states may provide valuable insights into disease progression and aid in the development of personalized treatment strategies. By unraveling the multifaceted roles of epiphycan in tissue biology and its potential therapeutic applications, this research aims to contribute to our understanding of tissue development and repair mechanisms. Furthermore, it highlights the potential of epiphycan as a target for therapeutic interventions and emphasizes the importance of further investigations to harness its full therapeutic potential.

Precautions

EPYC Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q99645)

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