# Recombinant Human Decorin / DCN / SLRR1B Protein (His tag) 

Cat.NO.: TP06431

## Synonyms:CSCD;DSPG2;PG40;PGII;PGS2;SLRR1B

Description:Decorin is a ubiquitous small cellular or pericellular matrix proteoglycan and is closely related in structure to biglycan protein. It belongs to the small leucine-rich proteoglycan (SLRP) family and consists of a core protein and a covalently linked glycosaminoglycan chain which is either chondroitin sulfate (CS) or dermatan sulfate (DS). As a component of connective tissue, decorin interacts with several extracellular matrix components, such as type I collagen and fibronectin, and plays a role in matrix assembly. Decorin resides in the tumor microenvironment and affects the biology of various types of cancer by downregulating the activity of several receptors involved in cell growth and survival. Decorin binds to and modulates the signaling of the epidermal growth factor receptor and other members of the ErbB family of receptor tyrosine kinases. It exerts its antitumor activity by a dual mechanism: via inhibition of these key receptors through their physical downregulation coupled with attenuation of their signaling, and by binding to and sequestering TGFbeta. Decorin also modulates the insulinlike growth factor receptor and the low-density lipoprotein receptor-related protein 1, which indirectly affects the TGFbeta receptor pathway. Decorin plays significant roles in tissue development and assembly, as well as playing both direct and indirect signaling roles.

## Form:PBS

Molecular Weight:39.4 kDa

Sequences:Met 1-Lys 359

Purity:> 95\% by HPLC

## Concentration:

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)
Storage:Can be stored at $+4^{\circ} \mathrm{C}$ short term (1-2 weeks). For long term storage, aliquot and store at $-20^{\circ} \mathrm{C}$ or $-70^{\circ} \mathrm{C}$. Avoid repeated freezing and thawing cycles.

