

RP00141

Leader in Biomolecular Solutions for Life Science



Recombinant Human Biglycan/BGN Protein

Catalog No.: RP00141

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	633	P21810

Tags

C-His

Synonyms

BGN;DSPG1;MRLS;PG-S1;PGI;SEMDX;SLRR1A;biglycan

Product Information

Source

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Purification

≥ 85% as determined by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Background

Biglycan, also known as PG I, is a secreted chondroitin/dermatan sulfate proteoglycan in the small leucine-rich proteoglycan (SLRP) family. The protein plays a role in bone growth, muscle development and regeneration, and collagen fibril assembly in multiple tissues. This protein may also regulate inflammation and innate immunity. Additionally, it may contribute to atherosclerosis and aortic valve stenosis in human patients.

Basic Information

Description

Recombinant Human Biglycan/BGN Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Asp38-Lys368) of human Biglycan/BGN (Accession #NP_001702.1) fused with a 6×His tag at the C-terminus.

Bio-Activity

1. Measured by its ability to inhibit the cell growth of mouse 3T3-L1 mouse embryonic fibroblast adipose-like cells. The ED₅₀ for this effect is 0.492-1.966 μg/mL, corresponding to a specific activity of 508.6~2034.6 units/mg. 2. Measured by its ability to inhibit the cell growth of mouse NIH3T3. The ED₅₀ for this effect is 0.375-1.500 μg/mL, corresponding to a specific activity of 666.7~2666.7 units/mg.

Shipping

Lyophilized proteins are shipped at ambient temperature. Liquid proteins are shipped at frozen temperature with dry ice. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

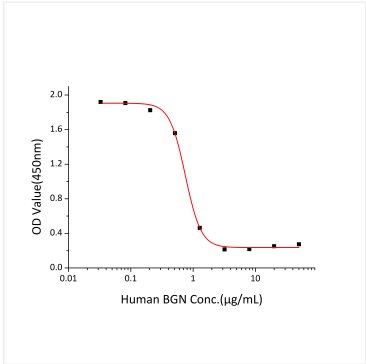
Store at -20°C. Avoid repeated freeze/thaw cycles.

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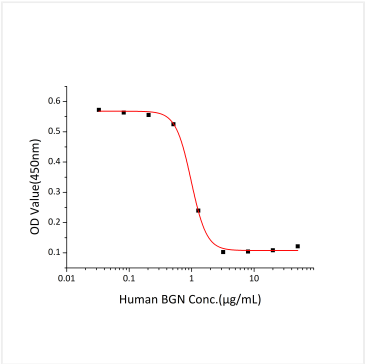
Contact



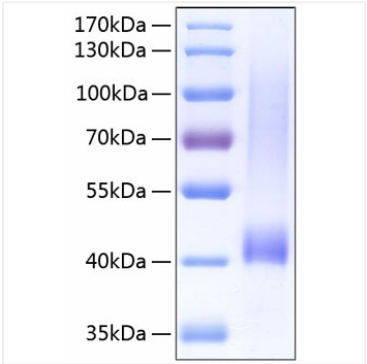
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Recombinant Human Biglycan/BGN Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.