



Recombinant Protein Technical Manual  
Recombinant Mouse Biglycan/BGN Protein (Fc Tag)  
RPES4649

#### Product Data:

**Product SKU:** RPES4649

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_031568.2

#### Protein Information:

**Molecular Mass:** 66.5 kDa

**AP Molecular Mass:** 67 kDa

**Tag:** C-Fc

**Bio-activity:**

**Purity:** > 85 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** BG;DSPG1;PG-S1;PGI;SLRR1A

## Immunogen Information:

**Sequence:** Met1-Lys369

## Background:

Biglycan, also known as PG-S1 and BGN, is a small leucine-rich repeat proteoglycan (SLRP). It can be detected in a variety of extracellular matrix tissues, including bone, cartilage and tendon. Biglycan consists of a protein core containing leucine-rich repeat regions and two glycosaminoglycan (GAG) chains consisting of either chondroitin sulfate (CS) or dermatan sulfate (DS). Non-glycanated forms of biglycan (no GAG chains) increase with age in human articular cartilage. Biglycan interacts with collagen, both via the core protein and GAG chains. Biglycan plays a role in the mineralisation of bone. Biglycan core protein binds to the growth factors BMP-4 and influences its bioactivity.