

## Human BMP-15 Protein, His tag (Animal-Free)

Cat #: PRP1911 Size: 5 µg/20 µg/100 µg/1 mg

## **Product Information**

	Product Name: Human BMP-15 Protein, His tag (Animal-Free)		
REF	Catalog Number: PRP1911	LOT	Lot Number: Refer to product label
	Purity: > 98 % as determined by SDS-PAGE		
Ŷ	Storage: Store at -20°C		Preparation method: E.coli
	Shipping: The product is shipped at ambient temperature.		

**Background:** Bone morphogenetic protein 15 (BMP-15), also known as GDF-9B, is a TGF-β superfamily ligand, which is expressed by oocytes throughout follicular development and plays an important role in oocyte development. BMP-15 promotes FSH-independent proliferation of ovarian granulosa cells (GC), and induces GC glycolysis and cholesterol synthesis. It also induces the GC production of stem cell factors, and then negatively regulates the expression of BMP-15 in oocytes. BMP-15 blocks the GC expression of FSH R and steroid-producing molecules induced by FSH. BMP-15 is synthesized from N- terminal propeptide with 249 amino acids (aa). The propeptide was cleaved from 50 kDa proBMP-15 in the cell, but still combined with mature BMP-15. Mature BMP-15 exists in the form of 16 kDa and 17 kDa, which can be distinguished by O- linked glycosylation in the form of 17 kDa. Mature BMP-15 is phosphorylated, which is a necessary modification to stimulate GC proliferation.

**Sequence:** Amino acid sequence derived from Human BMP-15 (Gln268-Arg392) (O95972) was expressed with 6×His tag at the C-terminus.

**Protein length:** The recombinant Human BMP-15 Protein consists of 125 amino acids and predicts a molecular mass of 14 kDa.

**Biological Activity**: Measured by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED<sub>50</sub> for this effect is <17 ng/mL.

**<u>Endotoxin</u>**: <0.1 EU per  $\mu$ g of the protein by the LAL method.

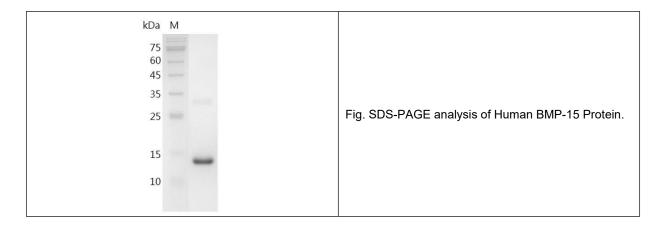
Formulation: Lyophilized from sterile 20 mM sodium citrate, 0.2 M NaCl, pH 3.5.

Storage Instructions: Lyophilized protein product should be stored desiccated below -18°C. Upon reconstitution, the protein



should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (5% HSA, 10%FBS or 0.1%BSA). Please prevent freeze-thaw cycles.

<u>Usage notes</u>: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized recombinant protein to a concentration of 0.1-1 mg/mL using the buffer we provided, and keep at room temperature for at least 20 min to fully dissolve. Please avoid vortex vigorously.



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