

Recombinant Human BMP11 / Bone Morphogenetic Protein 11, Animal Free & Carrier Free

Cat #: C-CYP265

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

Product Overview

BMPs (bone morphogenetic proteins) belong to the TGF-beta superfamily of structurally related signaling proteins. BMP11 is a regulator of cell growth and differentiation during muscular and neural development. BMP11 binds the transforming growth factor-beta receptors ALK4, ALK5, and ALK7 to activate SMAD signaling. In adults, exogenous BMP11 promotes cardiomyocyte regeneration to reverse age-related cardiac hypertrophy.

Product Information

Source: *Escherichia Coli*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

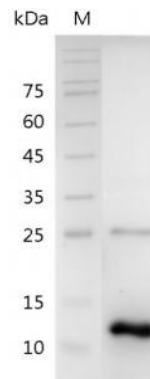
Biological Activity: Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED₅₀ for this effect is < 11 ng/mL. Measure by its ability to induce hemoglobin expression in K562 cells. The ED₅₀ for this effect is < 4 ng/mL

Endotoxin: <0.1EU per 1µg of the protein by the LAL method.

Amino acid sequence:

MNLGLDCDEHSSERCCRYPLTVDFEAFGWDWIIAPKRYKANYCSGQCEYMFQMYPHTHLVQQANPRGSAGPCCTPTKMSPINMLYF
NDKQQIYGGKIPGMVVDRCGCS with polyhistidine tag at the C-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 20 mM sodium citrate, 0.2 M NaCl, pH 3.5



SDS-PAGE analysis of recombinant human BMP11

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H₂O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.