Recombinant Human BMP8a / Bone Morphogenetic Protein 8a, Animal Free & Carrier Free

Cat #: C-CYP257

Size: 5μg, 20μg, 100μg, 500μg, 1mg

Shipping: Blue Ice

Product Overview

Bone morphogenetic protein 8A (BMP8A) is a polypeptide member of the TGFβ superfamily of proteins. Like other BMPs, BMP8A is involved in the development of bone and cartilage. BMP8A may be involved in epithelial osteogenesis. It also plays a role in bone homeostasis. Human BMP- 8a is synthesized as a large precursor protein that is cleaved at a dibasic cleavage site (RTPR) between aa residues 263 and 264 to release a 139 aa carboxy- terminal domain.

Product Information

Source: *Escherichia Coli*.

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

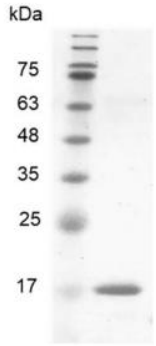
Biological Activity: Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED_{50} for this effect is 10-19.4 ng/mL

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

Amino acid sequence:

MAVRPLRRRQPKKSNELPQANRLPGIFDDVHGSHGRQVCRRHELYVSFQDLGWLDWVIAPQGYSAYYCEGECSFPLDSCMNATNHAILQ SLVHLMKPNAVPKACCAPTKLSATSVLYYDSSNNVILRKHRNMVVKACGCH 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 BMP8a

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 H_2O. 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.