



Human BMP-2

Research grade

2 µg
10 µg
100 µg

130-093-814
130-093-812
130-094-616

Description:

Human bone morphogenetic protein 2 (BMP-2) is a disulfide-bonded homodimeric protein with an apparent molecular weight of 26 kDa containing 115 amino acid residues per subunit. BMP-2 is one of the proteins originally identified as factors extractable from bone and is triggering ectopic bone formation at non-skeletal sites *in vivo*. BMP-2 regulates, similarly to its nearest homologue BMP-4, diverse fundamental processes during embryonic development.

Source:	<i>E. coli</i>
Molecular mass:	26 kDa
Specific activity:	≥1×10 ⁵ U/mg
Purity:	>95% (SDS-PAGE, HPLC)
Endotoxin level:	<0.1 ng/µg (1 EU/µg)
Buffer:	Acetic acid (20 mM, pH 4)
Stabilizer:	None
Product format:	Sterile filtered, lyophilized

Biological activity:

The ED₅₀ of ≤10 ng/µg was determined by the ability of BMP-2 to induce alkaline phosphatase production using mouse muscle myoblast C2C12 cells.

Reconstitution:

The lyophilized Human BMP-2 is best soluble in 20 mM acetic acid at a concentration of not less than 100 µg/mL, but should also be soluble in most aqueous buffers when the pH is below 6.0. Above pH 6.0 the solubility is low, but could be increased by addition of 1 M NaCl or 30% 2-propanol. Addition of carrier protein, such as 0.1% bovine serum albumin (BSA) or human serum albumin (HSA) may have stabilizing effects.

Storage:

The lyophilized powder is stable as shipped for at least 1 year at -20 °C. Reconstituted Human BMP-2 should be stored at 4 °C between 2–7 days in working aliquots and for future use at -20 °C. Avoid repeated freeze-thaw cycles.

All protocols and data sheets are available at www.miltenyibiotec.com.

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