

BMP-2 (Bone morphogenetic protein-2), Human

v. 231001

Catalog number	C01062-5UG / C01062-20UG / C01062-100UG
Package	5 µg / 20 µg / 100 µg
Description	BMP-2 like other bone morphogenetic proteins, plays an important role in the development of bone and cartilage. It is involved in the hedgehog pathway, TGF beta signaling pathway, and in cytokine-cytokine receptor interaction. It is also involved in cardiac cell differentiation and epithelial to mesenchymal transition. Like many other proteins from the BMP family, BMP-2 has been demonstrated to potently induce osteoblast differentiation in a variety of cell types. BMP-2 may be involved in white adipogenesis and may have metabolic effects.
Source	<i>Escherichia coli</i>
Sequence	MQAKHKQRKRLKSSCKRHPLYVDFSDVGWWDWIVAPPGYHAFYCHGECPPFL ADHLNSTNHAIQTLVNSVNSKIPKACCVPTELSAISMLYLDENEKVVVKNYQD MVVEGCGCR with polyhistidine tag at the C-terminus
Endotoxin level	<0.1 EU per 1 µg of the protein by the LAL method.
Activity	Measure by its ability to induce alkaline phosphatase production by ATDC5 cells. The ED ₅₀ for this effect is <9.5 ng/mL. The specific activity of recombinant BMP-2 is > 3.2 x 10 ⁶ IU/mg.
Purity	>95% as determined by SDS-PAGE.
Form	Lyophilized
Storage Buffer	Lyophilized from a 0.2 µm filtered solution containing 20 mM sodium citrate and 0.2 M NaCl, pH 3.5.
Reconstitution	It is recommended to reconstitute the lyophilized protein in 4 mM HCl to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.
Stability & Storage	This product is stable after storage at: <ul style="list-style-type: none"> -20°C for 12 months in lyophilized state from date of receipt. -20°C or -80°C for 1 month under sterile conditions after reconstitution. Avoid repeated freeze/thaw cycles.



SDS-PAGE analysis of recombinant human BMP-2

For research use only.