

Human Osteomodulin Protein

Cat. No. OMD-HM101

Description

Source	Recombinant Human Osteomodulin Protein is expressed from HEK293 with His tag at the C-terminal. It contains Gln21-Glu421.
Accession	Q99983
Molecular Weight	The protein has a predicted MW of 48.25 kDa. Due to glycosylation, the protein migrates to 50-70 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE

Formulation and Storage

Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Osteomodulin (OMD) is a member of the small leucine-rich repeat proteoglycan family, which is involved in the organization of the extracellular matrix. OMD is located in bone tissue and is reportedly important for bone mineralization. Mechanistically, OMD could bind to BMP2 via its terminal leucine-rich repeats and formed complexes with BMP2 and its membrane receptors, thus promoting BMP/SMAD signal transduction. In addition, OMD was a putative target gene of SMAD4, which plays a pivotal role in this pathway.

Assay Data

Tris-Bis PAGE



Human Osteomodulin on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.