

Recombinant Human Osteomodulin/OMD Protein (His Tag)

Catalog Number: PKSH031406

Note: Centrifuge before opening to ensure complete recovery of vial contents.

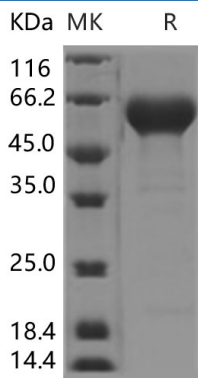
Description

Species	Human
Source	HEK293 Cells-derived Human Osteomodulin/OMD protein Met 1-Glu421, with an C-terminal His
Calculated MW	48.6 kDa
Accession	NP_005005.1
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Osteomodulin (OMD), also known as Osteoadherin (OSAD), Keratan sulfate proteoglycan osteomodulin, KSPG osteomodulin, and SLRR2C, is a secreted protein which belongs to the small leucine-rich proteoglycan (SLRP) family and Class II subfamily. SLRP family proteins are normally found in extracellular matrices, but Osteomodulin is the only member restricted to mineralized tissues. Osteomodulin is primarily expressed by osteoblasts and might have a role in regulation of mineralization. In bone OSAD has been localized in primary spongiosa within the bovine fetal rib growth plate. Moreover, in situ hybridization has shown expression of OSAD in osteoblasts close to the cartilage and bone border in the growth plate of rat femur. OSAD may play an important role during tooth development and biomineralization of dentin. Osteomodulin is a cell binding keratan sulfate proteoglycan which was recently isolated from mineralized bovine bone and subsequently cloned and sequenced. Osteomodulin may be implicated in biomineralization processes. It has a function in binding of osteoblasts via the alpha (V) beta (3)-integrin. It is likely that Osteomodulin is an osteoblast maturation marker that is induced by osteoclast activity. Osteomodulin is also an early marker for terminally differentiated matrix producing osteoblasts.