



Recombinant Protein Technical Manual
Recombinant Human Osteomodulin/OMD Protein
(His Tag)
RPES0598

Product Data:

Product SKU: RPES0598

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_005005.1

Protein Information:

Molecular Mass: 48.6 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: OSAD;SLRR2C

Immunogen Information:

Sequence: Met 1-Glu421

Background:

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.