

**Recombinant Mouse Osteomodulin / OMD Protein (His tag)**

**Cat.NO.: TP07615**

3th Edition

**Synonyms:**OSAD;SLRR2C

**Description:**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.

**Form:**PBS

**Molecular Weight:**48.8 kDa

**Sequences:**Met 1-Ile 423

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.