



Recombinant Protein Technical Manual

Recombinant Human SMOC1 Protein (His Tag)

RPES4078

Product Data:

Product SKU: RPES4078

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_001030024.1

Protein Information:

Molecular Mass: 47 kDa

AP Molecular Mass: 55-60 kDa

Tag: C-His

Bio-activity:

Purity: > 92 % 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: OAS

Immunogen Information:

Sequence: Met 1-Val 435

Background:

SPARC-related modular calcium-binding protein 1, also known as secreted modular calcium-binding protein 1 and SMOC1, is a member of the SPARC family. SMOC1 is widely expressed in many tissues with a strongest signal in ovary. It contains two EF-hand domains, one Kazal-like domain and two thyroglobulin type domains. Extracellular matrix proteins have been implicated in the regulation of osteoblast differentiation of bone marrow derived mesenchymal stem cells (BMSCs) through paracrine or autocrine mechanisms. SMOC1 is a regulator of osteoblast differentiation of BMSCs. SMOC1 is highly expressed and secreted in BMSCs stimulated with osteogenic medium (OSM). SMOC1 and SMOC2 are matricellular proteins thought to influence growth factor signaling, migration, proliferation, and angiogenesis. SMOC1 and SMOC2 may mediate intercellular signaling and cell type-specific differentiation during gonad and reproductive tract development.