

## Recombinant Human SMOC1 Protein (His Tag)

**Catalog Number:** PKSH030930

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

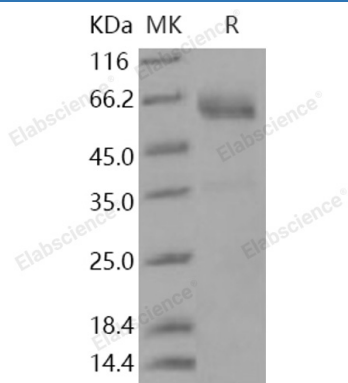
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human SMOC1 protein Met 1-Val 435, with an C-terminal His
<b>Mol_Mass</b>	47.0 kDa
<b>Accession</b>	NP_001030024.1
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 92 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 92 % as determined by reducing SDS-PAGE.

### 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-1 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.

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