

Recombinant Human Osteonectin/SPARC Protein (His Tag)

Catalog No. PKSH032839

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

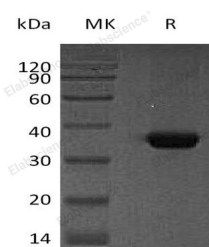
Description

Synonyms	SPARC;Basement-Membrane Protein 40;BM-40;Osteonectin;ON;Secreted Protein Acidic and Rich in Cysteine;SPARC;ON
Species	Human
Expression Host	HEK293 Cells
Sequence	Ala18-Ile303
Accession	P09486
Calculated Molecular Weight	33.7 kDa
Observed molecular weight	36 kDa
Tag	C-His
Bioactivity	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 a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2. 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

Secreted Protein Acidic and Rich in Cysteine (SPARC) is a secreted, evolutionarily conserved collagen-binding

For Research Use Only

glycoprotein and belongs to the SPARC family. SPARC has 286 amino acids and contains an EF-hand in C-terminal domain, a follistatin-like domain with Kazal-like sequences. There are two calcium binding sites, one binds 5 - 8 Ca^{2+} with a low affinity and other on an EF-hand loop that binds a Ca^{2+} ion with a high affinity. It is highly expressed in tissues undergoing morphogenesis, remodeling and wound repair. SPARC regulate cell growth through interactions with the extracellular matrix (ECM) and cytokines. SPARC bind to numerous proteins of the ECM, affect ECM protein expression, influence cellular adhesion and migration, and modulate growth factor-induced cell proliferation and angiogenesis. SPARC also binds several types of collagen, albumin, thrombospondin, PDGF and cell membranes.