Recombinant Human Osteonectin/SPARC Protein (His Tag)

Catalog Number: PKSH032839



Description			
Species	Human		
Mol_Mass	33.7 kDa		
Accession	P09486		
Bio-activity	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 $< -20^{\circ}$ 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.		

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

Data			
	kDa	MK	R
	120 90 60		
	40	The second second	-
	30		1995
	20		
	14	1 kites	
>	95 % as determine	ined by redu	ucing SDS-PAGE.

Background

Secreted Protein Acidic and Rich in Cysteine (SPARC) is a secreted, evolutionarily conserved collagen-binding glycoprotein and belongs to the SPARC family. SPARC has 286 amino acids and contains an EF-hand in C-termina domain, a follistatin-like domain with Kazal-like sequences. There are two calcium binding sites, one binds 5 - 8 Ca2+ with a low affinity and other on an EF-hand loop that binds a Ca2+ 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.

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