

# **Recombinant Human SPARC/Osteonectin**

Catalog # PBG10421

### Specification

## **Recombinant Human SPARC/Osteonectin - Product Information**

### **Recombinant Human SPARC/Osteonectin - Additional Information**

### Description

SPARC/Osteonectin is a secreted, evolutionarily conserved collagen-binding glycoprotein that is involved in a variety of cellular activities. It is highly expressed in tissues undergoing morphogenesis, remodeling and wound repair. SPARC/Osteonectin and its related peptides bind to numerous proteins of the extracellular matrix (ECM), affect ECM protein expression, influence cellular adhesion and migration, and modulate growth factor-induced cell proliferation and angiogenesis. SPARC/Osteonectin consists of three domains; an N-terminal acidic region that binds calcium ions with low affinity, a module containing two EF-hand motifs that bind calcium with high affinity, and a cysteine-rich follistatin-like domain. Recombinant human SPARC/Osteonectin is a glycoprotein containing 286 amino acids that migrates at an apparent MW of 43.7 kDa by SDS-PAGE analysis due to the effect of glycosylation.

#### BiologicalActivity

Determined by its ability to increase alkaline phosphatase activity in differentiating MC3T3 cells using a concentration of 0.5-0.7  $\mu$ g/ml.

Authenticity Verified by N-terminal and Mass Spectrometry analyses (when applicable).

#### Endotoxin

Endotoxin level is <0.1 ng/  $\mu$ g of protein (<1EU/  $\mu$ g).

### **Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage -20°C

#### Precautions

Recombinant Human SPARC/Osteonectin is for research use only and not for use in diagnostic or therapeutic procedures.

### **Recombinant Human SPARC/Osteonectin - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry



- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**Recombinant Human SPARC/Osteonectin - Images**