SPARC/Osteonectin Human Chinese Hamster Ovary Cells (CHO)

Product Data Sheet

Type: Recombinant
Source: Chinese Hamster Ovary Cells (CHO)
Species: Human
Other names: Secreted protein acidic and rich in cysteine, BM-40, ON

Cat. No.:

RBG10301010	(10 µg)
RBG10301050	(50 µg)
RBG10301100	(100 µg)

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. The calculated molecular weight of Recombinant Human SPARC/Osteonectin is 32.7 kDa.

Research topic

Bone and cartilage metabolism, Cardiovascular disease, Coronary artery disease, Oncology

Amino Acid Sequence

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APQQEALPDE TEVVEETVAE VTEVSVGANP VQVEVGEFDD GAEETEEEVV AENPCQNHHC KHGKVCELDE NNTPMCVCQD
PTSCPAPIGE FEKVCSNDNK TFDSSCHFFA TKCTLEGTKK GHKLHLDYIG PCKYIPPCLD SELTEFPLRM RDWLKNVLVT
LYERDEDNNL LTEKQKLRVK KIHENEKRLE AGDHPVELLA RDFEKNYNMY IFPVHWQFGQ LDQHPIDGYL SHTELAPLRA
PLIPMEHCTT RFFETCDLDN DKYIALDEWA GCFGIKQKDI DKDLVI
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Source

Chinese Hamster Ovary Cells (CHO)

Purity

98%

Biological Activity

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

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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