

RPES8368

Product Information

Product SKU:	RPES8368	Expression Host:	Mammalian	Size:	20µg
Tag:	C-His	Reactivity:	Human	Accession:	P09486

Additional Information

Calculated MW:	33.2 kDa	Observed MW:	38 kDa
Sequence:	Met1-Ile303		

Protein Information

Background: Secreted protein acidic and rich in cysteine (SPARC), also known as Osteonectin (ON), is a member of the SPARC family. SPARC consists of three domains: an EF-hand domain, a follistatin-like domain and a Kazal-like domain, and each of which has independent activity and unique properties. The activity of SPARC is context- and cell-type-dependent, which is highlighted by the fact that SPARC has shown seemingly contradictory effects on tumor progression in both clinical correlative studies and in animal models. The location of SPARC in the nuclear matrix of certain proliferating cells, but only in the cytosol of postmitotic neurons, indicates potential functions of SPARC as a nuclear protein, which might be involved in the regulation of cell cycle progression and mitosis. It functions not only to modulate cell-cell and cell-matrix interactions, but its de-adhesive and growth inhibitory properties in non-transformed cells have led to studies to assess its role in cancer. Its divergent actions reflect the complexity of this protein, because in certain types of cancers, such as melanomas and gliomas, SPARC is associated with a highly aggressive tumor phenotype, while in others, mainly ovarian, neuroblastomas and colorectal cancers, SPARC may function as a tumor suppressor. Recent studies have also demonstrated a role for SPARC in sensitizing therapy-resistant cancers. Notably, SPARC is linked to human obesity.

Synonyms: Basement-membrane protein, SPARC, BM-40, OI17, Osteonectin, acidic, cysteine-rich, Basement-membrane protein 40, Oncysteine-rich protein, Secreted protein acidic

and rich in cysteine, secreted protein, ON, AA517111, Basement membrane protein 40, BM 40, BM40, Cysteine rich protein, hm:zeh0062, MGC128090, Secreted acidic cystein rich glycoprotein, Secreted protein acidic and cysteine rich, Secreted protein acidic cysteine rich, Secreted protein acidic cysteine rich (osteonectin), SPRC

Endotoxin: < 1.0 EU/mg of the protein as determined by the LAL method

Formulation: Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.

Purity: > 90% as determined by reducing SDS-PAGE.

Bio-Activity: Not validated for activity

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.