

## Recombinant Human Secreted Protein Acidic and Rich in Cysteine (Human SPARC)

### Product Information

Product Name	Cat#	Size
Recombinant Human Secreted Protein Acidic and Rich in Cysteine (Human SPARC)	92558ES10	10 µg
	92558ES60	100 µg
	92558ES76	500 µg

### Product Description

Secreted protein acidic and rich in cysteine (SPARC), also named as osteonectin or BM-40, is an acronym for “secreted protein, acidic and rich in cysteine”. Mature human SPARC shows 92%, 92%, 97%, 99%, 96% and 85% aa identity with mouse, rat, canine, bovine, porcine and chick SPARC. SPARC is the founding member of a family of secreted matricellular proteins with similar domain structure. It is produced by fibroblasts, capillary endothelial cells, platelets and macrophages, especially in areas of tissue morphogenesis and remodeling. SPARC is required for the collagen in bone to become calcified but is also involved in extracellular matrix synthesis and promotion of changes to cell shape. The gene product has been associated with tumor suppression but has also been correlated with metastasis based on changes to cell shape which can promote tumor cell invasion.

### Product Properties

<b>Synonyms</b>	Basement-membrane Protein 40, BM-40, Osteonectin, ON, SPARC
<b>Accession</b>	P09486
<b>GeneID</b>	6678
<b>Source</b>	E.coli-derived human SPARC protein, Ala18-Asp1303.
<b>Molecular Weight</b>	Approximately 32.7 kDa.
<b>AA Sequence</b>	APQQEALPDE TEVVEETVAE VTEVSVGANP VQVEVGEFDD GAEETEEVV AENPCQNHHC KHGKVCCELDE NNTPMCVCQD PTSCPAPIGE FEKVCSDNK TFDSSCHFFA TKCTLEGTKK GHKLHLDYIG PCKYIPPCLD SELTEFPLRM RDWLKNVLT LYERDEDNNL LTEKQKLRVK KIHENEKRLE AGDHPVELLA RDFEKNYMY IFPVHWQFGQ LDQHPIDGYL SHTELAPLRA PLIPMEHCTT RFFETCDLDN DKYIALDEWA GCFGIKQKDI DKDLVI
<b>Tag</b>	None
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	>98% by SDS-PAGE and HPLC analyses.
<b>Biological Activity</b>	The ED <sub>50</sub> as determined by its ability to inhibit the cell growth of Mv1Lu mink lung epithelial cells is less than 3.0 µg/mL, corresponding to a specific activity of > 333 IU/mg. Fully biologically active when compared to standard.
<b>Endotoxin</b>	< 0.1 EU per 1µg of the protein by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
<b>Reconstitution</b>	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

## **Shipping and Storage**

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

## **Cautions**

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only!