

SPARC active protein

SPARC Protein, Mouse, Recombinant (His Tag)

CATALOG #
AAA258167

HOST
HEK293 Cells

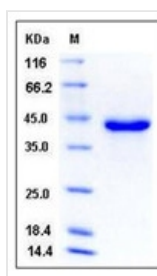
PRODUCT SYNONYMS

SPARC; SPARC Protein; Mouse; Recombinant (His Tag); Mouse Osteonectin/SPARC Protein (His Tag); AA517111 Protein; BM-40 Protein; ON Protein; RP23-465I4.1 Protein; secreted protein; acidic; cysteine-rich (osteonectin); SPARC active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>96% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. 5% trehalose, 5% mannitol and 0.01% Tween80
Sequence	Met1-Ile30 2
Species	Mouse
Activity	Measured by its ability to inhibit the cell growth of Mv-1-Lu mink lung epithelial cells. The ED50 for this effect is typically 1-4ug/mL.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Ala 18
Tag	C-His
Protein Construction	A DNA sequence encoding the mouse SPARC (NP_033268.1)(Met 1-Ile 302) was expressed, with a polyhistidine tag at the C-terminus.
Reconstitution	It is recommended that sterile water (400ul) be added to the vial to prepare a stock solution of 0.25mg/mL. Concentration is measured by UV-Vis
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for SPARC active protein	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.
References	Yan Q, et al. (1999) SPARC, a matricellular glycoprotein with important biological functions. J Histochem Cytochem. 47(12): 1495-506. Brekken RA, et al. (2000) SPARC, a matricellular protein: at the crossroads of cell-matrix. Matrix Biol. 19(7): 569-80. Tai IT, et al. (2008) SPARC in cancer biology: its role in cancer progression and potential for therapy. Drug Resist Updat. 11(6): 231-46. Podhajcer OL, et al. (2008) The role of the matricellular protein SPARC in the dynamic interaction between the tumor and the host. Cancer Metastasis Rev. 27(3): 523-37. Kos K, et al. (2010) SPARC: a key player in the pathologies associated with obesity and diabetes. Nat Rev Endocrinol. 6(4): 225-35.

NCBI AND UNIPROT INFORMATION

NCBI GI #	6678077
NCBI GeneID	20692
NCBI Accession #	NP_033268.1
NCBI GenBank Nucleotide #	NM_009242.5
UniProt Accession #	P07214
Molecular Weight	The secreted recombinant mouse SPARC consists of 296 amino acids and has a predicted molecular mass of 34 kDa. In SDS-PAGE under reducing conditions, rm SPARC migrates as an approximately 43 kDa band due to glycosylation.
NCBI Official Full Name	SPARC
NCBI Official Synonym Full Names	secreted acidic cysteine rich glycoprotein
NCBI Official Symbol	Sparc
NCBI Official Synonym Symbols	ON; BM-40
NCBI Protein Information	SPARC
UniProt Protein Name	SPARC
UniProt Gene Name	Sparc
UniProt Synonym Gene Names	BM-40; ON

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/hek293-active-protein/sparc/258167>