Product Datasheet

Recombinant Human Secreted Protein Acidic and Rich in Cysteine, His

Catalog No: #AP60449



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Package Size: #AP60449-1 10ug #AP60449-2 100ug #AP60449-3 500ug

Description	
Product Name	Recombinant Human Secreted Protein Acidic and Rich in Cysteine, His
Host Species	E.coli
Purification	> 95 % by SDS-PAGE and HPLC analyses.
Other Names	Basement-membrane Protein 40, BM-40, Osteonectin, ON
Uniprot	P09486
GeneID	6678
Calculated MW	Approximately 36.1 kDa, a single non-glycosylated polypeptide chain containing 314 amino acids, with
	expression vector sequence (containing 6 o Ω ½o Ω ½ His tag).
Target Sequence	MSYYHHHHHH DYDIPTTENL YFQGAMGSAP QQEALPDETE VVEETVAEVT EVSVGANPVQ
	VEVGEFDDGA EETEEEVVAE NPCQNHHCKH GKVCELDENN TPMCVCQDPT SCPAPIGEFE
	KVCSNDNKTF DSSCHFFATK CTLEGTKKGH KLHLDYIGPC KYIPPCLDSE LTEFPLRMRD WLKNVLVTLY
	ERDEDNNLLT EKQKLRVKKI HENEKRLEAG DHPVELLARD FEKNYNMYIF PVHWQFGQLD QHPIDGYLSH
	TELAPLRAPL IPMEHCTTRF FETCDLDNDK YIALDEWAGC FGIKQKDIDK DLVI
Formulation	LyophilizedB fromB aB 0.2B umB filteredB concentratedB solutionB inB PBS.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles 12 months from date of receipt, -20 to
	-70 o $\Omega^{1/2}$ o $\Omega^{1/2}$ C as supplied 1 month, 2 to 8 o $\Omega^{1/2}$ o $\Omega^{1/2}$ C under sterile conditions after reconstitution 3
	months, -20 to -70 o $\Omega^{1/2}$ o $\Omega^{1/2}$ C under sterile conditions after reconstitution.

Background

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". It is encoded by the SPARC gene in humans. The protein is a glycoprotein of 40 kDa, (303 amino acid residues) and consists of 17 a.a. signal sequence, an N-terminal acidic region that binds calcium, a follistatin domain containing Kazal-like sequences, and a C-terminal extracellular calcium (EC) binding domain with two EF-hand motifs. 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.

Note: This product is for in vitro research use only