

Recombinant Rat SPARC Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52288

Size: 10ug, 100ug

Protein Name: SPARC (Basement-membrane protein 40) (BM-40) (Osteonectin) (ON)
(Secreted protein acidic and rich in cysteine)

Synonym: Sparc

UniProt ID: P16975

UniProt Link: www.uniprot.org/uniprotkb/P16975/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 301 AA

Molecular Weight: 34 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MRAWIFFLLCLAGRALAAPQTEAAEEMVAEETVVEETGLPVGANPVQVEMGEFEEGAEETVEEVVA
ENPCQNHHCCKHGKVCCELDESNTPMCVCQDPTSCPAPIGEFEKVCSDNKNKTFDSSCHFFATKCTLEG
TKKGHKLHLDYIGPCKYIAPCLDSELTEFPLMRDWLKNVLVTLYERDEGNLLTEKQKLRVKKIHEN
EKRLEAGDHPVELLARDFEKNYNMYIFPVHWQFGQLDQHPIDGYLSHTELAPLRAPLIPMEHCTTRF
FETCDLDNDKYIALEEWAGCFGIKEQDINKDLVI

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant SPARC (Basement-membrane protein 40) (BM-40) (Osteonectin) (ON) (Secreted protein acidic and rich in cysteine) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Appears to regulate cell growth through interactions with the extracellular matrix and cytokines. Binds calcium and copper, several types of collagen, albumin, thrombospondin, PDGF and cell membranes. There are two calcium binding sites; an acidic domain that binds 5 to 8 Ca(2+) with a low affinity and an EF-hand loop that binds a Ca(2+) ion with a high affinity.

Subcellular Localization: Secreted, extracellular space, extracellular matrix, basement membrane .
Note=In or around the basement membrane.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.