

Recombinant Rat SRGN Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52239

Size: 10ug, 100ug

Protein Name: Serglycin (Chondroitin sulfate proteoglycan core protein) (Cytolytic granule proteoglycan core protein) (PG19 core protein) (Proteoglycan 10K core protein) (Secretory granule proteoglycan core protein)

Synonym: Srgn, Pgsg, Prg, Prg1

UniProt ID: P04917

UniProt Link: www.uniprot.org/uniprotkb/P04917/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 179 AA

Molecular Weight: 19 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MRQVPVGTSLVLALAFVLVWGSSVQGYPARRARYQWVRCKPDGIFANCIEEKGPFRDLIAEESNVG
PPMTDPVLMRGFPNDFFPISDDYS GSGS GSGS GSGS GSGS GSGS GSGS GSGS GSGS GSGS
SGSGSGSGSLADMEWEYQPTDENNI VYFN YGPFDRMLTEQNQE QPGDFII

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 Serglycin (Chondroitin sulfate proteoglycan core protein) (Cytolytic granule proteoglycan core protein) (PG19 core protein) (Proteoglycan 10K core protein) (Secretory granule proteoglycan core protein) 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: Plays a role in formation of mast cell secretory granules and mediates storage of various compounds in secretory vesicles. Required for storage of some proteases in both connective tissue and mucosal mast cells and for storage of granzyme B in T-lymphocytes. Plays a role in localizing neutrophil elastase in azurophil granules of neutrophils. Mediates processing of MMP2. Plays a role in cytotoxic cell granule-mediated apoptosis by forming a complex with granzyme B which is delivered to cells by perforin to induce apoptosis. Regulates the secretion of TNF and may also regulate protease secretion. Inhibits bone mineralization (By similarity).

Subcellular Localization: Cytoplasmic granule . Cytolytic granule . Secreted, extracellular space . Golgi apparatus . Note=Found in mast cell granules and in cytoplasmic granules of cytolytic T-lymphocytes from where it is secreted upon cell activation. Secreted constitutively by endothelial cells and macrophages. Located to Golgi apparatus during neutrophil differentiation (By similarity).

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.