Recombinant SCAI protein (His tag)

Catalog Number	547760
Synonyms	Suppressor of cancer cell invasion protein
Species	Human
Expression System	E. coli
Accession	Q8N9R8
Molecular Weight	Predictes a molecular mass of 50.46 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	50-471
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 50-471 aa (Q8N9R8) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	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 unless customers require otherwise.

Description

Description	Introducing the recombinant Protein SCAI (Suppressor of cancer cell invasion protein) fragment (amino acids 50-471), a highly stable and soluble unit designed for advanced structural and biochemical studies. This 422-amino acid fragment retains key functional characteristics of the full-length tumor suppressor, offering researchers a reliable tool to investigate mechanisms of cancer cell invasion and transcriptional regulation. Protein SCAI is a tumor suppressor that inhibits MRTFA-induced SRF transcriptional activity, playing a critical role in suppressing cancer cell invasion. It functions within the RHOA-DIAPH1 signal transduction pathway and regulates cell migration through transcriptional control of ITGB1. SCAI exhibits complex subcellular localization, being found at the membrane as a single-pass membrane protein, as well as in the nucleus and cytoplasm. Nuclear localization is specifically required for its inhibition of MRTFA, highlighting the importance of its compartmentalization for tumor suppressor function. The selected fragment (50-471) represents a computationally optimized stable region that maintains relevance to the protein's biological activities while ensuring experimental utility.