Recombinant SPR2G protein (His tag)

Catalog Number	550758
Synonyms	SPR-2G
Species	Human
Expression System	E. coli
Accession	Q9BYE4
Molecular Weight	Predictes a molecular mass of 9.81 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	1-73
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-73 aa (Q9BYE4) 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	Recombinant Human Small Proline-rich Protein 2G (SPR-2G) Fragment (residues 1-73) is a high-purity, stable protein designed for structural and biochemical studies. This fragment captures a soluble and functional unit of SPR-2G, a key keratinocyte protein involved in epidermal barrier formation, providing an ideal tool for investigating skin biology and protein cross-linking mechanisms. Small Proline-rich Protein 2G (SPR-2G), encoded by the SPRR2G gene, is a cross-linked envelope protein essential in keratinocytes. It initially localizes to the cytoplasm and is subsequently cross-linked to membrane proteins via transglutaminase activity, contributing to the formation of an insoluble protective envelope beneath the plasma membrane. This process is critical for epidermal integrity and barrier function. The provided fragment (residues 1-73) represents a computationally optimized region selected for stability and solubility, enabling detailed analysis of SPR-2G's structural and functional properties in research applications.