Recombinant SPR2B protein (His tag)

Catalog Number	549459
Synonyms	SPR-2B
Species	Human
Expression System	E. coli
Accession	P35325
Molecular Weight	Predictes a molecular mass of 9.63 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	1-72
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-72 aa (P35325) 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 2B (SPR-2B) Fragment (residues 1-72) is a highly stable and soluble protein unit designed for structural and biochemical research. This fragment captures the essential characteristics of SPR-2B, a key keratinocyte protein involved in the formation of the cross-linked cell envelope, making it an ideal tool for studying epidermal differentiation and barrier function. Small proline-rich protein 2B (SPR-2B), encoded by the SPRR2B gene, is a crucial component in keratinocyte differentiation. It functions as a cross-linked envelope protein that initially localizes to the cytoplasm before being incorporated into the insoluble cell envelope beneath the plasma membrane via transglutaminase-mediated cross-linking. This process is essential for forming the protective barrier of the skin, contributing to cellular integrity and defense against environmental stressors. The provided fragment (residues 1-72) represents a computationally optimized stable region of SPR-2B, facilitating experimental studies on its structural properties and role in keratinocyte biology.