Recombinant SPR2D protein (His tag)

Catalog Number	548932
Synonyms	SPR-2D; Small proline-rich protein II; SPR-II
Species	Human
Expression System	E. coli
Accession	P22532
Molecular Weight	Predictes a molecular mass of 9.56 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	>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 1-72 aa (P22532) 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 2D (SPR-2D) Fragment (residues 1-72) is a highly stable and soluble protein unit designed for structural and biochemical studies. This fragment captures a key functional region of SPR-2D, a keratinocyte protein essential for forming the cross-linked envelope in skin cells, offering researchers a reliable tool for investigating epidermal differentiation and barrier formation. Small Proline-Rich Protein 2D (SPR-2D), also known as SPR-II, is a critical component in keratinocytes, where it contributes to the formation of an insoluble protective envelope beneath the plasma membrane. Initially localized in the cytoplasm, SPR-2D is cross-linked to membrane proteins via transglutaminase activity, resulting in a robust structural framework that supports skin integrity and cellular defense. This process is vital for epidermal differentiation and barrier function, making SPR-2D a protein of significant interest in dermatological and cell biology research. The provided fragment (residues 1-72) represents a computationally optimized, stable region of the protein, facilitating experimental analysis without compromising biological relevance.