Recombinant DESP protein (His tag)

Catalog Number	546785
Synonyms	DP; 250/210 kDa paraneoplastic pemphigus antigen
Species	Human
Expression System	E. coli
Accession	P15924
Molecular Weight	Predictes a molecular mass of 49.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	663-1068
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 663-1068 aa (P15924) 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	This product features a recombinant fragment of Desmoplakin (DP), a 250/210 kDa paraneoplastic pemphigus antigen, spanning residues 663-1068. It represents a stable and soluble unit optimized for structural and biochemical studies, supporting research into desmosomal function and cell adhesion mechanisms. Desmoplakin is a major high molecular weight protein of desmosomes, critical for maintaining cell-cell adhesion in tissues. It regulates profibrotic gene expression in cardiomyocytes by activating the MAPK14/p38 MAPK signaling cascade and increasing TGFB1 protein abundance. The protein localizes to desmosomes at cell junctions, the cell membrane, and cytoplasm, with dynamic distribution during epithelial differentiation—initially cytoplasmic in undifferentiated keratinocytes and later enriched at lateral and tricellular contacts as epithelial sheets form. This fragment provides a focused tool for investigating Desmoplakin's roles in cellular integrity and signaling pathways.