Recombinant KRT83 protein (His tag)

Catalog Number	544793
Synonyms	Hair keratin K2.10; Keratin-83; K83; Type II hair keratin Hb3; Type-II keratin Kb23
Species	Human
Expression System	E. coli
Accession	P78385
Molecular Weight	Predictes a molecular mass of 38.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	103-421
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 103-421 aa (P78385) 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 is a high-quality recombinant protein fragment of human Keratin-83 (KRT83), specifically encompassing residues 103-421. This 319-amino acid fragment was computationally designed for optimal stability and solubility, making it an ideal reagent for structural biology, biochemical assays, and functional studies of type II hair keratins. Keratin-83 (KRT83), also known as type II cuticular Hb3, is a human hair keratin encoded by the KRT83 gene. As a type II hair keratin, it plays a critical structural role in hair follicle formation and hair shaft integrity, forming intermediate filaments through heteropolymerization with type I keratins. While specific functional details and subcellular localization for the full-length protein are not provided in the available data, type II hair keratins like KRT83 are essential components of the hair cuticle and cortex, contributing to the mechanical strength and resilience of hair fibers.