Recombinant K2C1 protein (His tag)

Catalog Number	542011
Synonyms	67 kDa cytokeratin; Cytokeratin-1; CK-1; Hair alpha protein; Keratin-1; K1; Type-II keratin Kb1
Species	Human
Expression System	E. coli
Accession	P04264
Molecular Weight	Predictes a molecular mass of 38.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 44 kDa band.

Product Information

Sequence Region	179-491
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 179-491 aa (P04264) 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 Keratin-1 Fragment (aa 179-491) is a high-quality protein product representing a stable and soluble 313-amino acid segment of Keratin, type II cytoskeletal 1. This fragment was specifically designed for structural and biochemical studies, offering researchers a reliable tool to investigate keratin-mediated signaling pathways and protein interactions. Keratin-1 (KRT1) is a 67 kDa cytoskeletal protein that plays important regulatory roles in cellular signaling. The full-length protein functions as a modulator of kinase activity, potentially regulating proteins such as PKC and SRC through interactions with integrin beta-1 and RACK1. Additionally, when complexed with C1QBP, it serves as a high-affinity receptor for kininogen-1/HMWK. Keratin-1 exhibits dual subcellular localization, being found both at the cell membrane and in the cytoplasm, suggesting diverse functional roles in different cellular compartments. This protein is significant for understanding epithelial cell biology and keratin-mediated signaling networks.