

Datasheet for ABIN3137364
KRT17 Protein (AA 1-433) (His tag)[Go to Product page](#)

1 Image

Overview

Quantity:	1 mg
Target:	KRT17
Protein Characteristics:	AA 1-433
Origin:	Mouse
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KRT17 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>MTTIRQFTS SSSIKGSSGL GGGSSRTSCR LSGSLGAGSC RLGSASGLGS ALGSNSYSSC YSFGTSGSYG GNFGGVDGLL AGGEKATMQN LNDRLASYLD KVRALLEEANT ELEVKIRDWY QKQAPGPARD YSAYYHTIED LKNKILVATV DNASILLQID NARLAADDFR TKFETEALR MSVEADINGL RRVLDLTLA RADLEMQIEN LKEELAYLKK NHEEEMNALR GQVGGEINVE MDAAPGV DLS RILSEMRDQY EKMAEKNRKD AEDWFFSKTE ELNREVATNS ELVQSGKSEI SELRRMQAL EIELQSQLSM KASLEGSLAE TENRYCVQLS QIQGLIGSVE EQLAQLRCCEM EQQNQEYKIL LDVKTRLEQE IATYRRLLEG EDAHLTQYKP KEPVTTRQVR TIVEEVQDGK VISSREQVHQ TTR</p> <p>Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.</p>
Characteristics:	<ul style="list-style-type: none">• Made in Germany - from design to production - by highly experienced protein experts.• Mouse Krt17 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to

ensure crystallization grade.

- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made to order protein and will be made for the first time for your order. Our experts in the lab will ensure that you receive a correctly folded protein.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Endotoxin Level:

Protein is endotoxin free.

Grade:

Crystallography grade

Target Details

Target:

KRT17

Alternative Name:

Krt17 ([KRT17 Products](#))

Target Details

Background: Type I keratin involved in the formation and maintenance of various skin appendages, specifically in determining shape and orientation of hair (PubMed:14714564, PubMed:16702408). Required for the correct growth of hair follicles, in particular for the persistence of the anagen (growth) state (PubMed:16702408). Modulates the function of TNF-alpha in the specific context of hair cycling. Regulates protein synthesis and epithelial cell growth through binding to the adapter protein SFN and by stimulating Akt/mTOR pathway (PubMed:16710422). Involved in tissue repair. May be a marker of basal cell differentiation in complex epithelia and therefore indicative of a certain type of epithelial "stem cells". Acts as a promoter of epithelial proliferation by acting a regulator of immune response in skin: promotes Th1/Th17-dominated immune environment contributing to the development of basaloid skin tumors (PubMed:20871598). May act as an autoantigen in the immunopathogenesis of psoriasis, with certain peptide regions being a major target for autoreactive T-cells and hence causing their proliferation. {ECO:0000269|PubMed:14714564, ECO:0000269|PubMed:16702408, ECO:0000269|PubMed:16710422, ECO:0000269|PubMed:20871598, ECO:0000269|PubMed:9786956}.

Molecular Weight: 49.1 kDa Including tag.

UniProt: [Q9QWL7](#)

Application Details

Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: Protein has not been tested for activity yet. In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: 100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Handling

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process