

## Product datasheet

# Recombinant human Ubiquitin (mutated K33) protein (Chemical Free) ab80742

### 概述

---

产品名称	重组人Ubiquitin (mutated K33)蛋白(Chemical Free)
蛋白长度	Full length protein

### 描述

---

性质	Recombinant
来源	Escherichia coli

### 氨基酸序列

Accession	<a href="#">P0CG47</a>
种属	Human
分子量	9 kDa
标签	His tag N-Terminus

### 技术指标

---

Our [Abpromise guarantee](#) covers the use of **ab80742** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

生物活性	Mutation of lysine 33 to arginine renders ubiquitin (Ub) unable to form poly-Ub chains via lysine 33 linkages with other Ub molecules. ab80742 can form an E1-catalyzed active thioester at the C-terminus allowing the molecule to be transferred to the lysines of substrate proteins. Ideal for the reduction in poly-Ub chain length/conjugation rates and determining if poly-Ub chains are K33 linked.
应用	Conjugation SDS-PAGE
纯度	> 95 % SDS-PAGE.
形式	Lyophilised
补充说明	Mutation of lysine 33 to arginine renders ubiquitin (Ub) unable to form poly-Ub chains via lysine 33 linkages with other Ub molecules. ab80742 can form an E1-catalyzed active thioester at the C-terminus allowing the molecule to be transferred to the lysines of substrate proteins. Ideal for

the reduction in poly-Ub chain length/conjugation rates and determining if poly-Ub chains are K33 linked.

Typical concentrations for non rate-limiting support of in vitro conjugation reactions range from 200  $\mu$ M-1 mM depending on experimental conditions.

---

## 制备和贮存

### 稳定性和存储

Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

None

This product is an active protein and may elicit a biological response in vivo, handle with caution.

### 复溶

Soluble and stable aqueous buffers up to 5 mg/ml. Store at -20°C solubilization in desired buffer. Avoid multiple freeze/thaw cycles.

---

## 常规信息

### 相关性

Function: Ubiquitin exists either covalently attached to another protein, or free (unanchored). When covalently bound, it is conjugated to target proteins via an isopeptide bond either as a monomer (monoubiquitin), a polymer linked via different Lys residues of the ubiquitin (polyubiquitin chains) or a linear polymer linked via the initiator Met of the ubiquitin (linear polyubiquitin chains). Polyubiquitin chains, when attached to a target protein, have different functions depending on the Lys residue of the ubiquitin that is linked: Lys-6-linked may be involved in DNA repair; Lys-11-linked is involved in ERAD (endoplasmic reticulum-associated degradation) and in cell-cycle regulation; Lys-29-linked is involved in lysosomal degradation; Lys-33-linked is involved in kinase modification; Lys-48-linked is involved in protein degradation via the proteasome; Lys-63-linked is involved in endocytosis, DNA-damage responses as well as in signaling processes leading to activation of the transcription factor NF-kappa-B. Linear polymer chains formed via attachment by the initiator Met lead to cell signaling. Ubiquitin is usually conjugated to Lys residues of target proteins, however, in rare cases, conjugation to Cys or Ser residues has been observed. When polyubiquitin is free (unanchored-polyubiquitin), it also has distinct roles, such as in activation of protein kinases, and in signaling. Similarity: Belongs to the ubiquitin family. Contains 3 ubiquitin-like domains.

### 细胞定位

Cell Membrane, Cytoplasmic and Nuclear

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

---

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise,

please visit <http://www.abcam.cn/abpromise> or contact our technical team.

## Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors