

Product datasheet

Recombinant Human Ubiquitin protein **ab57798**

1 Image

Overview

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**Product name** Recombinant Human Ubiquitin protein  
**Protein length** Full length protein

Description

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**Nature** Recombinant  
**Source** Escherichia coli  
**Amino Acid Sequence**  
**Species** Human

Specifications

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Our [Abpromise guarantee](#) covers the use of **ab57798** in the following tested applications.

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

**Applications** SDS-PAGE  
**Purity** > 95 % SDS-PAGE.  
 Supplied essentially salt free.  
**Form** Lyophilised

Additional notes

Ubiquitin, N-terminal FLAG-tagged, can replace the ubiquitin in formation of poly-ubiquitin-protein conjugates. The FLAG tag enables separation and enrichment of the protein conjugates on anti-FLAG affinity columns and detection of conjugates in western blots using anti-FLAG antibodies.

Preparation and Storage

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**Stability and Storage** Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.  
 Preservative: None  
 Buffer: None  
**Reconstitution** Solubility: 10 mg/ml in 50 mM Tris, pH 7.4

## General Info

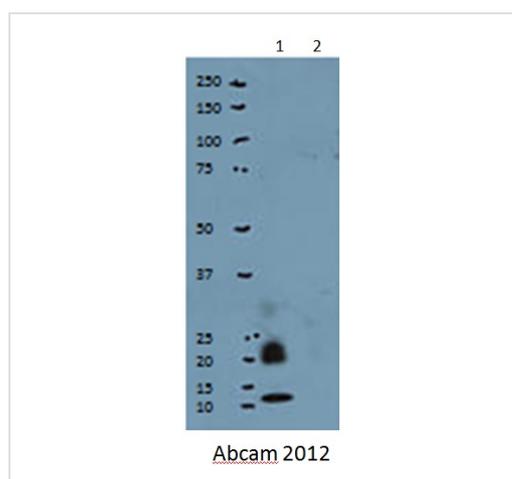
### Relevance

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.

### Cellular localization

Cell Membrane, Cytoplasmic and Nuclear

## Images



Western blot - Recombinant Human Ubiquitin protein (ab57798)

This data was provided by an anonymous collaborator

**All lanes :** Anti-FLAG antibody.

**Lane 1 :** Recombinant Human Ubiquitin protein (ab57798) at 0.1  $\mu$ g

**Lane 2 :** Recombinant Human Ubiquitin protein (ab57798) at 0.01  $\mu$ g

Developed using the ECL technique.

Performed under reducing conditions.

**Observed band size:** 12 kDa

[why is the actual band size different from the predicted?](#)

**Additional bands at:** 24 kDa (possible dimer), 24 kDa (possible post-translational modification)

Ubiquitin protein FLAG tagged (ab57798) was reconstituted to 5mg/ml using 50mM Tris pH7.4 and then mixed with sample loading buffer containing  $\beta$ -mercaptoethanol.

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

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