

Polyubiquitin 4 (UBQ4), Recombinant Protein

Cat *RP01838*

Size 0.02 mg (E-Coli)/ 0.1 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg
(Yeast)/ 0.02 mg (Baculovirus)/ 1 mg (E-Coli)/ 0.02 mg

Species (Mammalian-Cell)/ 0.1 mg (Baculovirus)/ 1 mg (Yeast)/ 0.1 mg
(Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-
Arabidopsis thaliana (Mouse-ear cress)
Cell)

Full Product Name

Recombinant Arabidopsis thaliana Polyubiquitin 4 (UBQ4)

Product Gene Name

UBQ4 recombinant protein

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Sequence

MQIFVKLTG KTITLEVESS DTIDNVKAKI QDKEGIPPDQ QRLIFAGKQL EDGRTLADYN IQKESTLHLV
LRLRGG

Sequence Positions

1-76, Full length protein

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

42,786 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week.
Repeated freezing and thawing is not recommended.

Protein Family

Polyubiquitin

NCBI Accession

NP_568397.1

NCBI GI

18420267

NCBI GenBank Nucleotide

NM_122069.4

NCBI GeneID

832184

NCBI Official Full Name

ubiquitin 4

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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(Yeast)/ 0.02 mg (Baculovirus)/ 1 mg (E-Coli)/ 0.02 mg

(Mammalian-Cell)/ 0.1 mg (Baculovirus)/ 1 mg (Yeast)/ 0.1 mg
(Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-
Cell)

NCBI Official Symbol

UBQ4

NCBI Official Synonym Symbols

T1M15.20; T1M15_20; ubiquitin 4

NCBI Protein Information

ubiquitin 4

NCBI Summary

encodes a ubiquitin polyprotein.

UniProt Gene Name

UBQ4

UniProt Protein Name

Polyubiquitin 4

UniProt Primary Accession

P0CH32

UniProt Secondary Accession

O80715; P59263; Q38875; Q9LDJ2; Q9LYW1; Q9M0W3; Q9M1P9; Q9S7X3

UniProt Related Accession

P0CH32; Q1EC66

UniProt Comments

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-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, and DNA-damage responses. 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 .

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY