

Ubiquitin-NEDD8-like protein RUB1 (RUB1), Recombinant Protein

Cat RP01225

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

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

Full Product Name

Recombinant Arabidopsis thaliana Ubiquitin-NEDD8-like protein RUB1 (RUB1)

Product Gene Name

RUB1 recombinant protein

Product Synonym Gene Name

RUB1

Purity

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

Sequence

MQIFVKTLTG 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

17,397 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

Ubiquitin-NEDD8-like protein

NCBI Accession

NP_564379.2

NCBI GI

30692436

NCBI GenBank Nucleotide

NM_102873.5

NCBI GeneID

840023

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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

NCBI Official Symbol

RUB1

NCBI Official Synonym Symbols

ARABIDOPSIS THALIANA RELATED TO UBIQUITIN 1; ATRUB1; NEDD8; related to ubiquitin 1; T19E23.13; T19E23_13

NCBI Protein Information

related to ubiquitin 1

NCBI Summary

Encodes a ubiquitin-related protein that is conjugated to target proteins by neddylation. It has been shown to be conjugated to the cullin AtCUL1. The RUB-conjugation pathway has been implicated in auxin response.

UniProt Gene Name

RUB1

UniProt Synonym Gene Names

NEDD8; UBQ15; AtRUB1

UniProt Protein Name

Ubiquitin-NEDD8-like protein RUB1

UniProt Synonym Protein Names

UbiquitinNEDD8-like protein RUB1Alternative name(s):Ubiquitin-related protein 1; AtRUB1

UniProt Primary Accession

Q9SHE7

UniProt Secondary Accession

O80715; P59263; Q0WQU3; Q38875; Q9LDJ2; Q9LYW1; Q9M0W3; Q9M1P9; Q9S7X3

UniProt Related Accession

Q9SHE7

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 .

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