Product Name: CUL3 / RBX1, Neddylated

Alternate Names: Cullin-3; CUL-3

Product Code: TE3-034

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

CUL3 / RBX1 combined with a BTB/POZ-domain substrate recognition subunit will ubiquitylate target substrates in an adaptor-dependent manner under suitable conditions.

Physical Characteristics

Species: Human

Predicted MW (kDa): CUL3: 89 kDa
RBX1: 12 kDa
NEDD8: 8.6 kDa

Source: High Five (*T. ni*)

Purity: 90 %

Tags: CUL3: Untagged
RBX1: Untagged
NEDD8: Untagged

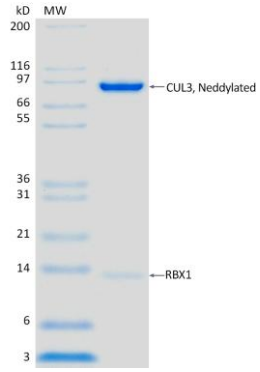
Formulation: 40 mM HEPES, 100 mM NaCl, 10% Glycerol, 1 mM EDTA, 2 mM TCEP, pH 7.6

Shipping: The product is shipped with cold packs or dry ice. Upon receipt, store it immediately at the temperature recommended below.

Stability/Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store ≤ -70°C (stable for 48 months from date of receipt).

Quality Assurance

Purity & SDS-PAGE



2 µg CUL3 / RBX1, run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Protein ID: Cullin-3
E3 ubiquitin-protein ligase RBX1
Ubiquitin-like protein NEDD8

Activity Assay

Active in Ubiquitylation Assay.

Background

Description

Recombinant human CUL3 is co-purified as a stable heterodimer with RBX1, then neddylated. When combined with an appropriate BTB/POZ domain substrate recognition subunit, E1, E2 and ubiquitin, this fusion can ubiquitylate substrates *in vitro*.

Accession Number: Q13618 **Entrez Gene ID:** CUL3

Accession Number: P62877 **Entrez Gene ID:** RBX1

Accession Number: Q15843 **Entrez Gene ID:** NEDD8

Protein Sequence

CUL3:

MSNLSKGTGSRKDTKMRIRAFPMTMDEKYVNSIWDLLKNAIQEIQRKNNSGLSFEELYRNAYT
MVLHKHGEKLYTGLREVVTEHLINKVREDVLNSLNNNFLQTLNQAWNDHQTAMVMIRDILMYM
DRVYVQQNNVENVYNLGLIIFRDQVVRYGCIRDHLRQTLLDMIARERKGEVVDRGAIRNACQM
LMILGLEGRSVYEEDFEAPFLEMSAEFFQMESQKFLAENSASVYIKKVEARINEEIERVMHCL
DKSTEEPIVKVVERELISKHMKTIVEMENSGLVHMLKNGKTEDLGCMYKLFSRVPNGLKTMCE
CMSSYLREQGKALVSEEGEGKNPVDYIQGLLDLKSRFDRFLLESFNNDRLFKQTIAGDFEYFL
NLNSRSPEYLSLFIDDKLKKGVKGLTEQEVETILDKAMVLFRFMQEKDVFERYYKQHLARRLL
TNKSVSDDSEKNMISKLKTECGCQFTSKLEGMFRDMSISNTTMDEFRQHLQATGVSLGGVDLT
VRVLTTGYWPTQSATPKCNIPPAPRHAFEIFRRFYLAKHSGRQLTLQHHMGSADLNATFYGPV
KKEDGSEVGVGGAQVTGSNTRKHILQVSTFQMTILMLFNNREKYTFEEIQQETDIPERELVRA
LQSLACGKPTQRVLTKEPKSKEIENGHIFTVNDQFTSKLHRVKIQTVAAKQGESDPERKETRQ
KVDDDRKHEIEAAIVRIMKSRKKMQHNVLVAEVTQQLKARFLPSPVVIKKRIEGLIEREYLAR
TPEDRKVYTYVA

RBX1:

GSDVDTPSGTNSGAGKKRFEVKKWNAVALWAWDIVVDNCAICRNHIMDLCIECQANQASATSE
ECTVAWGVCNHAFHFHCISRWLKTRQVCPLDNREWEFQKYGH

NEDD8:

MLIKVKTLTGKEIEIDIEPTDKVERIKERVEEKEGIPPQQQRLIYSGKQMNDEKTAADYKILG
GSVLHLVLALRGG