

Product Name: CUL4A / RBX1, Neddylated

Alternate Names: Cullin-4

Product Code: TE3-014

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

Validated for ATP-dependent *in vitro* ubiquitylation assays to support CUL4 E3 ligase activity and biochemical studies of cullin neddylation, ligase function, and small-molecule modulators.

Physical Characteristics

Species: Human

Predicted MW (kDa): CUL4A: 84 kDa
RBX1: 12 kDa
NEDD8: 8.6 kDa

Source: High Five (*T. ni*)

Purity: 90 %

Tags: CUL4A: Untagged
RBX1: Untagged
NEDD8: Untagged

Formulation: 40 mM HEPES, 200 mM NaCl, 10% Glycerol, 1 mM EDTA, 2 mM TCEP, pH 7.6

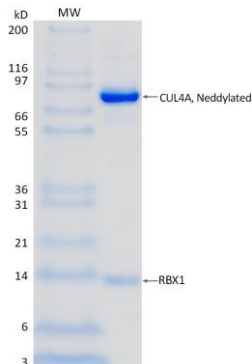
Shipping: The product is shipped with cold packs or dry ice. Upon receipt, store it immediately at the temperature recommended below.

Stability/Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store ≤ -70°C (stable for 24 months from date of receipt).

Quality Assurance

Purity & SDS-PAGE

Protein ID: Cullin-4A
E3 ubiquitin-protein ligase RBX1
Ubiquitin-like protein NEDD8



2 µg CUL4A / RBX1 run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Activity Assay

Verified in Ubiquitylation Assay.

Background

Description

Neddylated CUL4A / RBX1 is an activated core E3 ligase complex that supports assembly and catalytic function of CRL4 ubiquitin ligases involved in DNA repair, chromatin regulation, and protein homeostasis. The recombinant complex is ideal for *in vitro* ubiquitylation assays, mechanistic studies of CRL4 ligases, inhibitor characterization, and targeted protein degradation research.

Accession Number: Q13619

Entrez Gene ID: CUL4A

Accession Number: P62877

Entrez Gene ID: RBX1

Accession Number: Q15843

Entrez Gene ID: NEDD8

Protein Sequence

CUL4A:

MADEAPRKGSFSALVGRTNGLTKPAALAAAPAKPGGAGGSKKLVIKNFRDRPRLPDNYTQDTW
RKLHEAVRAVQSSTSIRYNLEELYQAVENLCSHKVSPMLYKQLRQACEDHVQAQILPFREDSL
DSVLFLKKINTCWQDHCRQMIMIRSIFLFLDRTYVLQNSTLPSIWDMGLELFRTHIISDKMVQ
SKTIDGILLIERERSGEAVDRSLLRSLLGMLSDDLQVYKDSFELKFLEETNCLYAAEGQRLMQ
EREVPEYLNHVSKRLEEEGDRVITYLDHSTQKPLIACVEKQLLGEHLTAILQKGLDHLLENR
VPDLAQMYQLFSRVRGGQQALLQHWSEYIKTFGTAIVINPEKDKDMVQDLLDFKDKVDHVIEV
CFQKNERFVNLMKESFETFINKRPNKPAELIAKHVDSKLRAGNKEATDEELERTLDKIMILFR
FIHGKDVFEAFYKKDLAKRLLVGKSASVDAEKSMLSCLKHECGAAFTSKLEGFMFKDMELSKDI
MVHFKQHMQNQSDSGPIDLTVNILTMGYWPTYTPMEVHLTPEMIKLQEVFKAFYLGKHSGRKL
QWQTTLGHAVLKAEFKEGKKEFQVSLFQTLVLLMFNEGDGFSFEEIKMATGIEDSELRRTLQS
LACGKARVLIKSPKGKEVEDGDKFI FNGEFKHKLFRIKINQIQMKETVEEQVSTTERVVFQDRQ
YQIDAAIVRIMKMRKTLGHNLLVSELYNQLKFPVKPGDLKKRIESLIDRDYMERDKDNPQYH
YVA

RBX1:

GSDVDTPSGTNSGAGKKRFEVKKWNAVALWAWDIVVDNCAICRNHIMDLCECQANQASATSE
ECTVAWGVCNHAFFHFCISRWLKTRQVCPLDNREWEFQKYGH

NEDD8:

MLIKVKTLTGKEIEIDIEPTDKVERIKERVEEKEGIPPPQQRLIYSGKQMNDEKTAADYKILG
GSVLHLVLALRGG