

Product Name: NAE1/UBA3

Alternate Names:

Product Code: TE1-082

Quantity: 25 µg

FOR RESEARCH USE ONLY (RUO)

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).

Verified Applications / Usage

Recombinant NEDD8-activating enzyme activates NEDD8 for subsequent transfer to a NEDD8 Conjugating Enzyme (E2) in Mg-ATP-dependent in vitro reactions. Appropriate enzyme concentrations are specific to the application.

Physical Characteristics

Species: Homo sapiens (Human)

Predicted MW (kDa): 60 kDa (NAE1) / 52 kDa (UBA3)

Source: Proprietary

Purity: 98%

Concentration: 5 µM

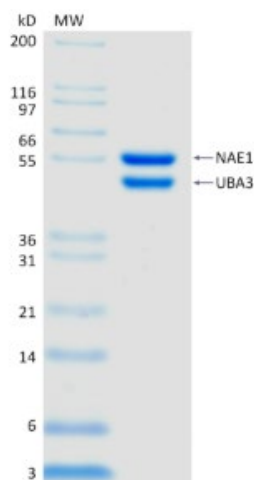
Formulation: 40 mM HEPES, 100 mM NaCl, 10% Glycerol, 1 mM EDTA, 1 mM TCEP, pH 7.6

Shipping: The product is shipped with 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



2 µg NAE1/UBA3 run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Protein ID: NAE1;NEDD8-activating enzyme E1 catalytic subunit

Activity Assay

Verified in NEDD8 Charging Assay.

Background

Description

In vitro, NEDD8 E1 activates NEDD8 in an ATP-dependent manner, generating an E1-NEDD8 thioester that is competent for charging E2 conjugating enzymes and supporting various Neddylation assays.

Accession Number:
Q13564;Q8TBC4

Entrez Gene ID: NAE1;UBA3

Protein Sequence

SGSMADGEEPEKKRRRIEELLA EKMAVDGGCGDTGDWEGRWNHVKK
FLERSGPFTHPDFEPSTESLQFLDTCVKLVIGAGGLGCELLKNLALSGF
RQIHVIDMDTIDVSNLNRQFLFRPKDIGRPKAEVAAEFLNDRVPNCNVVP
HFNKIQDFNDTFYRQFHIIVCGLDSIIARRWINGMLISLLNYEDGVLDPSSI
VPLIDGGTEGFKGNARVILPGMTACIECTLELYPPQVNFPMCTIASMPRL
PEHCIEYVRMLQWPKEQPFGEVPLDGDDPEHIQWIFQKSLERASQYN
IRGVITYRLTQGVVKRIIPAVASTNAVIAAVCATEVFKIATSAYIPLNNYLVFN
DVDGLYTYTFEAERKENCPACSQLPQNIQFSPSAKLQEVLDYLTNSASL
QMKSPAITATLEGKNRTLYLQSVTSIEERTRPNLSKTLKELGLVDGQELA
VADVTTTPQTVLFLKHFTS;SGSMAQLGKLLKEQKYDRQLRLWGDHGQE
ALES AHVCLINATATGTEILKNLVLPGIGSFTIIDGNQVSGEDAGNNFFLQ
RSSIGKNRAEAAMEFLQELNSDVSGSFVEESPENLLDNDPSFFCRFTVV
VATQLPESTSLRLADVLWNSQIPLLICRTYGLVGYMRIIIEHPVIESHPDN
ALEDLRLDKPFPELREHFQSYDL DHMEKKDHSHTPWIVIIAKYLAQWYS
ETNGRIPKTYKEKEDFRDLIRQGILKNENGAPED EENFEEAIKNVNTALN
TTQIPSSIEDIFNDDRCINITKQTPSFWILARALKEFVAKEGQGNLPVRGTI
PDMIADSGKYIKLQNVYREKAKKDAAAVGNHVAKLLQSIGQAPESISEKE
LKLLCSNSAFLRVVRCRSLAEEYGLDTINKDEIISSMDNPDNEIVLYLMLR
AVDRFHKQQGRYPGVSNYQVEEDIGKLKSCLTGFLQEYGLSVMVKDDY
VHEFCRYGAAEPHTIAAFLGGAAAEVIKIITKQFVIFNNTYIYSGMSQTS
ATFQL