Product Name: E6AP (UBE3A)

Alternate Names: EPVE6AP, HPVE6A, Renal carcinoma antigen NY-REN-54

Product Code: TE3-130

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

Suitable for studies of HECT E3 ubiquitin ligase activity, substrate ubiquitylation, ubiquitin signaling, Angelman syndrome research, and HPV E6-dependent protein degradation pathways.

Physical Characteristics

Species: Human

Predicted MW (kDa): 104 kDa

Source: *E. coli* BL21

Purity: 90 %

Tag: N-His_8-TEV

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

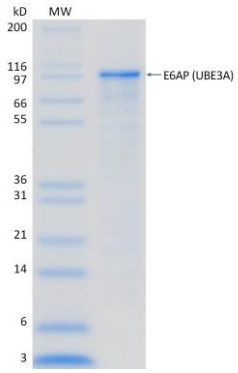
Shipping: The product is shipped with dry ice. Upon receipt, store it immediately at the temperature recommended below.

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

Protein ID: Ubiquitin-protein ligase E3A



2 µg E6AP (UBE3A) run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Activity Assay

Verified in Ubiquitylation Assay with S5A.

Background

Description

E6AP (UBE3A) is a HECT-domain E3 ubiquitin ligase that regulates protein turnover through ubiquitin-mediated substrate modification. It is a key protein in neuronal development and disease research, with established roles in Angelman syndrome, autism spectrum disorders, and HPV-mediated p53 degradation.

Accession Number: Q05086

Entrez Gene ID: UBE3A

Protein Sequence

MHHHHHHHHSSGVDLGTENLYFQSMEKLHQCYWKSGEPQSDDIEASRMKRAAAKHLIERYYHQLTEGCGN
EACTNEFCASCPTFLRMDNNAAAIKALELYKINAKLCDPHPSKKGASSAYLENSKGAPNNSCSEIKMNKK
GARIDFKDVTYLTEEKVYEILELCREREDYSPLIRVIGRVFSSAEALVQSFRKVKQHTKEELKSLQAKDE
DKDEDEKEKAACSAAAMEEDSEASSSRIGDSSQGDNNLQKLGPDDVSVDIDAIRRVYTRLLSNEKIETAF
LNALVYLSPNVECDLTYHNVYSRDPNYLNLFIIVMENRNLHSPEYLEMALPLFCKAMSKLPLAAQGKLIR
LWSKYNADQIRRMMETFQQLITYKVISNEFNSRNLVNDDDAIVAASKCLKMVYYANVVGGEVDTNHNEED
DEEPIPESSELTLQELLGEERRNKKGPRVDPLETELGVKTLDCRKPLIPFEEFINEPLNEVLEMDKDYTF
FKVETENKFSFMTCPFILNAVTKNLGLYYDNRIRMYSERRITVLYSLVQGQQLNPYLRLKVRRDHIIDDA
LVRLEMIAMENPADLKKQLYVEFEGEQGVDEGGVSKEFFQLVVEEIFNPDIGMFTYDESTKLFWFNPSSF
ETEGQFTLIGIVLGLAIYNNCILDVHFPMVVYRKLMGKKGTFRDLGDSHPVLYQSLKDLLEYEGNVEDDM
MITFQISQTDLFGNPMMYDLKENGDKIPITNENRKEFVNLYSDYILNKSVEKQFKAFRRGFHMVTNESPL
KYLFRPEEIELLICGSRNLDFQALEETTEYDGGYTRDSVLIREFWEIVHSFTDEQKRLFLQFTTGTDRAP
VGGLGKLKMIIAKNGPDTERLPTSHTCFNVLLLPEYSSKEKLKERLLKAITYAKGFGML