

Inhibitors

Screening Libraries

Proteins

Product Data Sheet

UBE2B Protein, Human (HEK293, His)

Cat. No.: HY-P71398

Synonyms: Ubiquitin-Conjugating Enzyme E2 B; RAD6 Homolog B; HR6B; hHR6B; Ubiquitin Carrier Protein

B; Ubiquitin-Conjugating Enzyme E2-17 kDa; Ubiquitin-Protein Ligase B; UBE2B; RAD6B

Human Species: Source: **HEK293**

Accession: P63146 (M1-S152)

Gene ID: 7320

Molecular Weight: Approximately 17.0 kDa

PROPERTIES

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AA	Sec	uen	ıce

MSTPARRRLM RDFKRLQEDP PVGVSGAPSE NNIMQWNAVI FGPEGTPFED GTFKLVIEFS EEYPNKPPTV RFLSKMFHPN VYADGSICLD ILQNRWSPTY DVSSILTSIQ SLLDEPNPNS

PANSQAAQLY QENKREYEKR VSAIVEQSWN D S

Biological Activity

The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

Appearance

Solution.

Formulation

Supplied as a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconsititution

N/A

Storage & Stability

Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.

Shipping

Shipping with dry ice.

DESCRIPTION

Background

UBE2B, a key player in the ubiquitination pathway, acts as an E2 ubiquitin-conjugating enzyme by accepting ubiquitin from the E1 complex and catalyzing its covalent attachment to other proteins. Teaming up with the E3 enzyme BRE1 (RNF20 and/or RNF40), UBE2B assumes a pivotal role in transcriptional regulation, catalyzing the monoubiquitination of histone H2B at 'Lys-120' (H2BK120ub1). This modification serves as a distinctive tag for various epigenetic processes, including transcriptional activation, RNA polymerase II elongation, and telomeric silencing, and is essential for the formation of H3K4me and H3K79me. In addition to its histone-modifying functions, UBE2B exhibits versatile ubiquitin chain linkages, mediating 'Lys-11', 'Lys-48', and 'Lys-63'-linked polyubiquitination in vitro. Furthermore, UBE2B plays a crucial role in

postreplication repair of UV-damaged DNA and collaborates with the E3 ligase RAD18 to form the UBE2B-RAD18 ubiquitin ligase complex, which mono-ubiquitinates DNA-associated PCNA on 'Lys-164'. The diverse functions of UBE2B suggest its potential involvement in neurite outgrowth.

Caution: Product has not been fully validated for medical applications. For research use only.

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