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Human UBE2B

Catalog # PVGS1211

Product Information

Primary Accession	P63146
Sequence	MHHHHHHAMG QLRSMSTPAR RRLMRDFKRL QEDPPVGVSG APSENNIMQW NAVIFGPEGT PFEDGTFKLV IEFSEEYPNK PPTVRFLSKM FHPNVYADGS ICLDILQNRW SPTYDVSSIL TSIQSLLDEP NPNSPANSQA AQLYQENKRE YEKRVSAIVE QSWNDS
Purity	> 95% as analyzed by SDS-PAGE&HPLC.
Endotoxin Level	
Formulation	yophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH_2O or PBS at 100 g/ml.

Additional Information

Gene ID	7320
Other Names	Ubiquitin-conjugating enzyme E2 B, 2.3.2.23, E2 ubiquitin-conjugating enzyme B, RAD6 homolog B, HR6B, hHR6B, Ubiquitin carrier protein B, Ubiquitin-conjugating enzyme E2-17 kDa, Ubiquitin-protein ligase B, UBE2B (HGNC:12473)
Target Background	Ubiquitinconjugating Enzyme E2 B (UBE2B), also referred to as Homolog of Rad6B (HR6B), is a member of the Ubiquitinconjugating (E2) enzyme family. It has apredicted molecular weight of 17 kDa, and is highly expressed in the brain, heart, andtestis. UBE2B forms a thioester bond with ubiquitin through a cysteine residue in its catalytic core domain.Studies indicate that UBE2B may play a critical role in male fertility and overexpression may be linked to certain types of cancer. Recombinant Human UBE2B produced in E. coli cells is a single non-glycosylated polypeptide chain containing 159 amino acids. A fully biologically active molecule, rhUBE2B has a molecular mass of 18.3 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at .

Protein Information

Name	UBE2B (HGNC:12473)
Function	E2 ubiquitin-conjugating enzyme that accepts ubiquitin from the ubiquitin-activating enzyme E1 and transfers it to a E3 ubiquitin- protein ligase (PubMed:16337599, PubMed:17108083, PubMed:17130289, PubMed:1717990, PubMed:20061386). In vitro catalyzes 'Lys-11'-, as well as

'Lys-48'- and 'Lys-63'-linked polyubiquitination (PubMed:20061386). Together with the E3 enzyme BRE1 (RNF20 and/or RNF40), plays a role in transcription regulation by catalyzing the monoubiquitination of histone H2B at 'Lys-120' to form H2BK120ub1 (PubMed:16337599). H2BK120ub1 gives a specific tag for epigenetic transcriptional activation, elongation by RNA polymerase II, telomeric silencing, and is also a prerequisite for H3K4me and H3K79me formation (PubMed:16337599). May play a role in DNA repair (PubMed:8062904). Associates to the E3 ligase RAD18 to form the UBE2B-RAD18 ubiquitin ligase complex involved in mono-ubiquitination of DNA-associated PCNA on 'Lys-164' (PubMed:17108083, PubMed:17130289). In association with the E3 enzyme UBR4, is involved in N-end rule-dependent protein degradation (PubMed:38182926). May be involved in neurite outgrowth (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P63149}. Nucleus {ECO:0000250|UniProtKB:P63149}. Note=In peripheral neurons, expressed both at the plasma membrane and in nuclei {ECO:0000250|UniProtKB:P63149}

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