

**Human UBE2B**  
Catalog # PVGS1211**Specification****Human UBE2B - Product Information**Primary Accession [P63146](#)**Sequence**MHHHHHHAMG QLRSMPAR RRLMRDFKRL QEDPPVGVSG APSENNIMQW NAVIFGPEGT PFEDGTFKLV  
IEFSEEYPNK PPTVRFLSKM FHPNVYADGS ICLDILQNRW SPTYDVSSIL TSIQSLLDEP NPNSPANQA  
AQLYQENKRE YEKRVAIVE QSWNDS**Purity**

&gt; 95% as analyzed by SDS-PAGE&amp;HPLC.

**Endotoxin Level**

&lt; 0.2 EU/ µg, determined by LAL method.

**Formulation****yophilized after extensive dialysis against PBS.****Reconstitution**Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.**Human UBE2B - 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](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=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 a predicted molecular weight of 17 kDa, and is highly expressed in the brain, heart, and testis. 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 .**Human UBE2B - 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:<a href="http://www.uniprot.org/citations/16337599" target="\_blank">16337599</a>, PubMed:<a href="http://www.uniprot.org/citations/17108083" target="\_blank">17108083</a>, PubMed:<a href="http://www.uniprot.org/citations/17130289" target="\_blank">17130289</a>, PubMed:<a href="http://www.uniprot.org/citations/1717990" target="\_blank">1717990</a>, PubMed:<a href="http://www.uniprot.org/citations/20061386" target="\_blank">20061386</a>). In vitro catalyzes 'Lys-11'-, as well as 'Lys-48'- and 'Lys-63'-linked polyubiquitination (PubMed:<a href="http://www.uniprot.org/citations/20061386" target="\_blank">20061386</a>). 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:<a href="http://www.uniprot.org/citations/16337599" target="\_blank">16337599</a>). 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:<a href="http://www.uniprot.org/citations/16337599" target="\_blank">16337599</a>). May play a role in DNA repair (PubMed:<a href="http://www.uniprot.org/citations/8062904" target="\_blank">8062904</a>). 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:<a href="http://www.uniprot.org/citations/17108083" target="\_blank">17108083</a>, PubMed:<a href="http://www.uniprot.org/citations/17130289" target="\_blank">17130289</a>). In association with the E3 enzyme UBR4, is involved in N-end rule-dependent protein degradation (PubMed:<a href="http://www.uniprot.org/citations/38182926" target="\_blank">38182926</a>). 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}

### Human UBE2B - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Human UBE2B - Images