10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

UBE2D3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP16801b

Specification

UBE2D3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P61077

UBE2D3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 7323

Other Names
Ubiquitin-conjugating enzyme E2 D3, Ubiquitin carrier protein D3, Ubiquitin-conjugating enzyme E2(17)KB 3, Ubiquitin-conjugating enzyme E2-17 kDa 3, Ubiquitin-protein ligase D3, UBE2D3, UBC5C, UBCH5C

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

UBE2D3 Antibody (C-term) Blocking Peptide - Protein Information

Name UBE2D3

Synonyms UBC5C, UBCH5C

Function
Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins (PubMed:15247280, PubMed:15496420, PubMed:18284575, PubMed:20061386, PubMed:21532592). In vitro catalyzes 'Lys-11'-, as well as 'Lys-48'-linked polyubiquitination (PubMed:15247280, PubMed:15496420, PubMed:18284575, PubMed:20061386, PubMed:21532592). Cooperates with the E2 CDC34 and the SCF(FBXW11) E3 ligase complex for the polyubiquitination of NFKBIA leading to its subsequent proteasomal degradation (PubMed:<a

href="http://www.uniprot.org/citations/20347421" target="_blank">20347421). Acts as an initiator E2, priming the phosphorylated NFKBIA target at positions 'Lys-21' and/or 'Lys-22' with a monoubiquitin (PubMed:10329681). Ubiquitin chain elongation is then performed by CDC34, building ubiquitin chains from the UBE2D3-primed NFKBIA-linked ubiquitin (PubMed:10329681). Acts also as an initiator E2, in conjunction with RNF8, for the priming of PCNA (PubMed:18948756). Monoubiquitination of PCNA, and its subsequent polyubiquitination, are essential events in the operation of the DNA damage tolerance (DDT) pathway that is activated after DNA damage caused by UV or chemical agents during S-phase (PubMed:18948756). Associates with the BRCA1/BARD1 E3 ligase complex to perform ubiquitination at DNA damage sites following ionizing radiation leading to DNA repair (PubMed:16628214). Targets DAPK3 for ubiquitination which influences promyelocytic leukemia protein nuclear body (PML-NB) formation in the nucleus (PubMed:18515077). In conjunction with the MDM2 and TOPORS E3 ligases, functions ubiquitination of p53/TP53 (PubMed:12646252, PubMed:15280377). In conjunction with the CBL E3 ligase, targets EGFR for polyubiquitination at the plasma membrane as well as during its internalization and transport on endosomes (PubMed:18508924). In conjunction with the STUB1 E3 quality control E3 ligase, ubiquitinates unfolded proteins to catalyze their immediate destruction (PubMed:11743028). Together with RNF135, catalyzes the viral RNA- dependent 'Lys-63'-linked polyubiquitination of RIGI to activate the downstream signaling pathway that leads to interferon beta production (PubMed:28469175). Together with ZNF598, catalyzes ubiquitination of 40S ribosomal proteins in response to ribosome collisions (PubMed:28685749). In cooperation with the GATOR2 complex, catalyzes 'Lys-6'-linked ubiquitination of NPRL2 (PubMed:36528027).

Cellular Location
Cell membrane; Peripheral membrane protein. Endosome membrane; Peripheral membrane protein

UBE2D3 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

UBE2D3 Antibody (C-term) Blocking Peptide - Images

UBE2D3 Antibody (C-term) Blocking Peptide - Background

The modification of proteins with ubiquitin is animportant cellular mechanism for targeting abnormal or short-livedproteins for degradation. Ubiquitination involves at least threeclasses of enzymes: ubiquitin-activating enzymes, or E1s,ubiquitin-conjugating enzymes, or E2s, and ubiquitin-proteinligases, or E3s. This gene encodes a member of the E2ubiquitin-conjugating enzyme family. This enzyme functions in theubiquitination of the tumor-suppressor protein p53, which isinduced by an E3 ubiquitin-protein ligase. Multiple splicedtranscript variants have been found for this gene, but thefull-length nature of some variants has not been determined.

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UBE2D3 Antibody (C-term) Blocking Peptide - References

Kalsi, G., et al. Hum. Mol. Genet. 19(12):2497-2506(2010)Wu, K., et al. Mol. Cell 37(6):784-796(2010)Vina-Vilaseca, A., et al. J. Biol. Chem. 285(10):7645-7656(2010)Markson, G., et al. Genome Res. 19(10):1905-1911(2009)van Wijk, S.J., et al. Mol. Syst. Biol. 5, 295 (2009) :