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BostonBiochem

MATERIAL DATA SHEET

Ubc13/UBE2N, *human recombinant*
Cat. # E2-660

Ubiquitin-conjugating Enzyme E2N (UBE2N), also known as Ubiquitin-conjugating Enzyme 13 (Ubc13), is a member of the Ubiquitin-conjugating (E2) enzyme family. UBE2N has a predicted molecular weight of 17 kDa. The human enzyme shares 100% and 99% amino acid sequence identity with its mouse and rat orthologs, respectively. UBE2N has an E2 catalytic core domain with an active site cysteine residue that is required for the formation of a thioester bond with Ubiquitin. UBE2N localizes to both the nucleus and cytoplasm. UBE2N forms a heterodimeric complex with UBE2V1 and UBE2V2, both of which are catalytically inactive E2 enzyme variants. The UBE2N/UBE2V1 Complex is found in the cytoplasm and is important for inflammatory responses via Nuclear Factor kappa B (NF-κB) activation. In contrast, the UBE2N/UBE2V2 complex functions in the nucleus and is required for an efficient DNA damage response. This protein has an N-terminal His6-tag.

Product Information	
Quantity:	100 µg
Stock:	X mg/ml (X µM) in 50 mM HEPES, pH 8.0, 150 mM NaCl, 10% glycerol, 1 mM DTT
MW:	18 kDa
Purity:	> 90% by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie Blue stain

Use & Storage	
Use:	Recombinant Human UBE2N/Ubc13 is a member of the Ubiquitin-conjugating Enzyme (E2) family that—in complex with UBE2V1 or UBE2V2—receives Ubiquitin from a Ubiquitin-Activating Enzyme (E1) and subsequently interacts with a Ubiquitin ligase (E3) to conjugate ubiquitin to substrate proteins. Reaction conditions will need to be optimized for each specific application.
Storage:	Store at -80°C. Avoid multiple freeze-thaw cycles.

840 Memorial Drive, Cambridge, MA 02139 Phone: 617-576-2210 FAX: 617-492-3565
www.bostonbiochem.com

Literature

References:

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Laine, A. *et al.* (2006) Mol. Cell. Biol. **26**: 8901
Andersen, P.L. *et al.* (2005) J. Cell Biol. **170**: 745
Pertel, T. *et al.* (2011) Nature **472**: 361
Zhao, G.Y. *et al.* (2007) Mol. Cell **25**: 663

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