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MATERIAL DATA SHEET

Recombinant Human UbcH2/UBE2H Dominant Negative
Cat. # E2-608

Ubiquitin-conjugating Enzyme H2 (UbcH2), also known as Ubiquitin-conjugating Enzyme E2H (UBE2H), is a member of the Ubiquitin-conjugating (E2) enzyme family (1). UbcH2/UBE2H has a predicted molecular weight of 20.5 kDa. The human protein shares 100% amino acid sequence identity with the mouse and rat orthologs. Human UbcH2/UBE2H is highly expressed in skeletal and cardiac muscle, shows significant expression levels in kidney and placenta, and is expressed at low levels in liver, brain, lung, and spleen (2). TNF-alpha induces UbcH2/UBE2H expression via NF-κB, and SCL/Tal1 upregulates the expression of UbcH2/UBE2H during erythroid differentiation (2,3). Pathologically, a single nucleotide polymorphism within UbcH2/UBE2H is associated with autism (4). Furthermore, UbcH2/UBE2H has been reported as a putative oncogene for liver tumorigenesis (5). The active site of this protein was chemically inactivated for use as a negative or competitive control.

Product Information	
Quantity:	100 µg
Source:	*E. coli*-derived Accession # P62256
Stock:	Supplied as a solution in HEPES, NaCl, DTT and Glycerol.
Purity:	>95%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage	
Use:	The Ubiquitin-conjugating (E2) enzyme family receives Ubiquitin from a Ubiquitin-activating (E1) enzyme and subsequently interacts with a Ubiquitin ligase (E3) to conjugate Ubiquitin to substrate proteins. Recombinant Human UbcH2/UBE2H Dominant Negative is catalytically inactive and is ideal for use as a negative control. Reaction conditions will need to be optimized for each specific application. We recommend an initial Recombinant Human UbcH2/UBE2H Dominant Negative concentration of 0.1-1 µM.
Storage:	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -70 °C as supplied. • 3 months, -70 °C under sterile conditions after opening.

Literature

References:

1. Kaiser, P. *et al*. (1994) J. Biol. Chem. **269**:8797.
2. Li, Y.P. *et al*. (2003) FASEB J. **17**:1048.
3. Lausen, J. *et al*. (2010) J. Biol. Chem. **285**:5338.
4. Vourc'h, P. *et al*. (2003) Psychiatr. Genet. **13**:221.
5. Keng, V.W. *et al*. (2009) Nat. Biotechnol. **27**:264.

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