

**MATERIAL DATA SHEET****UBE2I (Ubc9) Dominant Negative, *human recombinant***  
**Cat. # E2-646**

UBE2I (Ubc9) is a member of the E2 family and is homologous to ubiquitin-conjugating enzymes, but is specific for the conjugation of SUMO to a variety of target proteins. This E2 is unusual in that it interacts directly with protein substrates that are modified by SUMOylation, and may play a role in substrate recognition. UbcH9 can mediate the conjugation of all SUMOs to a variety of proteins including RanGAP1, I $\kappa$ B $\alpha$ , and PML without the requirement of an E3 ligase. This enzyme has a mutation of the active site from cysteine to serine which abolishes the ability of UbcH9 to transfer ubiquitin to an accepting E3 protein. Ideal for use as a negative or competitive control, or to study protein-protein interactions.

**Product Information**

<b>Quantity:</b>	X $\mu$ g
<b>Stock:</b>	X mg/ml (X $\mu$ M) in 50 mM HEPES pH 7.6, 125 mM NaCl, 10% glycerol, 1 mM DTT. Actual concentration will vary with specific Lot #.
<b>MW:</b>	20 kDa
<b>Purity:</b>	> 95 % by SDS-PAGE

**Use & Storage**

<b>Use:</b>	Typical enzyme concentration to support conjugation <i>in vitro</i> is 100 nM-1 $\mu$ M depending on conditions.
<b>Storage:</b>	Store at -80°C. Avoid multiple freeze/thaw cycles.

**Literature**

<b>References:</b>	Desterro J.M., <i>et al.</i> (1999) <i>J. Biol. Chem.</i> <b>274</b> :10618-24 Joana M.P., <i>et al.</i> (1997) <i>FEBS. Lett.</i> <b>417</b> :3168-3179 Johnson E.S and Blobel G. (1997) <i>J. Biol. Chem.</i> <b>272</b> :26799-26794 Ito K., <i>et al.</i> (1999) <i>Cytogenet. Cell.</i> <b>84</b> :99-104 Liu Q., <i>et al.</i> (1999) <i>J. Biol. Chem.</i> <b>274</b> :16979-16987 Matushewski K., <i>et al.</i> (1996) <i>J. Biol. Chem.</i> <b>271</b> :2789-2794 Sampson D.A., <i>et al.</i> (2001) <i>J. Biol. Chem.</i> <b>276</b> :21664-21669 Tatham M.H., <i>et al.</i> (2003) <i>Biochem.</i> <b>42</b> :3168-3179
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