

Lot # XXXXX

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MATERIAL DATA SHEET

His₆-UBE2S, *human recombinant*

Cat. # E2-690

UBE2S (E2-24K, E2-EPF) shares 38% identity with *S.cerevisiae* UBC4 with a conserved UBC domain that is characteristic of ubiquitin E2 conjugating enzymes. This E2 enzyme is over-expressed in common human cancers and targets von Hippel-Lindau (VHL) for proteosomal degradation, thereby stabilizing HIF-1 α for Ub-mediated destruction. Overexpression of Ube2S *in vitro* and *in vivo* boosts tumor-cell proliferation, invasion and metastasis through effects on the pVHL-HIF pathway, and may thus be a novel molecular target for therapeutic intervention. Ube2S has also been identified as a K11-specific E2 for the anaphase-promoting complex (APC/C), and the E2 depends on the cell cycle-dependent association with the APC/C activators Cdc20 and Cdh1 for its activity. *In vitro*, UBE2S elongates ubiquitin chains initiated by the E2 enzymes UBCH10 and UBCH5, enhancing the degradation of APC/C substrates by the proteasome. This recombinant protein has an N-terminal 6His-tag.

Product Information

Quantity:	50 100 μ g
Stock:	0.64 mg/ml (25 μ M) in 50 mM Hepes, pH 7.5, 200 mM NaCl, 1 mM TCEP, and 10% glycerol
MW:	26 kDa
Purity:	> 95% by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie Blue stain.

Use & Storage

Use:	Recombinant Human His ₆ -UBE2S is a member of the Ubiquitin-conjugating (E2) enzyme family that 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. We recommend an initial His ₆ -UBE2S concentration of 0.1-1 μ M.
Storage:	Store at -80°C. Avoid multiple freeze/thaw cycles.

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Literature

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For Laboratory Research Use Only, Not For Use in Humans

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