

Recombinant Human UBE2I/UBC9 Protein, His

#R00518

Size: 10 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 6 months from date of receipt, -20 to -70 °C as supplied.
- 3 months, -20 to -70 °C under sterile conditions after opening.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Ubiquitin-conjugating Enzyme E2 I (UBE2I), also known as Ubiquitin-conjugating Enzyme 9 (UBC9) belongs to the ubiquitin-conjugating enzyme family and is encoded by the UBE2I gene in humans. The ubiquitin-conjugating enzymes, also known as E2 enzymes and more rarely as ubiquitin-carrier enzymes, take part in the second step in the ubiquitination reaction. In this reaction, E1 activates the ubiquitin by covalently attaching the molecule to its active site cysteine residue. The activated ubiquitin is then transferred to an E2 cysteine and then the E2 molecule binds E3 via a structurally conserved binding region. The UBE2I/UBC9 accepts the ubiquitin-like proteins SUMO1-4 from the UBLE1A-UBLE1B E1 complex and catalyzes their covalent attachment to other proteins with the help of an E3 ligase such as RANBP2 or CBX4. Additionally, it takes parts in catalysis the formation of poly-SUMO chains, sumoylation of FOXL2 and KAT5,

and the segregation of nuclear architecture and chromosome.

AA Sequence

MHHHHHHAMGTLNMSGIALSRLAQERKAWRKDHPF
GFVAVPTKNPDGTMNLMNWECAIPGKKGTPWEGGL
FKLRMLFKDDYPSSPPKCKFEPPLFHPNVYPSGTVC
LSILEEDKDWRPAITIKQILLGIQELLNEPNIQDPAQAEA
YTIYCQNRVEYEKRVRAQAKKFAPS

Product Specification

Synonyms	SUMO-protein Ligase, Ubiquitin Carrier Protein 9, Ubiquitin Carrier Protein I, Ubiquitin-conjugating Enzyme E2 I, Ubiquitin-protein Ligase I, p18
Species	Human
Source	Escherichia coli.
Tags	His
Molecular Weight	Approximately 19.5 kDa, a single non-glycosylated polypeptide chain containing 158 amino acids (a.a.) of human UBE2I/UBC9 and 8 a.a. vector sequence including 6 × His tag at N-terminus.
Purity	> 95 % by SDS-PAGE and HPLC analyses.

Biological Activity	Data is not available.
Physical Appearance	Sterile Colorless liquid.
Concentration	See CoA.
Formulation	A 0.2 μ m filtered concentrated solution in 50 mM HEPES, pH 7.6, with 125 mM NaCl, 10 % Glycerol, 1 mM DTT.
Endotoxin	Less than 1 EU/ μ g of rHuUBE2I/UBC9, His as determined by LAL method.
