Data Sheet (Cat.No.TMPY-02496)

TargetMol

Rad6/UBE2A Protein, Human, Recombinant (His)

General Information

Synonyms: UBC2;HHR6A;MRXS30;MRXSN;RAD6A;ubiquitin-conjugating enzyme E2A

Protein Construction: A DNA sequence encoding the mature form of human UBE2A (P49459) (Met 1-Cys 152) was expressed, with a polyhistidine tag at the N-terminus. Predicted N terminal: Met 1

Species: Human

Expression Host: E. coli

Accession: P49459

Molecular Weight: 19.2 kDa (predicted); 18.5 kDa (reducing conditions)

QC Testing

Biological Activity: Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.

Purity: > 80 % as determined by SDS-PAGE

Endotoxin: Please contact us for more information.

Formulation: Supplied as sterile PBS, 20% glycerol, pH 7.5.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

Proteins are shipped with blue ice.

Protein Background

Ubiquitin-conjugating enzyme E2 A (also known as HHR6A or UBE2A), encoded by human DNA repair genes HHR6A, belongs to the ubiquitin-conjugating enzymes (E2 enzymes) family and is likely to be involved in postreplication repair and induced mutagenesis. UBE2A is described as a CDK2 substrate. It is the human homologue of the product of the Saccharomyces cerevisiae RAD6 / UBC2 gene, a member of the family of ubiquitin-conjugating enzymes. In vivo, HHR6A phosphorylation peaks during the G2/M phase of cell cycle transition, with a concomitant increase in histone H2B ubiquitylation. Mutation of Ser120 to threonine or alanine abolished UBE2A activity, while mutation to aspartate to mimic phosphorylated serine increased UBE2A activity 3-fold. A mutation of UBE2A is considered as the cause of a novel X-linked mental retardation (XLMR) syndrome that

affects three males in a two-generation family.

Reference

Nascimento RM,et al. (2006) UBE2A, which encodes a ubiquitin-conjugating enzyme, is mutated in a novel X-linked mental retardation syndrome. Am J Hum Genet. 79 (3): 549-55.
Koken MH,et al. (1992) Localization of two human homologs, HHR6A and HHR6B, of the yeast DNA repair gene RAD6 to chromosomes Xq24-q25 and 5q23-q31. Genomics. 12 (3): 447-53.
Sarcevic B,et al. (2002) Regulation of the ubiquitin-conjugating enzyme hHR6A by CDK-mediated phosphorylation. EMBO J. 21 (8): 2009-18.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481