

Product datasheet for TL300421V

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Ku80 (XRCC5) Human shRNA Lentiviral Particle (Locus ID 7520)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Ku80 (XRCC5) Human shRNA Lentiviral Particle (Locus ID 7520)

Locus ID: 7520

Synonyms: KARP-1; KARP1; KU80; Ku86; KUB2; NFIV

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: XRCC5 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 021141, NM 021141.1, NM 021141.2, NM 021141.3, BC095442, BC095442.1, BC019027,

NM 021141.4

UniProt ID: P13010

Summary: The protein encoded by this gene is the 80-kilodalton subunit of the Ku heterodimer protein

which is also known as ATP-dependent DNA helicase II or DNA repair protein XRCC5. Ku is the DNA-binding component of the DNA-dependent protein kinase, and it functions together with

the DNA ligase IV-XRCC4 complex in the repair of DNA double-strand break by non-homologous end joining and the completion of V(D)J recombination events. This gene functionally complements Chinese hamster xrs-6, a mutant defective in DNA double-strand

break repair and in ability to undergo V(D)J recombination. A rare microsatellite

polymorphism in this gene is associated with cancer in patients of varying radiosensitivity.

[provided by RefSeq, Jul 2008]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).