

## Product datasheet for **RC210649L4V**

### **Ku80 (XRCC5) (NM\_021141) Human Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	Ku80 (XRCC5) (NM_021141) Human Tagged ORF Clone Lentiviral Particle
Symbol:	Ku80
Synonyms:	KARP-1; KARP1; KU80; Ku86; KUB2; NFIV
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_021141
ORF Size:	2196 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC210649).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	<a href="#">NM_021141.2</a>
RefSeq Size:	3448 bp
RefSeq ORF:	2199 bp
Locus ID:	7520
UniProt ID:	<a href="#">P13010</a>
Cytogenetics:	2q35
Domains:	VWA, Ku_C, Ku_N, ku
Protein Families:	Druggable Genome, Stem cell - Pluripotency



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**Protein Pathways:** Non-homologous end-joining

**MW:** 82.7 kDa

**Gene Summary:** The protein encoded by this gene is the 80-kilodalton subunit of the Ku heterodimer protein which is also known as ATP-dependant 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]