

## **Product datasheet for RC210649L2**

### OriGene Technologies, Inc.

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### Ku80 (XRCC5) (NM\_021141) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Ku80 (XRCC5) (NM\_021141) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: Ku80

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

Mammalian Cell None

Selection:

Vector:pLenti-C-mGFP (PS100071)E. coli Selection:Chloramphenicol (34 ug/mL)

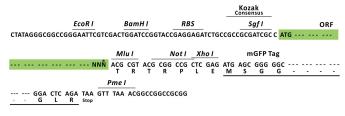
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC210649).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_021141

ORF Size: 2196 bp



### Ku80 (XRCC5) (NM\_021141) Human Tagged Lenti ORF Clone - RC210649L2

**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. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 021141.2</u>

 RefSeq Size:
 3448 bp

 RefSeq ORF:
 2199 bp

 Locus ID:
 7520

 UniProt ID:
 P13010

 Cytogenetics:
 2q35

Domains: VWA, Ku C, Ku N, ku

**Protein Families:** Druggable Genome, Stem cell - Pluripotency

**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

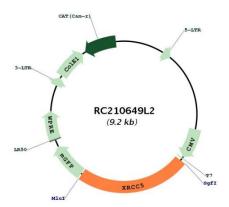
break repair and in ability to undergo V(D)J recombination. A rare microsatellite

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

[provided by RefSeq, Jul 2008]



# **Product images:**



Circular map for RC210649L2