

# Product datasheet for KN302249BN

## Brca2 Mouse Gene Knockout Kit (CRISPR)

## **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control
Donor DNA:	mBFP-Neo
Symbol:	Brca2
Locus ID:	12190
Components:	<ul> <li>KN302249G1, Brca2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)</li> <li>KN302249G2, Brca2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)</li> <li>KN302249BND, donor DNA containing left and right homologous arms and mBFP-Neo functional cassette.</li> <li>GE100003, scramble sequence in pCas-Guide vector</li> </ul>
Disclaimer:	These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.
RefSeq:	<u>NM 001081001, NM 009765</u>
UniProt ID:	<u>P97929</u>
Synonyms:	Fancd1; RAB163

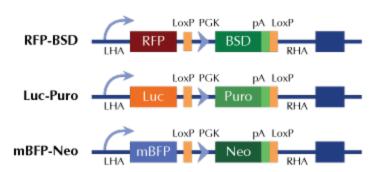


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Involved in double-strand break repair and/or homologous recombination. Binds RAD51 and Summary: potentiates recombinational DNA repair by promoting assembly of RAD51 onto singlestranded DNA (ssDNA). Acts by targeting RAD51 to ssDNA over double-stranded DNA, enabling RAD51 to displace replication protein-A (RPA) from ssDNA and stabilizing RAD51ssDNA filaments by blocking ATP hydrolysis. Part of a PALB2-scaffolded HR complex containing RAD51C and which is thought to play a role in DNA repair by HR. May participate in S phase checkpoint activation. Binds selectively to ssDNA, and to ssDNA in tailed duplexes and replication fork structures. May play a role in the extension step after strand invasion at replication-dependent DNA double-strand breaks; together with PALB2 is involved in both POLH localization at collapsed replication forks and DNA polymerization activity. In concert with NPM1, regulates centrosome duplication. Interacts with the TREX-2 complex (transcription and export complex 2) subunits PCID2 and SEM1, and is required to prevent Rloop-associated DNA damage and thus transcription-associated genomic instability, independently of its known role in homologous recombination (By similarity). [UniProtKB/Swiss-Prot Function]

### **Product images:**



Donor Vector Edited Chromosome

RFP, Luc, and mBFP will be under native gene promoter

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