

## Product datasheet for **KN200478RB**

### ERCC1 Human Gene Knockout Kit (CRISPR)

#### Product data:

|               |  |
|---------------|--|
| Product Type: | Knockout Kits (CRISPR)   |
| Format:       | 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control  |
| Donor DNA:    | RFP-BSD  |
| Symbol:       | ERCC1  |
| Locus ID:     | 2067   |
| Components:   | <b>KN200478G1</b> , ERCC1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)<br><b>KN200478G2</b> , ERCC1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)<br><b>KN200478RBD</b> , donor DNA containing left and right homologous arms and RFP-BSD functional cassette.<br><b>GE100003</b> , scramble sequence in pCas-Guide vector  |
| 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:       | <a href="#">NM_001166049</a> , <a href="#">NM_001983</a> , <a href="#">NM_202001</a> , <a href="#">NM_001369409</a> , <a href="#">NM_001369414</a> , <a href="#">NM_001369416</a> ,<br><a href="#">NM_001369419</a> , <a href="#">NM_001369408</a> , <a href="#">NM_001369410</a> , <a href="#">NM_001369411</a> , <a href="#">NM_001369412</a> ,<br><a href="#">NM_001369413</a> , <a href="#">NM_001369415</a> , <a href="#">NM_001369417</a> , <a href="#">NM_001369418</a> |
| UniProt ID:   | <a href="#">P07992</a>   |
| Synonyms:     | COFS4; RAD10; UV20   |



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**Summary:**

The product of this gene functions in the nucleotide excision repair pathway, and is required for the repair of DNA lesions such as those induced by UV light or formed by electrophilic compounds including cisplatin. The encoded protein forms a heterodimer with the XPF endonuclease (also known as ERCC4), and the heterodimeric endonuclease catalyzes the 5' incision in the process of excising the DNA lesion. The heterodimeric endonuclease is also involved in recombinational DNA repair and in the repair of inter-strand crosslinks. Mutations in this gene result in cerebrooculofacioskeletal syndrome, and polymorphisms that alter expression of this gene may play a role in carcinogenesis. Multiple transcript variants encoding different isoforms have been found for this gene. The last exon of this gene overlaps with the CD3e molecule, epsilon associated protein gene on the opposite strand. [provided by RefSeq, Oct 2009]

**Product images:**
