

## Product datasheet for **KN203222**

### Calreticulin (CALR) Human Gene Knockout Kit (CRISPR)

#### Product data:

**Product Type:** Knockout Kits (CRISPR)  
**Format:** 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control  
**Donor DNA:** GFP-puro  
**Symbol:** Calreticulin  
**Locus ID:** 811  
**Components:** **KN203222G1**, Calreticulin gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTCTGGACGGAGGTAACGCC  
**KN203222G2**, Calreticulin gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGCTCCTTGAAGTAGACGGC  
**KN203222D**, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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**GE100003**, 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:**

[NM\\_004343](#)

**UniProt ID:**

[P27797](#)

**Synonyms:**

cC1qR; CRT; HEL-S-99n; RO; SSA

**Summary:**

Calreticulin is a highly conserved chaperone protein which resides primarily in the endoplasmic reticulum, and is involved in a variety of cellular processes, among them, cell adhesion. Additionally, it functions in protein folding quality control and calcium homeostasis. Calreticulin is also found in the nucleus, suggesting that it may have a role in transcription regulation. Systemic lupus erythematosus is associated with increased autoantibody titers against calreticulin. Recurrent mutations in calreticulin have been linked to various neoplasms, including the myeloproliferative type.[provided by RefSeq, May 2020]

Product images:

