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Product datasheet for KN204783

XRCC4 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: XRCC4

Locus ID: 7518

Components: **KN204783G1**, XRCC4 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGTAGAAAATGAGTTATACT
KN204783G2, XRCC4 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTGTAGAAAATGAGTTATAC
KN204783D, 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 GTGGTGTCAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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.

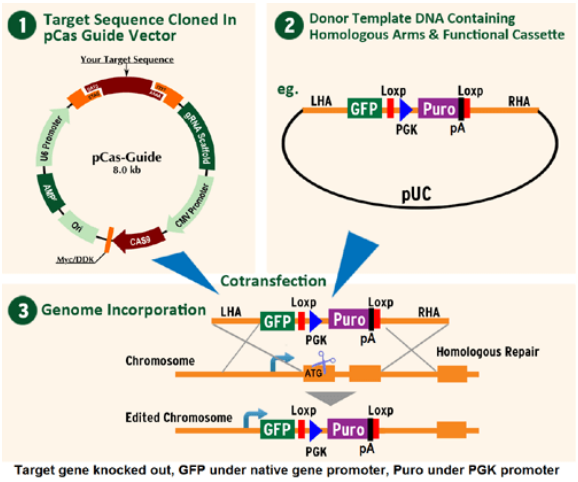
RefSeq: NM_001318012, NM_001318013, NM_003401, NM_022406, NM_022550

UniProt ID: Q13426

Synonyms: SSMED

Summary: The protein encoded by this gene functions together with DNA ligase IV and the DNA-dependent protein kinase in the repair of DNA double-strand breaks. This protein plays a role in both non-homologous end joining and the completion of V(D)J recombination. Mutations in this gene can cause short stature, microcephaly, and endocrine dysfunction (SSMED). Alternate transcript variants such as NM_022406 are unlikely to be expressed in some individuals due to a polymorphism (rs1805377) in the last splice acceptor site. [provided by RefSeq, Oct 2019]

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter