

Product datasheet for **KN305380**

Esr1 Mouse 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: Esr1
Locus ID: 13982
Components: **KN305380G1**, Esr1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGGGCATCTTGAGCTGCGGG
KN305380G2, Esr1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGCAGCAAGGCCATTCCCG
KN305380D, 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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 GGGGATCATG TAACTCGCCT T

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_001302531](#), [NM_001302532](#), [NM_001302533](#), [NM_007956](#), [NR_126357](#)

UniProt ID:

[P19785](#)

Synonyms:

ER; ER-alpha; ERa; ERalpha; ESR; Estr; Estra; Nr3a1

Summary:

This gene encodes an estrogen receptor, a member of the nuclear hormone family of intracellular receptors. The encoded protein, activated by the sex hormone estrogen, is a transcription factor composed of several domains important for hormone binding, DNA binding, and activation of transcription. Estrogen and its receptors are essential for sexual development and reproductive function, but also play a role in other tissues such as bone. Similar genes in human have been implicated in pathological processes including breast cancer, endometrial cancer, and osteoporosis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]

Product images:

