

Product datasheet for **KN212665**

Estrogen Receptor beta (ESR2) 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:	Estrogen Receptor beta
Locus ID:	2100
Components:	<p>KN212665G1, Estrogen Receptor beta gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGTATATGGAGCCGTGCTCC</p> <p>KN212665G2, Estrogen Receptor beta gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: ATGGTGGCTGTCTACATAGG</p> <p>KN212665D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

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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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
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 TACAGGCATC GTGGTGTAC 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_001040275](#), [NM_001040276](#), [NM_001214902](#), [NM_001214903](#), [NM_001271876](#),
[NM_001271877](#), [NM_001291712](#), [NM_001291723](#), [NM_001437](#), [NR_073496](#), [NR_073497](#),
[NR_073505](#)

UniProt ID:

[Q92731](#)

Synonyms:

ER-BETA; Erb; ESR-BETA; ESRB; ESTRB; NR3A2

Summary:

This gene encodes a member of the family of estrogen receptors and superfamily of nuclear receptor transcription factors. The gene product contains an N-terminal DNA binding domain and C-terminal ligand binding domain and is localized to the nucleus, cytoplasm, and mitochondria. Upon binding to 17beta-estradiol or related ligands, the encoded protein forms homo- or hetero-dimers that interact with specific DNA sequences to activate transcription. Some isoforms dominantly inhibit the activity of other estrogen receptor family members. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been fully characterized. [provided by RefSeq, Jul 2008]

Product images:

