

Product datasheet for **KN216224**

TJP1 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:	TJP1
Locus ID:	7082
Components:	<p>KN216224G1, TJP1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTTGGAGGGGGTGACGCCGA</p> <p>KN216224G2, TJP1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCAGCCTCCTGCCGCTCAAG</p> <p>KN216224D, 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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TGGCAACAAC GTTGCACAAA CTATTAACCTG GCGAACTACT TACTCTAGCT TCCCAGCAAC AATTAATAGA
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GGGGGATCAT GTAACCTGCC TT

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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_001301025](#), [NM_001301026](#), [NM_003257](#), [NM_175610](#), [NM_001330239](#), [NM_001355012](#), [NM_001355013](#), [NM_001355014](#), [NM_001355015](#)

UniProt ID:

[Q07157](#)

Synonyms:

ZO-1

Summary:

This gene encodes a member of the membrane-associated guanylate kinase (MAGUK) family of proteins, and acts as a tight junction adaptor protein that also regulates adherens junctions. Tight junctions regulate the movement of ions and macromolecules between endothelial and epithelial cells. The multidomain structure of this scaffold protein, including a postsynaptic density 95/disc-large/zona occludens (PDZ) domain, a Src homology (SH3) domain, a guanylate kinase (GuK) domain and unique (U) motifs all help to co-ordinate binding of transmembrane proteins, cytosolic proteins, and F-actin, which are required for tight junction function. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug 2017]

Product images:

