

Product datasheet for **KN201995**

EMP2 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:	EMP2
Locus ID:	2013
Components:	<p>KN201995G1, EMP2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAAACTTACATTGTGCGACGG</p> <p>KN201995G2, EMP2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GACGGTGGCAATGAACAGCA</p> <p>KN201995D, 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 TGGCCGCACT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA TTCAGCTCCG GTTCCAACG ATC

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_001424](#)

UniProt ID:

[P54851](#)

Synonyms:

XMP

Summary:

This gene encodes a tetraspan protein of the PMP22/EMP family. The encoded protein regulates cell membrane composition. It has been associated with various functions including endocytosis, cell signaling, cell proliferation, cell migration, cell adhesion, cell death, cholesterol homeostasis, urinary albumin excretion, and embryo implantation. It is known to negatively regulate caveolin-1, a scaffolding protein which is the main component of the caveolae plasma membrane invaginations found in most cell types. Through activation of PTK2 it positively regulates vascular endothelial growth factor A. It also modulates the function of specific integrin isomers in the plasma membrane. Up-regulation of this gene has been linked to cancer progression in multiple different tissues. Mutations in this gene have been associated with nephrotic syndrome type 10 (NPHS10). [provided by RefSeq, Mar 2015]

Product images:

