

Product datasheet for KN201995LP

OriGene Technologies, Inc.

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EMP2 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

Donor DNA: Luciferase-Puro

Symbol: EMP2 Locus ID: 2013

Components: KN201995G1, EMP2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN201995G2, EMP2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN201995LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

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: <u>NM 001424</u>

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:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter