

Product datasheet for **KN304781LP**

Dpp4 Mouse 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:	Dpp4
Locus ID:	13482
Components:	KN304781G1 , Dpp4 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) KN304781G2 , Dpp4 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) KN304781LPD , donor DNA containing left and right homologous arms and Luciferase-Puro functional cassette.

Homologous arm and Luciferase-Puro sequences:

pUC vector backbone in gray; Left arm sequence in blue; Luciferase-Puro in green;

Right arm in violet

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TTACTTTTTT GCGGGGGGAG GGACTCCGCG AAAGCAAGTG AACATTCCCC AGGGAGGATT AATACAGATA
TCCAACCTGA AGTGTATTTC AAAAGGGAAC AATCACCTTT TCTCTTCTT TGCCAGCCAG ATAACATGGG
ACACCCAACC CTTTCTCTCA GACTGACAGA CCTCTCAGGG AAGGGGACAA GAGAAGTGGC AGCTAGTTTC
TGCAGTGAGC CGTGAATCTG CCAAACCTCA TGCCTGCTTG AACCTCAGCT GCCTCGATTA TCCACGCAAG
GGAGCAACAG TTAACCTCA ATGTGCAATG TCTCTTTAG CAAAGGGGGT TCGCTGTTCC CCTTATCCCT
CACTCATGGG GGCCCTGCGT GCTACTTCTT GGCTCGCCTA GTGGTCCTAC CGCGCTGGGT CGGCTGCCCC
GCGCTCACAC TGTGCACCGA AGCCCGCCTT GCGCTAACTA ATGTTTAACT CAGGCCGAAA CTTGGCGGGC
AGCTCAGGGT GACTGCGTGC AGAGCAGCCG CGCAGGACGT CCGTCTCTGC GCGCAGTGAC TTCTGCCTGC
GCTCAAGCTT CAGAGTTCAG TTTCAAGGAG CCGCCCGACC GCGGAAGCCA CGGGGCCACC CTCACAGGTG
AAGGCACGTC CGTCCCGGGA ACTGGCTTAG ATCTCTGGCG TGTCTACTG GGACCCAGGC ACTGAGCCTT
GGAAGTCGGG GACGGTCACC CGTGGAACGC ACGCGGCACT CTCATTTGGC ATCAGACGGG TGGGTGGGAG
GAGAGAAGCC AACAAGATC TAAGATCATG CTCAGGGCCA AAATTCAAGG GCTTCTGCTT GAGTGAACGC
CAAACCCCTC AGGTCTACTA GTGCACCTGC AAACCTCTCT GCCTCTGAAG GGGCCTAAGT CCCAACCCCTC
TTCGCAGAGA GGAACAAAGA CTTCCCTCTT AATTGTTTGC AATCTGACCT GCTTGCAGAC ACCGTGGAAG
GTTCTTCTGG GACTGCTTGG TGTGCTGCG CTTGTACCA TCATCACCGT GCCAATAGTT CTGCTGAGCA
AAGGTAGAAC CTTGCAACAT CTTAAAAAGA GAGGGTGGTT GGAGACGGG TCAGGCCGCT CTCAAAGCGA
GCTCAGTTTA TTGGGGGGCC TTGACCCTG TGCTGGGTTA TGGCTGAAGA GACTGTAAG TGTCTCTAAA
TGTATTTGCT

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GE100003, scramble sequence in pCas-Guide vector



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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_001159543](#), [NM_010074](#)

UniProt ID: [P28843](#)

Synonyms: Cd26; Dpp-4; THAM

Summary: Cell surface glycoprotein receptor involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Acts as a positive regulator of T-cell coactivation, by binding at least ADA, CAV1, IGF2R, and PTPRC. Its binding to CAV1 and CARD11 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Its interaction with ADA also regulates lymphocyte-epithelial cell adhesion. In association with FAP is involved in the pericellular proteolysis of the extracellular matrix (ECM), the migration and invasion of endothelial cells into the ECM. May be involved in the promotion of lymphatic endothelial cells adhesion, migration and tube formation. When overexpressed, enhanced cell proliferation, a process inhibited by GPC3. Acts also as a serine exopeptidase with a dipeptidyl peptidase activity that regulates various physiological processes by cleaving peptides in the circulation, including many chemokines, mitogenic growth factors, neuropeptides and peptide hormones. Removes N-terminal dipeptides sequentially from polypeptides having unsubstituted N-termini provided that the penultimate residue is proline.[UniProtKB/Swiss-Prot Function]

Product images:

