

## Product datasheet for **KN204454**

### TAK1 (MAP3K7) 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:	TAK1
Locus ID:	6885
Components:	<b>KN204454G1</b> , TAK1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CATCTCACCGGCCGAAGACG <b>KN204454G2</b> , TAK1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTTTGAAGAGATCGACTACA <b>KN204454D</b> , donor DNA containing left and right homologous arms and GFP-puro functional cassette.

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
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TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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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\\_003188](#), [NM\\_145331](#), [NM\\_145332](#), [NM\\_145333](#)

**UniProt ID:**

[O43318](#)

**Synonyms:**

MEKK7; TAK1; TGF1a

**Summary:**

The protein encoded by this gene is a member of the serine/threonine protein kinase family. This kinase mediates the signaling transduction induced by TGF beta and morphogenetic protein (BMP), and controls a variety of cell functions including transcription regulation and apoptosis. In response to IL-1, this protein forms a kinase complex including TRAF6, MAP3K7P1/TAB1 and MAP3K7P2/TAB2; this complex is required for the activation of nuclear factor kappa B. This kinase can also activate MAPK8/JNK, MAP2K4/MKK4, and thus plays a role in the cell response to environmental stresses. Four alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]

Product images:

