

Product datasheet for **KN207479**

OTX2 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:	OTX2
Locus ID:	5015
Components:	<p>KN207479G1, OTX2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAGTCTGACCACTTCGGGTA</p> <p>KN207479G2, OTX2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AACCGCCTTACGCAGTCAAT</p> <p>KN207479D, 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 TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 ATTGTTGCCG GGAAGCTAGA GTAAGTAGTT CGCCAGTTAA TAGTTTGCGC AACGTTGTTG CCATTGCTAC
 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_001270523](#), [NM_001270524](#), [NM_001270525](#), [NM_021728](#), [NM_172337](#), [NR_073034](#), [NR_073036](#)

UniProt ID:

[P32243](#)

Synonyms:

CPHD6; MCOPS5

Summary:

This gene encodes a member of the bicoid subfamily of homeodomain-containing transcription factors. The encoded protein acts as a transcription factor and plays a role in brain, craniofacial, and sensory organ development. The encoded protein also influences the proliferation and differentiation of dopaminergic neuronal progenitor cells during mitosis. Mutations in this gene cause syndromic microphthalmia 5 (MCOPS5) and combined pituitary hormone deficiency 6 (CPHD6). This gene is also suspected of having an oncogenic role in medulloblastoma. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Pseudogenes of this gene are known to exist on chromosomes two and nine. [provided by RefSeq, Jul 2012]

Product images:

