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Product datasheet for KN223832

DUOX1 Human Gene Knockout Kit (CRISPR)

Product data:

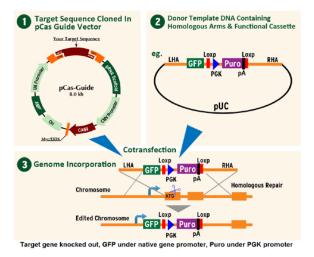
Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	DUOX1
Locus ID:	53905
Components:	 KN223832G1, DUOX1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGCTCTAGCATGGACACTTC KN223832G2, DUOX1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCCTCTGGGTGAGTACAGAT KN223832D, 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 TITGCCAAC ACCTGTCACT TGCTTGAAT TAAACCTCCT TCTCACATTT GATTCTGGCA ACCATGCTTA GAAGTAAACA GTTCAGGCAT ATTTGCTCCC ATAGCTGGAA GAGGAAAACA AGGATCAGAT TGGAGAAGTG ATTTATCTAA GATCCACAG TGGACTGGGA GCAGCACTGA GAGCAAAACA AGGATCAGAT TGGAGAAGTG ATTTATCTAA GATCCCACAG TGGACTGGGA GCAGCACTGA GACCTCAGCC TAGTCTCCG ATCCCCAAGC AGGCCCTCC CTAAGGAACA. CACTCTGCAG AGTGCTGGGC CAAAGCAGGG TTTTCCAACT AATCTTAGAA GGTAAAGTCC ATGAAGGTAT GTACCAGGA TTTTCTGTTGT TGTTGTTCAT CAGTGCTA TGTCAGTGGC TGGTATGTAG TGGTGCTCAT GAAGTATTG CCGAATCAT TAAAGAATTT TCGGAAAGAG TGAGTCTTT GAACTTTGT AGCCTTGGCC AGCCCCAGGC CTTGATTCAC AGAGGCCTGC AGAGTCTTT CACTGATTGT TCTGGTAG GAGCTCATT TATTTTCATC GGAGGAGAA CCCAGCATCC TCTGGGCTCC CCCAAGGCAC GGACCCATT GATTTGTCTGT GTATCTTTCA GGGTCCCAT TTTGGGACAT TCTATCCT GAGCCCCTAT TATTTTCATC GGAGGAAGAA CAGGTGAGAAA ATGGAAGAA CCCAGCATCC TCTGGGCTCC CCCAAGGCAC GGATCCATT TGATTATCTC TGTATCTTTA GGCTCCAT TTTGGGACAT TCTATCCT GAGCCCCTAT TATTTTCATC GGAGGAAAA TAGATGGAAA ATGGAAGAA AATTATCCCC AATACACAG AATTAGGGAG CCTTCAGCTG CTGTCAGCAC TTTCTTTTT ATTCTTACAG TTGGGGGCC CTTTCGCTCT CCTCTCTTT TCTTGTGTTT GGAGCCCAAA TAGAAGAAA AATTATCCCC AATACACAG AATTAGGGAG CCTTCAGCTG CTGTCAGCAC TTTCTTTTT ATTCTTACAG TTGGGGGCC CTTTCCTCT CCTCTCTTT CTCTTGTTTT CCATAAAGTG AGGGCCAAA ATTAGTGCA AATTATCCCC AATACACAG AATTAGGGAG CCTTCAGCTG CTGTCAGCAC TTTCCTCTTT ATTCTTACA GAAAGATT ATTCTCTC CCTCTCTT CTCTGTGTTTT CCATAAAGTG AGGGCCTCG ACTAGAAGTA ATTATCCCC AATACACAG AATTAGGGAG CCTTCAGCTG CTGTCAGCAC TTTCTCTTT ATTCTTACA GACAAAGATT ATTCTCTC CCTCTCTCT CCTCTGTGTTT CCTTGGACAT TGGAGGGA AGTCATCAAT ATGTTTAAC ATTAGGAGG C
	GE100003 , scramble sequence in pCas-Guide vector



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	DUOX1 Human Gene Knockout Kit (CRISPR) – KN223832
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 017434, NM 175940</u>
UniProt ID:	<u>Q9NRD9</u>
Synonyms:	LNOX1; NOXEF1; THOX1
Summary:	The protein encoded by this gene is a glycoprotein and a member of the NADPH oxidase family. The synthesis of thyroid hormone is catalyzed by a protein complex located at the apical membrane of thyroid follicular cells. This complex contains an iodide transporter, thyroperoxidase, and a peroxide generating system that includes proteins encoded by this gene and the similar DUOX2 gene. This protein is known as dual oxidase because it has both a peroxidase homology domain and a gp91phox domain. This protein generates hydrogen peroxide and thereby plays a role in the activity of thyroid peroxidase, lactoperoxidase, and in lactoperoxidase-mediated antimicrobial defense at mucosal surfaces. Two alternatively spliced transcript variants encoding the same protein have been described for this gene. [provided by RefSeq, Jul 2012]

Product images:



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