

Product datasheet for **KN223832RB**

DUOX1 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control
Donor DNA:	RFP-BSD
Symbol:	DUOX1
Locus ID:	53905
Components:	KN223832G1 , DUOX1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) KN223832G2 , DUOX1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) KN223832RBD , donor DNA containing left and right homologous arms and RFP-BSD 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: [NM_017434](#), [NM_175940](#)

UniProt ID: [Q9NRD9](#)

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]



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Product images:

