

Product datasheet for KN223832BN

DUOX1 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo

Symbol: DUOX1

Locus ID: 53905

KN223832G1, DUOX1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN223832G2, DUOX1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN223832BND, donor DNA containing left and right homologous arms and mBFP-Neo

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.

NM 017434, NM 175940 RefSeq:

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]



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

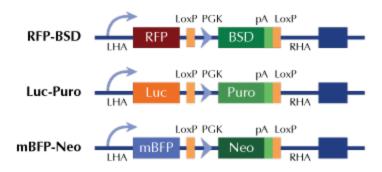
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter