

Product datasheet for **TR304889**

DUOX1 Human shRNA Plasmid Kit (Locus ID 53905)

Product data:

Product Type:	shRNA Plasmids
Product Name:	DUOX1 Human shRNA Plasmid Kit (Locus ID 53905)
Locus ID:	53905
Synonyms:	LNOX1; NOXEF1; THOX1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	DUOX1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 53905). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_017434 , NM_175940 , NM_175940.1 , NM_175940.2 , NM_017434.1 , NM_017434.2 , NM_017434.3 , NM_017434.4 , BC114938 , BC114628 , NM_017434.5 , NM_175940.3
UniProt ID:	Q9NRD9
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]
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



[View online »](#)

**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).