

## Product datasheet for PH323832

### DUOX1 (NM\_175940) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	DUOX1 MS Standard C13 and N15-labeled recombinant protein (NP_787954)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC223832
Predicted MW:	177.1 kDa
Protein Sequence:	>RC223832 representing NM_175940 Red=Cloning site Green=Tags(s)

MGFCLALAWTLLVGAWTPLGAQNPI SWEVQRFDGWYNNLMEHRWGSKGSRLQRLVPASYADGVYQPLGEP  
HLPNPRDLSNTISRGPAGLASLRNRTVLGVFFGYHVLSDLVSVETPGCPAEFLNIRIPPGDPMFDPDQRG  
DVVLPFQSRWDPETGRSPSNRPDPANQVTGWLDGSAIYGSSHSWSDALRSFSRQQLASGDPAPFRDSQ  
NPLLMWAAPDPATGQNGRPLYAFGAERGNREPFLQALGLLWFRYHNLWAQRLARQHPDWEDEELFQHAR  
KRVIATYQNI AVYEWLPSFLQKTLPEYTYRPFLLDPSISSEFVAASEQFLSTMVPPGVYMRNASCHFQGV  
INRNSSVSRALRVCNSYWSREHPSLQSAEDVDALLGMASQIAEREDHVLVEDVRDFWGP LKFSRTDHL  
ASCLQRGRDLGLPSYTKARAALGLSPITRWQDINPALSRSDTVLEATAALYNQDL SWLELLPGGLLESH  
RDPGPLFSTIVLEQFVRLRDGDRYWFENTRNLFSKKEIEEIRNTTLQDVLVAVINIDPSALQPNVFWWH  
KGDPCPQPRQLSTEGLPARAPSVVRDYFEGSGFGFVGTIGTLCCFPVLSLLSAWIVARLMRNFKRLQGG  
DRQSI VSEKLVGMEALEWQGHKEPCRPVLYLQPGQIRVVDGRLTVLRTIQLQPPQKVNFLVSSNRGRR  
TLLLKIPKEYDLVLLFNLEERQALVENLRGALKEGSLIQEWELREQELMRAAVTREQRHLETFFRH  
LFSQVLDINQADAGTLPDSSQKVREALTCELSRAEFAESLGLKQPDMFVESMFSLADKDGNGYLSFREF  
LDILVVFMKGSPEEKSRMLFRMYDFDGNGLISKDEFIRMLRSFIEISNNCLSKAQLAEVVESMFRESGFQ  
DKEELTWEDFHMLRDHNSLRF TQLCVKGVVEPEVIKDL CRRASYISQDMICSPRVSARCSRSDIETE  
LTPQRLQCPMDTDPPEIRRRFGKVT SFQPLLFTEAHREKFORSLHQTVOQFKRFIENYRRHIGCVAV  
FYAIAAGLFLERAYYYFAAHTGITDTRVGIILSRGTAASIFMFSYILLTMCRNLI TFLRETFLNRY  
VPFDAAVDFHRLIASTAI VLTVLH SVGHVNVYLF SISPLSVLSCLFPGLFHDDGSEFPQKYWWFFQTV  
PGLTG VVLLLILAIMYVFASHFRRRSRFRGFWLTHHLYILLYVLLIIHGSFALIQLPFRHFIFFLVPAIIY  
GGDKLVLSRKKVEISVKAELLPSGVTHLRFQRPQGFYKSGQWVRIACLALGTTEYHPFTLTSAPHED  
TLSLHIRAAGPWTRRLREIYSAPTGDRCARYPKLYLDGPFGEHQEWHKFEVSVLVGGGIGVTPFASILK  
DLVFKSSVSCQVFCCKIYFIWVTRTQRQFEWLADI IREVEENDHQDLVSVHIYITQLAEKFDLRTMLYI  
CERHFQKVLNRSFLTGLRSITHFGRPPFEPFNSLQEVHPQVRKIGVFCGPPGMTKNVEKACQLINRQD  
RTHFSHHYENF

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK



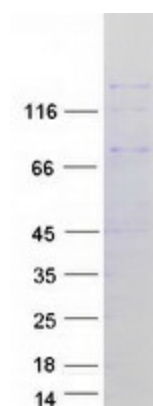
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<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Labeling Method:</b>	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3
<b>Storage:</b>	Store at -80°C. Avoid repeated freeze-thaw cycles.
<b>Stability:</b>	Stable for 3 months from receipt of products under proper storage and handling conditions.
<b>RefSeq:</b>	<a href="#">NP_787954</a>
<b>RefSeq Size:</b>	5501
<b>RefSeq ORF:</b>	4653
<b>Synonyms:</b>	LNOX1; NOXEF1; THOX1
<b>Locus ID:</b>	53905
<b>UniProt ID:</b>	<a href="#">Q9NRD9</a>
<b>Cytogenetics:</b>	15q21.1

**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]

**Protein Families:** Druggable Genome, Transmembrane

### Product images:



Coomassie blue staining of purified DUOX1 protein (Cat# [TP323832]). The protein was produced from HEK293T cells transfected with DUOX1 cDNA clone (Cat# [RC223832]) using MegaTran 2.0 (Cat# [TT210002]).