

Product datasheet for **RG218541**

DUOXA2 (NM_207581) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	DUOXA2
Synonyms:	SIMNIPHOM; TDH5
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG218541 representing NM_207581
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACCCTGTGGAACGGCGTACTGCCTTTTACCCCCAGCCCCGGCATGCCGAGGCTTCAGCGTTCAC
TGCTCATCGTTATTCTAGTGTTTTGGCTCTAGCAGCAAGCTTCCTGCTCATCTTGCCGGGGATCCGTGG
CCACTCGCGCTGGTTTTGGTTGGTGAGAGTTCTTCTCAGTCTGTTTCATAGGCGCAGAAATTGTGGCTGTG
CACTTCAGTGCAGAATGGTTCGTGGGTACAGTGAACACCAACACATCCTACAAAGCCTTCAGCGCAGCGC
GCGTTACAGCCCGTGTCCGTCTGCTCGTGGGCCCTGGAGGGCATTAAATATTACACTCACAGGGACCCAGT
GCATCAGCTGAACGAGACCATTGACTACAACGAGCAGTTACCTGGCGTCTGAAAGAGAATTACGCCGCG
GAGTACGGAACGCACTGGAGAAGGGGCTGCCGACCCAGTGTCTACCTGGCGGAGAAGTTCACACCGA
GTAGCCCTTGCGGCCTGTACCACAGTACCACCTGGCGGGACACTACGCCTCGGCCACGCTATGGGTGGC
GTTCTGCTTCTGGCTCCTCTCAACGTGCTGCTCTCCACGCCGGCCCCGCTCTACGGAGGCCTGGCACTG
CTGACCACCGGAGCCTTCGCGCTCTTCGGGGTCTTCGCCTTGGCCTCCATCTCTAGCGTGCCGCTCTGCC
CGCTCCGCCTAGGCTCCTCCGCGCTCACCCTCAGTACGGCGCCGCTTCTGGGTACGCTGGCAACCGG
CGTCTGTGCCTCTTCTCGGAGGGGCGTGGTGAGTCTCCAGTATGTTTCGGCCAGCGCTCTTCGCACC
CTTCTGGACCAAGCGCAAGGACTGCAGCCAGGAGAGAGGGGGCTACCTCTTATCCTCGGCGACCCAC
TGCACAAGCAGGCCGCTCTCCAGACTTAAATGTATCACCCTAACCTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence: >RG218541 representing NM_207581
Red=Cloning site Green=Tags(s)

MTLWNGVLPFYQPRHAAGFSVPLLVILVFLALAASFLLILPGIRGHSRFWLVRVLLSLFIGAEIVAV
HFSAEFVGTNTNTSYKAFSAARVTARVRLLVGLEGINITLTGTPVHQLNETIDYNEQFTWRLKENYAA
EYANALEKGLPDPVLYLAEKFTPSSPCGLYHQYHLAGHYASATLWVAFCFWLLSNVLLSTPAPLYGGLAL
LTTGAFALFGVFALASISSVPLCPLRLGSSALTTQYGAAFVWTLATGVLCFLGGAVVSLQYVRPSALRT
LLDQSAKDCSQERGGSPILGDPLHKQAALPDLKCITTNL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCGCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGCTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGCGCGGAGCT

- - E E R V Stop

ACCN: NM_207581

ORF Size: 960 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_207581.4

RefSeq Size: 1440 bp

RefSeq ORF: 963 bp

Locus ID: 405753

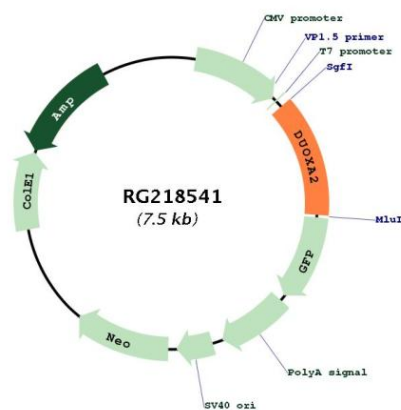
UniProt ID: Q1HG44

Cytogenetics: 15q21.1

Protein Families: Transmembrane

Gene Summary: This gene encodes an endoplasmic reticulum protein that is necessary for proper cellular localization and maturation of functional dual oxidase 2. Mutations in this gene have been associated with thyroid dysmorphogenesis 5.[provided by RefSeq, Feb 2010]

Product images:



Circular map for RG218541