*h*AOC2 VersaClone cDNA

Catalog Number: RDC2630

Specifications:

Gene:	*h*AOC2
Accession:	NP_001149
Insert size:	2203bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

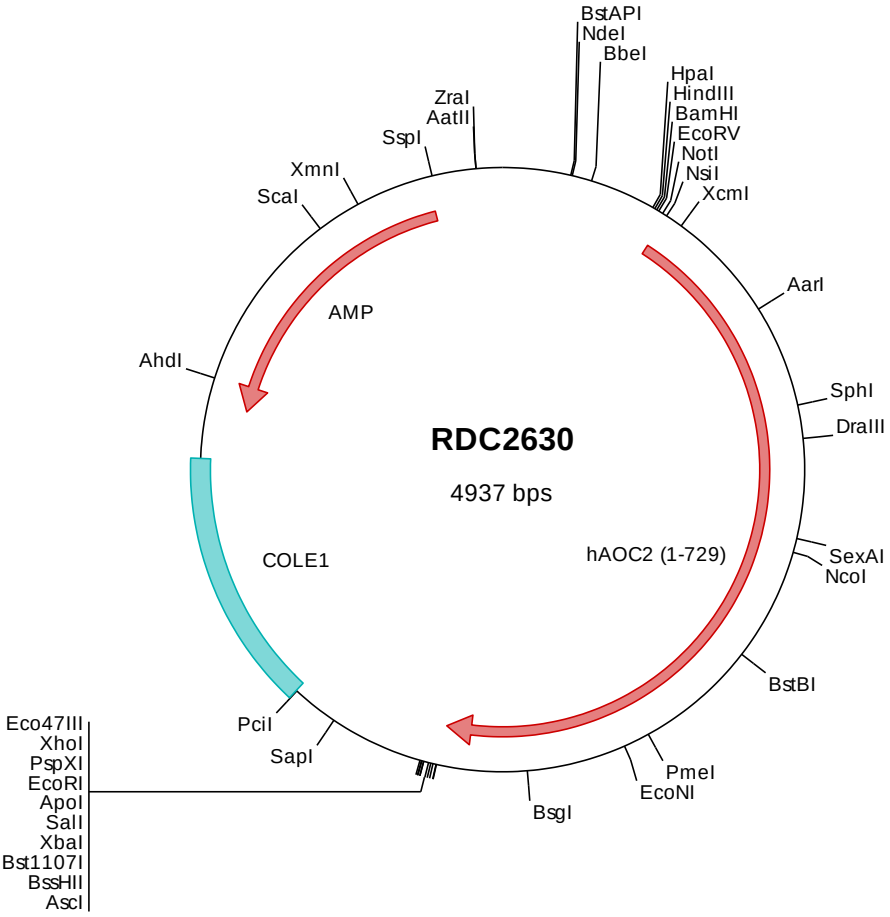
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*AOC2 cDNA Plasmid

AOC2 amine oxidase copper containing 2 [*Homo sapiens* (human)]

Also known as: RAO; DAO2; SSAO

Summary:
Copper amine oxidases catalyze the oxidative conversion of amines to aldehydes and ammonia in the presence of copper and quinone cofactor. AOC2 gene shows high sequence similarity to copper amine oxidases from various species ranging from bacteria to mammals. It contains several conserved motifs including the active site of amine oxidases and the histidine residues that likely bind copper. It may be a critical modulator of signal transmission in retina, possibly by degrading the biogenic amines dopamine, histamine, and putrescine. AOC2 may be a candidate gene for hereditary ocular diseases.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

R&D SYSTEMS
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> RDC2630 Plasmid DNA Sequence

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 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
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 501  ctttgccctg gcctatgttt tgctgaccag cccaggtggt tccagccagc ctccccactg cccctctgta tcccataggg cccagccctg gccacaccct
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 801  ccgggaggca ctggccatcg tcctctttgg tggacaaccc caacccaatg tgagtgagct ggtggtgggg ccgctgcctc acccctcgta catgcgggat
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1701  gctgcttcca ggggctgtgt gtgtatttga ggaagcccag ggactgcccc ttcgaaggca ccacaattac cttcaaaatc atttctatgg tggtttggcc
1801  agctcagccc ttgtggtcag gtctgtgtca tctgtgggca actatgacta catttgggac tttgtgttgt acccaaatgg ggcacttgaa gggcgggtcc
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2001  acatgccttc cacttcaagc tggacctgga tgtggcaggg ctgaaaaact gggtggtagc tgaagacgtg gtgtttaaac ctgtggctgc cccctggaac
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2301  tcaccagaat gacatctgga cacccacagt taccttgct gacttcatca acaatgaaac cctcttagga gaggatctgg tggcttgggt cacagccagc
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2701  cttggcgtaa tcatggtcat agctgtttcc tgtgtgaaat tgttatccgc tcacaattcc acacaacata cgagccggaa gcataaagtg taaagcctgg
2801  ggtgcctaat gagtgagcta actcacatta attgcgttgc gctcactgcc cgctttccag tcgggaaacc tgtcgtgcca gctgcattaa tgaatcggcc
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> RDC2630 Translated Insert Sequence

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 201  tlaavhatpr glrsgdratw malyhnisgv glflhpvgle llldhraldp ahwtvqqvfy lghyyadlgq lerefksgrl evvrvplppp ngasslrsrn
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 401  qatmvdihil vgkgavqllp gavcvfeeaq glplrrhhny lqnhfyggla ssalvvrsvs svgnydyiwd fvlypngale grvhatgyin taflkggeeg
 501  llfgnrvger vlgtvhthaf hfkldldvag lknwvvaedv vfkpvaapwn pehwlqrpql trqvlgkedl tafslgsplp rylylasnqt nawghqrgyq
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 701  glcsinpvac lpdlaacvpd lppfsyhgf
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