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Product datasheet for KN203238

COX11 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control

Donor DNA: GFP-puro

Symbol: COX11

Locus ID: 1353

Components: **KN203238G1**, COX11 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCCTGGTTGGAGACCCAGGG
KN203238G2, COX11 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: ATCCAGCGCCAGCCACAGAA
KN203238D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.
Homologous arm and GFP-puro sequences:
pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet

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AAACTTCAGC GTGACAGCCT CCCTCCTGCT CCAGCTGTGG TGCTTTCCAC TGGGCAAGTT GTAAGGGGCA
TCAGAGCAGG GGAAGCCGAC TGCCCACGGG CTGAGAAAAT GCAGGTGTCG TGGGTGCCCA TGAGGGCTGC
GGTTAACACA GCAAGGCTTC CTGAGAGAGG TGATACTTGA ACTAAGTCCA GGGCAGTGAG CACAGGAGCC
AGCGGCCAAG GGACCCCAGG AGAAAAGACC GCGGGAGAGC GTCGCCGGGG CTGCCGGGTC GAGACAAAGG
CTGGTGGAGT TTAAATAAAG ATCACAGGCG CAACCCCAAG TGATGGCAAG CTTGCACGCG GACGGGCGAA
ACGCATTTTC CTAAATGTTA AGAGACGTTC TGGCGAGAAG CGAAGTGGGA GTAACAGTCA CAAAGCAAAA
CGCAAACTTA CCCGTAATCT GGCAACCCGG CCTCCGTAGC CCGACTGCAA GCGCTGCCAC CTGAGGAGCC
TGGTAGCCAA GGCAGCGGCA GGCTCAACCC AGATCTCGCG AGACGGAGCA CGCCTCGCGA GATTTGACCT
CTCGTCCCTG AGAGGCGGGT GGGTGTTAGT TCAGAGGGTT CGTTTCTTAG GCCAGAGTGG AGTGGGACAG
GAGGTGCCGA GAGAGGACTG AGGTGGCTTG GGACATGGAA GCGCTGCAGC CTTCGAGCCC GGCATCCAGC
ATTGCAGCCG CCGCGGCGGC CTAAGAGCTC GAACCCTTTC ACACGCGCGC AGGAGGAGGA GCGGCGGCGG
CAGAACAAGA CGACCCTCAC TTACGTGGCC GCTGTCGCCG TGGGCATGCT GGGGGCGTCC TACGCTGCCG
TACCCCTTTA TCGGCTCTAT TGCCAGGTAG GGGCCGGCGC CGCCCGCAGG GTGGCGCAGA CGCGAGAGGT
GGGGGTGCAA GACAAATCCC GGGACAAGCC CTCGCTCTGC GGGTCGTAGG TGGAAGAGGT TTCCGATATT
ATCTACCTAA GAGGAGAGAG GTTCAAAACA GTCACTTAAC ACCCAAAGTC ACCAAAGAAA TTGGTGACAA
AACTGCAAGT AGCATCCAGT TCTTAGTGAT TGTGCTTATA CCATGCTGCA GAGTGAAACC CCTGATCTAT
GAACTGCACC TCGCCAAAAA AAAAAAAAAA GGTCCGCAGC CTCTAACCGG GTATCTAGCA GTCTGCCTTA
CCCTCCTGCG
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GE100003, scramble sequence in pCas-Guide vector

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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.

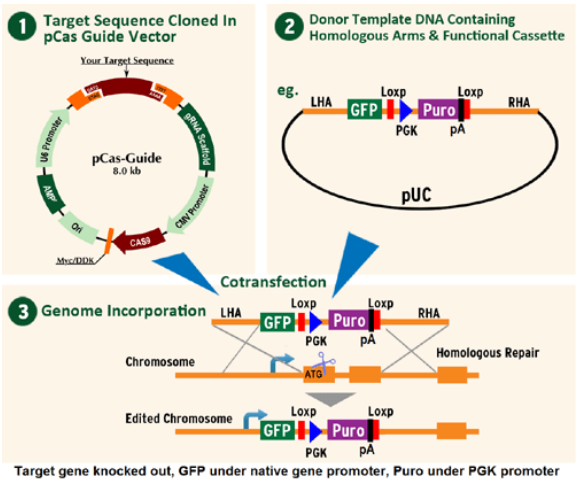
RefSeq: NM_001162861, NM_001162862, NM_001321518, NM_004375, NR_027941, NR_027942, NR_135677

UniProt ID: Q9Y6N1

Synonyms: COX11P

Summary: Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, and the nuclear-encoded subunits may function in the regulation and assembly of the complex. This nuclear gene encodes a protein which is not a structural subunit, but may be a heme A biosynthetic enzyme involved in COX formation, according to the yeast mutant studies. However, the studies in Rhodobacter sphaeroides suggest that this gene is not required for heme A biosynthesis, but required for stable formation of the Cu(B) and magnesium centers of COX. This human protein is predicted to contain a transmembrane domain localized in the mitochondrial inner membrane. Multiple transcript variants encoding different isoforms have been found for this gene. A related pseudogene has been found on chromosome 6. [provided by RefSeq, Jun 2009]

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter