

# Nucleotide sequence of a cDNA for mouse cytochrome *c* oxidase subunit VIIc

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Cytochrome *c* oxidase (COX), complex IV of the electron transport chain, is encoded in two cellular compartments. The thirteen subunits of the mammalian enzyme consist of three coded by mitochondrial DNA and ten by nuclear DNA. The function(s) of the nuclear encoded subunits is unknown, but has been suggested to modulate the activity of the complex (reviewed in 1).

We have been isolating mouse cDNAs for nuclear encoded subunits for subsequent studies. We screened a mouse (BALB/c) heart cDNA library (Stratagene) in lambda ZAP with a previously isolated bovine cDNA for subunit VIIc (2). The insert of the cDNA we isolated was 391 bp (excluding linkers, shown below in brackets). The deduced presequence of 16 amino acids is like the bovine (2) and human (3); the mature polypeptide (starting at <sup>h</sup>) is 94% identical to bovine COX VIIc (amino acids that differ are underlined once) and 81% identical to the human subunit (double underline for differences). A difference in both

species is indicated by ≡. A presumptive polyadenylation signal is overlined.

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## REFERENCES

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1 [GAATTC]CAGACCGAAGGAAGTTAGGTGGTACGGCCATTTCTTCGCCTTCCGTGTCTGCGGCCCTCGCAGAACTTCCAG
80 CAGCGACATGTTGGGCCAGAGTATCCGGAGGTTACGACCTCCGTGGTCCGTCGCAGCCACTATGAGGAGGGTCCGGGGAA
    M L G Q S I R R F T T S V V R R S H Y E E G P G K
161 GAATTTGCCATTTTCAGTGGAACAAGTGGCGGTTGCTGGCTATGATGACCGTGTACTTTGGATCTGGGTTTGCCGCACC
    N L P F S V E N K W R L L A M I V Y F G S G F A A P
242 TTTCTTTATAGTAAGACACCAGCTACTTAAAAATAAGGATATTTAATTCATCCCTTTAACAGAATGAAGAAAGTTTAAGA
    F E I V R H Q L L K K *
323 GGTGATCTGAAAATTGGATTAACCTCTTGAACCTTATACTAGAAAAAATTGTAATAAACTAATGACATAAAAG[GAATTC]

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