Sequence of a full length cDNA coding for human protein HC (α_1 microglobulin)Cinzia Traboni and Riccardo Cortese¹Dipartimento di Biopatologia umana, Sezione Biologia cellulare, Università 'La Sapienza', Roma, Italy and ¹European Molecular Biology Laboratory, Meyerhofstrasse 1, 6900 Heidelberg, FRG

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Protein HC is a glycoprotein which has recently been suggested to be involved in the regulation of the inflammatory response(1). We have isolated and sequenced a full length clone from a human liver cDNA library using the procedures described in ref.2. The deduced aminoacid sequence is almost identical to the one reported for human protein HC(3), except for a Lys residue at position 39 and for the last 18 aminoacids at the COOH terminus, which are not present in the published protein sequence. The presence of a 19 aminoacids leader peptide can also be deduced by comparing the nucleotide sequence with the aminoacid sequences of both protein HC and the strictly related or identical protein α_1 microglobulin(4).

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-19

M R S L G A L L L L L L S A

GCAGGGAGCGCGTGGCCCTCTGTGTTCTAGACCGAGCGCTGTGGGATATACCAAGGCAGAGGAGCCCATAGCCATGAGGAGCCTCGGGGCCCTGCTCTGTGCTGAGCGC 110
 C L A V S A G P V P T P P D N I Q V Q E N F N I S R I Y G K W Y N L A I
 CTGCTCGGCGGTGAGCGCTGGCCCTGTGCCAACGCCGCCGACAACTCCAAGTGCAGGAAAACCTCAATATCTCTGGGATCTATGGGAAAGTGTACAAAGTGGCCATCG 220
 G S T C P W L K K I M D R M T V S T L V L G E G A T E A E I S M T S T R W
 GTTCACAGTGGCCCTGGCTGAAGAAGATCATGGACAGGATGACACTGAGCAGCGTGGTGTCTGGGAGAGGGCGCTACAGAGCGCGGAGATCAGCATGACCAGCACTCGTTGG 330
 R K G V C E E T S G A Y E K T D T D G K F L Y H K S K W N I T M E S Y V V
 CGGAAAGGTGTCTGTGAGGAGACGTCTGGAGCTTATGAGAAAACAGATACTGATGGGAAGTTTCTCTATCACAAATCCAAATGGAACATAACCATGGAGTCTATGTGGT 440
 H T N Y D E Y A I F L T K K F S R H H C P T I T A K L Y G R A P Q L R E
 CCACACCAACTATGATGAGTATGCCATTTCTGTGACCAAGAAATTTCAGCGCCATCATGGACCCACCATTAAGTCCAAAGCTCTACGGGGGGGGCGCCGAGCTGAGGGAAA 550
 T L L Q D F R V V A Q G V G I P E D S I F T M A D R G E C V P G E Q E P E
 CTCTCTGAGGAGTTCAGAGTGGTTCGCCAGGGTGTGGGCATCCCTGAGGACTCCATCTTACCATGGCTGACCGAGGTGAATGTGCTCCCTGGGGAGCAGGAACAGAG 660
 P I L I P R V R R A V L P N E E E G S G G G H W
 CCCATCTTAATCCCGAGAGTCCCGAGGGCTGTGCTACCCCAAGAAGAGCAAGCATCAGCGGCTGGGCACTGGTAAGTCAAGTCACCAAGAAAGAAGATTCTCCAGCTG 770
 GGTACTCTGGCGGCTCCCTGCATGGGAATGACAGCAGGTATTCTATAATGGTACATCCATGGCCTGTGAGACTTTCCAGTACGGCGGCTGCATGGGCAACGGTAACAA 880
 CTTCTGTCAGAGAAAGAGTGTCTGCAGACCTGCCGAAGTGTGGCGGCTGCAATCTCCCATAGTCCGGGGCGCTGCCGAGCCTTATCCAGCTCTGGGCATTGTGATG 990
 CTGTCAAGGGGAAGTGGCTCTCTCCCTACGGGGGCTGCCAGGGCAAGGGGAACAAGTTCTACTCAGAGAAAGAGTGCAGAGAGTACTGCGGTGCTCCCTGGTGTGATG 1100
 GATGAGGAGCTGTGCGCTTCTCCAACTGACAACCTGGCGGCTGCAAGTCAGAGGATGCCAGTGTCTGTCTCGCGGGGCTCTGTGGCAGGCAGCGCAAGCAACCTGGGTC 1210
 AATAAACTAATTGTAAGTCTG polyA 1231

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