

## Nucleotide sequence of cDNA for mouse osteopontin-like protein

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A cDNA clone encoding osteopontin-like protein have been isolated from a  $\lambda$ gt11 library prepared from ICR mouse macrophages, using a 3' fragment probe derived from a pBR322 library prepared from a mouse macrophage cell line (1). Northern blot hybridization with this insert detected a message of approximately 1.4 kb in macrophages and macrophage cell lines. The overall cDNA sequence showed approximately 89 % homology with that of the osteopontin cDNA derived from a rat osteosarcoma cell line (2). The nucleotide sequence spanning an open reading frame of 882 nucleotides, however, had 15 bp and 54 bp deletions at positions, 705 and 744, respectively, relative to that of the rat osteopontin cDNA. The open reading frame encoded a protein of 294 amino acid residues, including a putative signal peptide of 22 amino acids.

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1  GGACTAACTACGACCATGAGATTGGCAGTGATTTGCTTTTGCCCTGTTGGCATTGCCTCCTCCCTCCCGGTGAAAGTGA
-22      M R L A V I C F C L F G I A S S L P V K V T V
82  GATTCTGGCAGCTCAGAGGAGAAGCTTTACAGCCTGCACCCAGATCCTATAGCCACATGGTGGTGCCTGACCCATCTCAG
1  D S G S S E E K L Y S L H P D P I A T W L V P D P S Q
163 AAGCAGAATCTCCTTGGCCACAGAATGCTGTGCTCTGAAGAAAAGGATGACTTTAAGCAAGAACTTTCCAAGCAAT
28  K Q N L L A P Q N A V S S E E K D D F K Q E T L P S N
244 TCCAATGAAAGCCATGACCACATGGACGACGATGATGACGATGATGATGACGATGGAGACCATGCAGAGAGCGGAGGATTCT
55  S N E S H D H M D D D D D D D D D D G D H A E S E D S
325 GTGGACTCGGATGAATCTGACGAATCTCACCATTCCGATGAGTCTGATGAGACCGTCACTGCTAGTACAAAGCAGACACT
82  V D S D E S D E S H H S D E S D E T V T A S T Q A D T
405 TTCCTCCAATCGTCCCTACAGTCGATGTCCCAACGGCCGAGGTGATAGCTTGGCTTATGGACTGAGGTCAAAGTCTAGG
109 F T P I V P T V D V P N (G R G D S) L A Y G L R S K S R
487 AGTTTCCAGGTTTCTGATGAACAGTATCCTGATGCCACAGATGAGGACCTCACCTCTCACATGAAGAGCGGTGAGCTAAG
136 S F Q V S D E Q Y P D A T D E D L T S H M K S G E S K
568 GAGTCCCTCGATGTCATCCCTGTTGCCAGCTTCTGAGCATGCCCTCTGATCAGGACAACAACGGAAAGGGCAGCCATGAG
163 E S L D V I P V A Q L L S M P S D Q D N N G K G S H E
649 TCAAGTCAGCTGGATGAAPCSAAGTCTGGAACACACAGACTTGAGCATTCCAAGAGAGCCAGGAGATCCCGATCAGTCG
190 S S Q L D E P S L E T H R L E H S K E S Q E S A D Q S
730 GATGTGATCGATAGTCAAGCAAGTTCCTCAAGCCAGCCTGGAACATCAGAGCCACAAGTTTACAGCCACAAGGACAAGCTA
217 D V I D S Q A S S K A S L E H Q S H K F H S H K D K L
811 GTCCTAGACCCTAAGAGTAAGGAAGATGATAGGTATCTGAAATTCGAAATTTCTCATGAATTAGAGAGTTTCATCTTCTGAG
244 V L D P K S K E D D R Y L K F R I S H E L E S S S S E
892 GTCAACTAAGAAGAGGCCAAAAACACAGTTCCTTACTTTGCATTTAGTAAAAACAAGAAAAGTGTAGTGAGGGTTAAGC
271 V N *
973 AGGAATACTAAGTCTCATTCTCAGTTCAGTGGATATATGTATGTAGAGAAGAGAGGTAATATTTGGGCTCTTAGCTT
1054 AGTCTGTTGTTTCATGCAAAACACCGTTGTAACAAAAGCTTCTGCATTTGCTTCTGTTCTTCTGTAAGAAATGCAAAA
1135 CGGCCACTGCATTTAATGATTGTTATTCTTTATGAATAAATGTTAGTGTAGAAACAAGCAAAATTTAGTAAACAAGCAGA
1216 ATTAAGAGAGAACTGTAACAGTCTATATCACTATACCCTTTTAGTTTTATAATTAGCATATATTTGTTGTGATTATTTT
1297 TTTTGTGGTGTGAATAACTTGTGAACGAA

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▼ The putative signal peptidase cleavage site.

## References

1. Setoguchi, M., Yoshida, S., Higuchi, Y., Akizuki, S. and Yamamoto, S. (1988) *Somat. Cell Mol. Genet.* **14**, 427-438.
2. Oldberg, A., Franzen, A. and Heinegard, D. (1986) *Proc. Natl. Acad. Sci. USA* **83**, 8819-8823.