

Sequence of bovine CD5

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We have isolated a full-length cDNA clone of the bovine CD5 from a lambda gt10 library constructed from a normal calf thymus, using oligonucleotide probes synthesized on the basis of published human CD5 and murine Ly1 nucleotide sequences (1, 2). The nucleotide sequence of this clone, reported in Fig. 1, consists of 1953 nucleotides containing an open reading frame beginning at position 38 and ending at position 1523. Fig. 2 shows the alignment of the deduced amino acid sequence to its human and murine counterparts.

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gagcttggcg aggcctgagc gggaggagc cgcgccatg gggctcagc atctgccact ggcccctcg 70
TACCTTCTGG AGCTGCTGGT CACTTCTGCG CTGGAGGGC TCAAGGTGGA GGTGCAAGGG CTCACCATGA 140
GACTGAGCGG CTCCGGCTCA CCGTGTCCAG GCCGTCTGGA GGTGCAAGAG GGTGCAAGGG GGTACCGGGT 210
GCACAGCCAG AGCTGGGGCC AGCTTTGCT CTACCAGGTG GTCCCAAGG AGTCTCTGAA GCTGTGCCAG 280
GAGCTGCAGT GCCGGGACG TTGTTCACG TCTTCCTCGG GTTACTTCAA AGAGGTGCAA TTCCAGAAAT 350
TGATAATCTG CCATGGACAG CTGGGATCTT TCTCCTCAAG CAGCCTCAA AGGGGACGCG AGGTGGACTC 420
TCTGGCCCTG ATCTGCTTAG AGCCACCGAG GACAACAGCT CTTCCACGAA CCTCAGCCGC CACAACCACT 490
CCGGAGCCCA CAGCACCTCC CAGGTTTCAG CTGGTGCGAG AGCCGCGGGC CTTGCGGGTCT GCTGGCGTGG 560
TGGAGTCTTA CAGTGCGTGG CTGGGCGGCA CCAATCGGCAT CGAGCCCGAG AATGATATCA AGGACCTGGG 630
GCACCTCATC TGTCAGAGCC TCCAGTGTGG CTCTTCTCGT AAGCCCCGTC CAGAGACCGA GGAAGCCAG 700
ACACAAAAGC CAGAAGGCCA AAGCCCTTTG CCAATCCGCT GGGAGATCCA GAACCCAAA TGCACTTCCC 770
TGGAGCAGTG CTTCGAAAA GTCCAGAGCC TGGTGGGTGG CCAAGCTCTT GGCCTCATCT GTTCTGATTT 840
CCAGCCCAAG CTCCAGAGCC GCTGCTGTTG GGGCAGCGAC GTGTCGGAAG GCTCCGTGGA AGTGCAGT 910
GGGAAAGGCC AGAAGTGGGA CACCGTATGT GACGATCTCT GGGCCAAAGG CAGCGCACGG CGGGTGGAGG 980
TGTGCGGGGA GGACAGTGC GGCACAGTCA GCTCTTACCG GGGGCTGGAC CCGACGAGA AGACTTGGG 1050
GGGCTTCTAC TGTCCTCCCG GGATACGTCT CCGGTGCCAC AAGCTTGAGG AGAAAAGTC GCACCTGAAG 1120
AGGGTGTGTTG TCACATGCCA GAACTCCAGC CGAGCGGGCC TGGGCGCGGG CCGGTGTATG AGCATTATTT 1190
TGGCCCTCTT GCTTCTGGCC GTGCTGTGTTG TCGTGTGTGG CCCCCTGGCC TACAAGAAGG TGGTGAAGAA 1260
ATTCCGCCAG AAGAAGCAGC GCCAGTGGAT TGGCCCAAG GGAATGAACC AGAATCATCT TTTCCATCGC 1330
AACCACAGCG TGACTGTCCG GTCCACAGTT GAGAAGCCCA CGGCTCCCA CGTGGAGAAC GAATACAGTC 1400
AGCCTCCAG GAATCAGCAG ATCTCAGCTT ATCCAGCTCT GGAAGGGGCC CTGCAAGGCC TCTCCACCCA 1470
GCCGTGATAAC TCCCTCCACA GTGATATGTA GCTACACGGG GCTCAGAGGC TGTAagagat ctgtgacccg 1540
ggaacaataa ttaagagcca gaetttttat cccgagaaac ctctgcagtc accaacttggg tgecaagtec 1610
cactctctgc ccgagagacc agcgatggga ettcecaaca cateccactg ceetgcagag cgaggtteac 1680
tcagacatct cctcaacatc teaccagecc agggaagacc ceagatggc teagctggcc cetceatggg 1750
tgaagactgt gaaagggcag aggcaagcag cccctcectc tgetgtgga categgetet ctctteagac 1820
tetgaacccc agaagggccc cacaggaag cctgcaacty gageggggcg gtggggagga gggctgattt 1890
ctctcatgta tttttaatat ttttttgta aataatgctt ttttctgctt cctggaaaaa aaa 1953
  
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Figure 1.

REFERENCES

- Huang, H.-J.S., Jones, N.H., Strominger, J.L. and Herzenberg, L.A. (1987) *Proc. Natl. Acad. Sci. USA* **84**, 204-208.
- Jones, N.H., Clabby, M.L., Dyalnas, D.P., Huang, H.-J.S., Herzenberg, L.A. and Strominger, J.L. (1986) *Nature (London)* **323**, 346-349.

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human  NPNGSLQLATLLGLHVASCLGLSLVDPDPAQLTRSHSLCCQQLVTLIDGHNHCQSQSGRSS-X
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
bovine  HGSHL-PLAALYLLELLVTSCLGLLEVVQGLTLHLSGSGSICQGLVTSHTYATVRSQSHGLS-L 58
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
murine  NDSHRV-LLAATYLLGLLAPCLGSGCGGLDQVHLGSHSLCCQQLVTLIDGHNHCQSQSSS-N-XLSQD
  
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human  QHSDPSQASKVCQRLKCGVPL--LSEGLPVVTTTTQSLLICTGQGLGFSK-SHSHDHCSLGLTCLRPQ
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
bovine  YQVAPRQFLKQLCQKRDPLLLSSRTYKVVQQLLTCGGLGFSK-SLNRGQVDSLAGLICLRLPP 137
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
murine  HSKHAQQASAVCQLRGLCGDPLALGPPFLNLRLPQ--VPCQSPNISINCHNTSSQQDQLPLSLICLRLPQ
  
```

```

human  KTT-PTTPTPTPTPTPTAPRQLVQSGGQCGVYVTGSLGCTYSTRAQDETQDLNPLCNLIQ
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
bovine  RTTAPPYT-SPTTPTPTPTAPRQVAPRGLRAGVYPTSGGCGCTGIRPQDIDKLGQLICAAIQ 206
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
murine  RTTPPTPT-TPPTTPTPTAPRQLVQSGGQCGVYVTGSLGCTYSTRAQDETQDLNPLCNLIQ
  
```

```

human  CGSFLKLPETRAAQDP-G--BPREKPLQIQLHSCTSLKHCPRRILKQKSRVLLALGCPQP
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
bovine  CGSFLKLPETRAAQDP-R--GQR---PLPRLKIQIPACTLHQCPRKVPVGGQALGLICSDPQP 270
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
murine  CGSFLKLPETRAAQDP---PLPRLKIQIPACTLHQCPRKVPVGGQALGLICSDPQP
  
```

```

human  KVQSLVGGSSICBGTVEVKGQ-AQ-VAALCDSSSARSSLRHWYVCRBQQCGSVNSYVLDADGPTSGEL
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
bovine  KVQSLVGGSDVBCBGSVZVSGKQVHDLCDSSSARSGARVYVCRBQQCGSVNSYVLDADGPTSGEL 340
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
murine  KVQSLVGGSSVCEGLAEVKGQ-RSQ-VEALCDSSSARSGARVYVCRBQQCGDLSFHTVD-ADETSQPF
  
```

```

human  FCPHQKLSQCHLWRNHSYC-KRVFPTCQEPHAGLAAGTVASIIALVLLVLLVVCGLAYKLVKKEF
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
bovine  YCPPGLSRCHLWRNHSYC-KRVFPTCQNSRAGLGGPMSIIALLVLLVLLVVCGLAYKLVKKEF 405
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
murine  LCAQKLSQCTEL-QKKHCHKRVFTVCPHAGLAAGTVASIIALVLLVLLVLCGLAYKLVKKEF
  
```

```

human  RQXKQRIQVTCVHSHFRRHHTATYSSENPASHVDEYSQPPNHSLSATPALGALRLSSHPQ
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
bovine  RQXKQRIQVTCVHSHFRRHHTATYSSENPASHVDEYSQPPNHSLSATPALGALRLSSHPQ 475
          | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
  
```

```

murine  RQXKQRIQVTCVHSHFRRHHTATYSSENPASHVDEYSQPPNHSLSATPALGALRLSSHPQ
  
```

```

human  DHSSDSDYLNGAQL*
          | | | | | | | | | | |
bovine  DHSSDSDYLNGAQL*
          | | | | | | | | | | |
murine  DHSSDSDYLNGAQL*
  
```

Figure 2.

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