

### The nucleotide sequence of the cDNA encoding the human lung protein phosphatase 2A $\alpha$ catalytic subunit

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A cDNA encoding the human  $\alpha$  catalytic subunit of protein phosphatase 2A was obtained by screening human lung and lung fibroblast cDNA libraries with a porcine  $\alpha$  cDNA probe (1). The cDNA encodes a protein of 309 amino acids which exhibits 96% homology with porcine  $\alpha$  catalytic subunit (2). High conservation (94%) was also observed in the noncoding sequences between species (2).

-82 CG

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-84 GCGGCGTGTGCGGTGTGCGCGGGGCGGCGGGGAGGAGCGGGAGCGCGGCGAGCCGGCTGGGGCGGGTGGCATCTGTAGGCC
1  ATGGACGAGAAGGTGTTCCACCAAGGAGCTGGACCACTGGATCGAGCAGCTGAACGAGTGAAGCAGCTGTCCGAGTCCCAG
1  MetAspGluLysValPheThrLysGluLeuAspGlnTrpIleGluGlnLeuAsnGluCysLysGlnLeuSerGluSerGln
82  GTCACAGCCCTCTCGAGAAGGCTAAAGAAATCCTGACAAAAGAATCCAACGTGCAAGAGGTTCGATGCCATTTACTGTC
82  ValLysSerLeuCysGluLysAlaLysGluIleLeuThrLysGluSerAsnValGlnGluValArgCysProValThrVal
163  TGTGGAGATGTGCATGGCAATTTTCATGATCTCATGGAACTGTTAGAAATGGTGGCAAATCACCAGATACAAATTTACTTG
55  CysGlyAspValHisGlyGlnPheHisAspLeuMetGluLeuPheArgIleGlyGlyLysSerProAspThrAsnTyrLeu
244  TTTATGGGAGATTATGTTGACAGAGGATATTATTCAGTTGAACAGTTACACTGCTTGTAGCTCTTAAAGTTTCGTTACCGT
82  PheMetGlyAspTyrValAspArgGlyTyrTyrSerValGluThrValThrLeuLeuValAlaLeuLysValArgTyrArg
325  GAACGCATCACCATTCTTCGAGGGAATCATGAGACGACAGATCACACAAGTTTATGGTTTCTATGATGAATGTTTAAGA
109  GluArgIleThrIleLeuArgGlyAsnHisGluSerArgGlnIleThrGlnValTyrGlyPheTyrAspGluCysLeuArg
406  AAATATGGAAATGCAAAATGTTTGGAAATTTTTACAGATCTTTTTGACTATCTTCTCTCACTGCCCTGGTGGATGGGCAG
136  LysTyrGlyAsnAlaAsnValTrpLysTyrPheThrAspLeuPheAspTyrLeuProLeuThrAlaLeuValAspGlyGln
487  ATCTTCTGTCTACATGGTGGTCTCTCGCCATCTATAGATACACTGGATCATATCAGAGCACTTGATCGCCCTACAAGAGTT
163  IlePheCysLeuHisGlyGlyLeuSerProSerIleAspThrLeuAspHisIleArgAlaLeuAspArgLeuGlnGluVal
568  CCCCATGAGGGTCCAAATGTTGTGACTTGCTGTGGTCCAGATCCAGATGACCGTGGTGGTGGGGTATATCTCTCCGAGGAGCT
190  ProHisGluGlyProMetCysAspLeuLeuTrpSerAspProAspAspArgGlyGlyTrpGlyIleSerProArgGlyAla
649  GGTTACACCTTTGGGCAAGATATTTCTGAGACATTTAATCATGCCAATGGCCTCACGTTGGTGGTGGTGGTGGTGGTGGTGGT
217  GlyTyrThrPheGlyGlnAspIleSerGluThrPheAsnHisAlaAsnGlyLeuThrLeuValSerArgAlaHisGlnLeu
730  GTGATGGAGGATATAACTGGTCCATGACCGAAATGTAGTAAACGATTTTCAGTGTCCAAACTTATGTTATGTTGTTGGT
244  ValMetGluGlyTyrAsnTrpCysHisAspArgAsnValValThrIlePheSerAlaProAsnTyrCysTyrArgCysGly
811  AACCAAGCTGCAATCTGGAACCTTGACGATCTTAAATACTCTTCTTGGAGTTTGACCCAGCACTCGTAGAGGGCGAG
271  AsnGlnAlaAlaIleMetGluLeuAspAspThrLeuLysTyrSerPheThrLeuGlnPheSerAlaProArgArgGlyGlu
892  CCACATGTTACTCTGACCCAGACTTCTTGTATGAAATTTAAACTTTGTACAGTATGGCATGACCACTATATC
298  ProHisValThrArgArgThrProAspTyrPheLeu
973  GACCTAATGGAAATGGGAAGAGCACTAACTCCAAAGTGTGAGAAATAGTTAACATTCAAAAACTGTTTTCACATG
1054  GACCAAAAGATGTGCCATATAAAAAATCAAAAGCCTCTTGTGCATCAACAGCCGTGACCCTTTAGAATGAACAGTTCATTG
1135  CATGCTGAAGCGCATTGTTGGTCAAGAAACAGTTTCTGGCATAGCCGCTATTGTAGTTACTTTTCTCTGAGAGA
1216  CTGCAGATAAAGATGTGAACATTAAACACCTCGTGAATACRAATTTAACTTCCATTTAGCTATAGCTTTACTCAGCATGA
1297  CTGTAGATAAGGATAGCAGCAACAATCATTTGGAGCTTAATGAAATTTTAAAATAATTAACCGGCCTCCCTTCTACTGT
1378  GAGTTGAAATGTTCTTTTATTTTCAGGATACCGTTTAAATTAATTATATGATTTGTCTGCACACTCAGTTTATCCCTAG
1459  TGAATGTGAGCCCATGTGCTTGTATGTGAGAACCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
1540  CGATGTGACTGCACAAGAGCACTGCAGTGTTTTTATAATAAATTTGTGAACATAAGAACTGAGAAGTCAAATTTAAATG
1621  TATCAATGGGCAAGCACTGGTGGCTGTTTATTAATAAAAGTTAAATGAATTGAGTAAATTTAGAAATTTGAGACTGTGAGTA
1702  AAATAAAATCAAGGGCACTACATAACCTCTCTGGTAACTCCTTGACATTTCTCAGATTAACCTCAGATTTATTTGTATT
1783  TCACATATTCAATTTGTCACTTGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
1864  TCTGTGCTGCTTCAGTAAGACTTAATGTAAAAACCATATAACTGAGATTTAAGCTTTGGTGTGGTGGTGGTGGTGGTGGT
1945  GGCATTGTT

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#### REFERENCES

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2. Stone, S.R., Hofsteenge, J., Hemmings, B.A. (1987) *Advances in Protein Phosphatases* 4, 375-389