

The sequence of a nervous system-specific, class II β -tubulin gene from *Xenopus laevis*Peter J. Good, Klaus Richter¹ and Igor B. Dawid

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We previously reported the isolation of a β -tubulin cDNA (clone 24-10) whose RNA is expressed in the nervous system of *Xenopus laevis* and is accumulated early after gastrulation (1). The sequence of the predicted 24-10 protein shares 99% identity with the chicken β 2-tubulin. Comparison of the C-terminal domain of the predicted 24-10 protein with other β -tubulins indicates that the 24-10 protein is a class II isotype β -tubulin (2,3). The 3' untranslated sequence of clone 24-10 is identical to the same region of clone D8 described by Dworkin-Rastl *et al.* which was previously shown to be expressed in the nervous system of tadpoles (4).

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-88          GAATCCCGCACAAAGGGCAAGTAAAGCAACAAGAAAGGCCACACCATTCCACTGATTACACCACCTGTAAGACTCAACCCATCGGAAAC
1  ATGCGTGAATCGTGCACCTCCAAGCTGGCCAGTGGCGTAACCAATGGAGCTAAATTTGGGAAGTCATCAGTGATGAACACGGCATTGATCCTACAGGCAGT
MetArgGluIleValHisLeuGlnAlaGlyGlnCysGlyAsnGlnIleGlyAlaLysPheTrpGluValIleSerAspGluHisGlyIleAspProThrGlySer
106  TACCATGGAGACAGTATTGCAACTAGAAAGGATTAACGTATACTACAATGAAGCCACAGGTAACAATTTGTACCCCGTCCCATCTTGTGGATTGGAACCA
TyrHisGlyAspSerAspLeuGlnLeuGluArgIleAsnValTyrTyrAsnGluAlaThrGlyAsnLysPheValProArgAlaIleLeuValAspLeuGluPro
211  GGCACAATGGACTCTGTAGACTGGACATTGGCCAGATTTTCAGACCCGACAACCTTTGTGTTGGTCAAAGTGGTGGTGGCAATAACTGGCCAAAGGTCAT
GlyThrMetAspSerValArgSerGlyProPheGlyGlnIlePheArgProAspAsnPheValPheGlyGlnSerGlyAlaGlyAsnAsnTrpAlaLysGlyHis
316  TACACCAGAGGACTGAGCTGGTGACTCTGTCTAGATGTGGTGAGAAAAGAATCTGAGAGCTGTGACTGCCTACAAGGTTTTCAACTGACCCATTCTGGGT
TyrThrGluGlyAlaGluLeuValAspSerValLeuAspValValArgLysGluSerGluSerCysAspCysLeuGlnGlyPheGlnLeuThrHisSerLeuGly
421  GGTGGCACAGGCTCTGGTATGGGTACCTGCTCATCAGTAAGTAAGGAAAGAGTACCCAGACCGAATCATGAATACATTCAGTGTGATGCCATCACCAAAGTC
GlyGlyThrGlySerGlyMetGlyThrLeuLeuIleSerLysIleArgGluGluTyrProAspArgIleMetAsnThrPheSerValMetProSerProLysVal
526  TCAGACACTGTGGTTGAAACATATAATGCAACCTCTCTGTTCATCAGTTGGTGAAAATACAGATGAAACCTACTGGATAGACAATGAGGCCCTCTATGATATC
SerAspThrValValGluProTyrAsnAlaThrLeuSerValHisGlnLeuValGluAsnThrAspGluThrTyrCysIleAspAsnGluAlaLeuTyrAspIle
631  TGCTCCCGCACITTAAGTTAAACAACCAACATATGGTGATCTGAATCACCTTGTATCCCGTACAAATGAGCGGGTAACAACCTGGCTCTGTTTCCAGGGCAG
CysPheArgThrLeuLysLeuThrThrProThrTyrGlyAspLeuAsnHisLeuValSerAlaThrMetSerGlyValThrThrCysLeuArgPheProGlyGln
736  CTTAATGCTGATCTACGAAACTGGCTGTCAACATGGTGCCCTTCCCTCGATTGCACCTTTTTATGCGAGGCTTGCACCATTAAACAAGTGGCCAGCCAAACA
LeuAsnAlaAspLeuArgLysLeuAlaValAsnMetValProPheProArgLeuHisPhePheMetProGlyPheAlaProLeuThrSerArgGlySerGlnGln
841  TACCGAGCCTGACAGTCCAGAACTAACACAGCAAAATGTTGATTCCAAGAACATGATGGCAGCGTGGCATCCCGCTCATGGACGCTACCTCACAGTAGCTGCT
TyrArgAlaLeuThrValProGluLeuThrGlnGlnMetPheAspSerLysAsnMetMetAlaAlaCysAspProArgHisGlyArgTyrLeuThrValAlaAla
946  ATCTCCGTGGAAGAAATGCTATGAAAGGAGTAGATGAACAGATGCTCAATGTCCAGAACAAGCAGCAGCTACTTGTGTAATGGATTCCCAACAATGTGAAG
IlePheArgGlyArgMetSerMetLysGluValAspGluGlnMetLeuAsnValGlnAsnLysSerSerTyrPheValGluTrpIleProAsnAsnValLys
1051 ACCCGAGTTTGTGACATCCACCAAGAGGCCCTCAAATGTCTGCAACCTTTATTGGTAAACAGCAGCTGCTATTCAAGAGCTTTTCAAAGAATCTCTGAGCAGTTC
ThrAlaValCysAspIleProProArgGlyLeuLysMetSerAlaThrPheIleGlyAsnSerThrAlaIleGlnGluLeuPheLysArgIleSerGluGlnPhe
1156 ACTGCCATGTTCCGTCGCAAGCTTCTTGCACCTGGTACTGGTGAGGCCATGGATGAGATGGAGTTCACAGAAGCTGAGAGCAACATGAACGACTTGGTGTC
ThrAlaMetPheArgArgLysAlaPheLeuHisTrpTyrThrGlyGluGlyMetAspGluMetGluPheThrGluAlaGluSerAsnMetAsnAspLeuValSer
1261 GAGTATCAGCAGTACCAGATGCAACAGCTGATGAGCAAGGCCAGTTTGGAGAACGAGGATGAGCCTGATGACAAAGGCTCCTAGCATTTTAGAAATAAAA
GluTyrGlnGlnTyrGlnAspAlaThrAlaAspGluGlnGlyGluGluGluAspGluAlaIleEnd
1366 AGGCACAGTTTTTAAATAGCTAGAGCATTTGCTCAGAATTTGTTTCCAGCATGCTTCTTCAATTTTCAATGTCATGAAACCAACATCAGTTTTTGTACCTTT
1471 ACAATGTCAAAGTAAACAGTGTGTTTATGATCTCTCTAAAGCTTTACAAAATGCCCAACATGATTAGGATGATGGTGAAGTGAATTTCCGACCACCTATAGATGT
1576 TTTCCCCACACTGGATAGATCATAAAAGTATTTGGTCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGGAATTC 1656

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