Molecular Cloning of Regulatory Sequences Controlling the Expression of Threonine Dehydratase/Deaminase

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MOLECULAR CLONING OF REGULATORY SEQUENCES CONTROLLING THE
EXPRESSION OF THREONINE DEHYDRATASE/DEAMINASE
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An *Arabidopsis thaliana* bacterial artificial chromosome genomic DNA library TAMU-BAC, obtained from ABRC stock center, was screened for the isolation of the threonine dehydratase/deaminase gene. The BAC library was probed with a threonine dehydratase specific probe cloned in this lab. The probing of the BAC library yielded two positive clones one of which was used to isolate the 5' upstream regulatory sequences of the threonine dehydratase gene. Southern blot and PCR analysis confirmed the presence of threonine dehydratase in the two positive genomic clones. An adapter ligation PCR system was used to isolate the promoter sequences which are being sequenced and molecularly analyzed for consensus promoter sequences.