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**Tributyltin Induce Apoptosis by Induction of Nur 77
Expression and Translocation in to the Cytosol in Leydig
Cells**

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Tributyltin (TBT) is also recognized as an endocrine disrupter. Organotin compounds such as TBT are widely used as agricultural biocides, and for antifouling paint of ship bottoms and of fishing nets. In this study, we investigated the role of nur 77 in induction of apoptosis in TBT-induced leydig cells. Apoptotic morphology was observed by DAPI fluorescence staining, and apoptotic index was counted among 100 cells randomly. As the results, TBT triggered apoptosis in leydig cells and accompanied by the repression of Bcl-2 protein in a time-dependent manner. Furthermore, TBT also up-regulated expression level of nur 77 mRNA in leydig cells by Northern blot and Western blot. As the results, Nur 77 translocated from nucleus to cytosol in TBT treatment of leydig cells. However, when this nuclear translocation was blocked by leptomycin B (LMB), apoptosis was not occurred in TBT-induced leydig cells. In conclusion, induction of apoptosis by TBT is through induction of nur 77 expressions and translocation of nur 77 and represent the new biological function of nur 77 to exert its effect on apoptosis in leydig cells.

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