E103 The effects of Cd, Pb, and Al in several tissues of mouse

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The mice were treated with Cadmium chloride(Cd), Lead nitrate(Pb) and Aluminium sulfate(Al) for study of the change of histological structure and protein. The mice were each chemical injected into abdominal epiderm for 3 months, and divided three groups, such as 1-, 2-, and 3-month. The mice were treated with Cd for 1-month, tissues were especially occurred in hematogenous symptom. At 3-month treatment group appeared small spot in lung, kidney, spleen, and liver tissue, and some tumor cells in the skin. The mice were treated with Pb appeared less effects than Cd treated mice. This group was shown the cytotoxicity after 45 days in the lung, liver, and kidney. Al treatment group was observed lower effect than Cd and Pb treated mice. The spleen was effected into the changes of histological aspects, cell shaps and components. In the lead treatment group, the lung tissue was occured the above symptom in first. The Al didn't exhibit specific tissue.

E104 Cloning of a cDNA with homology to the antisense strand of the Rat PLC δ 4 gene

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We cloned a new cDNA from rat brain λZAPII cDNA library which have homologous to 3'untranslated region of PLC δ 4. The cDNA was named pB2ndl. The cloned cDNA consist of 1542 nucleotides. The seguence was not contain open reading frame. Putative polyadenylation signal(AATAAA) was present at the nucleotide position of 1493bp. Ncleotide sequence of pB2ndl was complementary identical with to three regions of PLC δ 4. These three regions of PLC δ 4, 2114~2331bp, 2332~2451bp, and 2452~2696bp, were complement with 1083~1168bp, 830~955bp, an 159~380bp of pB2ndl, respectively. PCR amplification was performed for sequence analysis of rat genomic DNA complementary to polyA region of pB2ndl. Product size was 1.0Kb. This product was digested with Sau3AI restriction enzyme and cloned into the pBluescript SK(+) vector. By DNA sequence analysis, the polyA sequence of pB2ndl was different to rat genomic DNA. In order to detect tissue expression pattern of both PLC δ 4 and pB2ndl. Northern hybridization was performed by the prepared total RNA from rat tissue. Here we used sense and antisense radiolabeled single strand DNA probes of PLC δ 4 which could specifically bind to mRNA of pB2ndl and PLC δ 4, respectively.