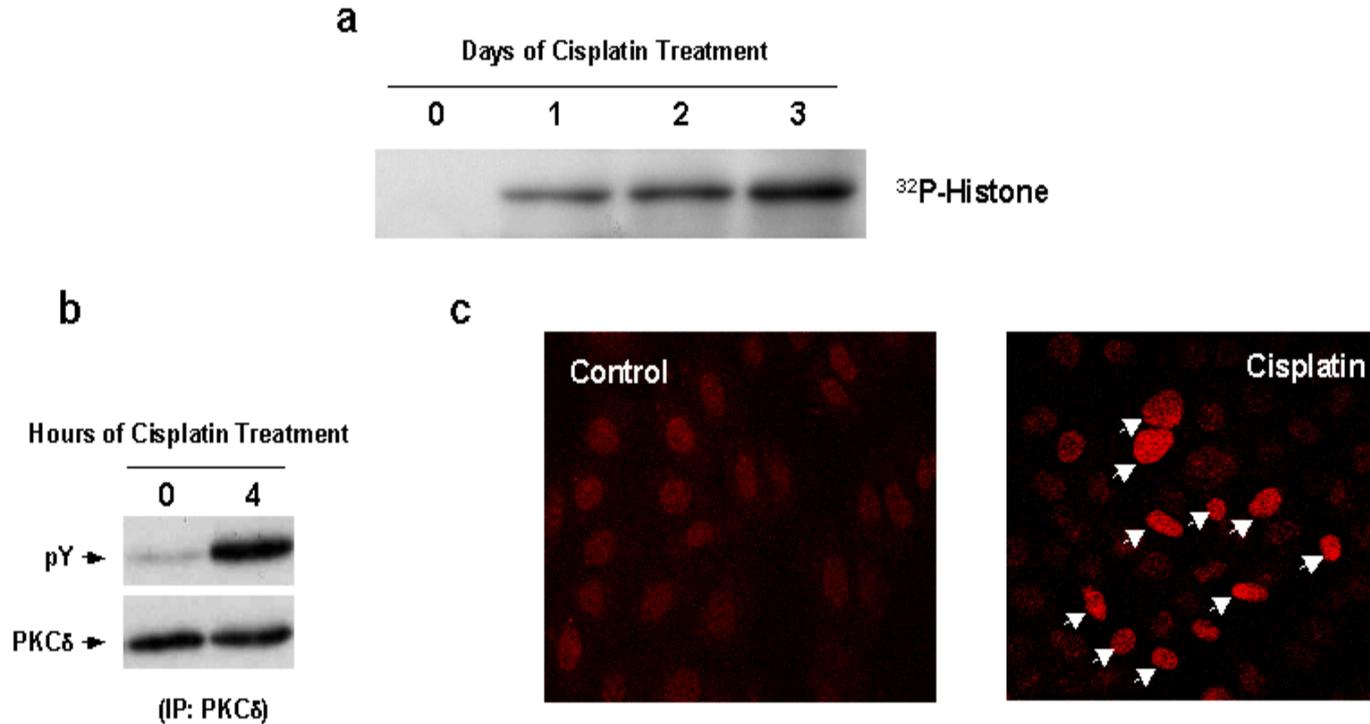


Supplementary Figure 1

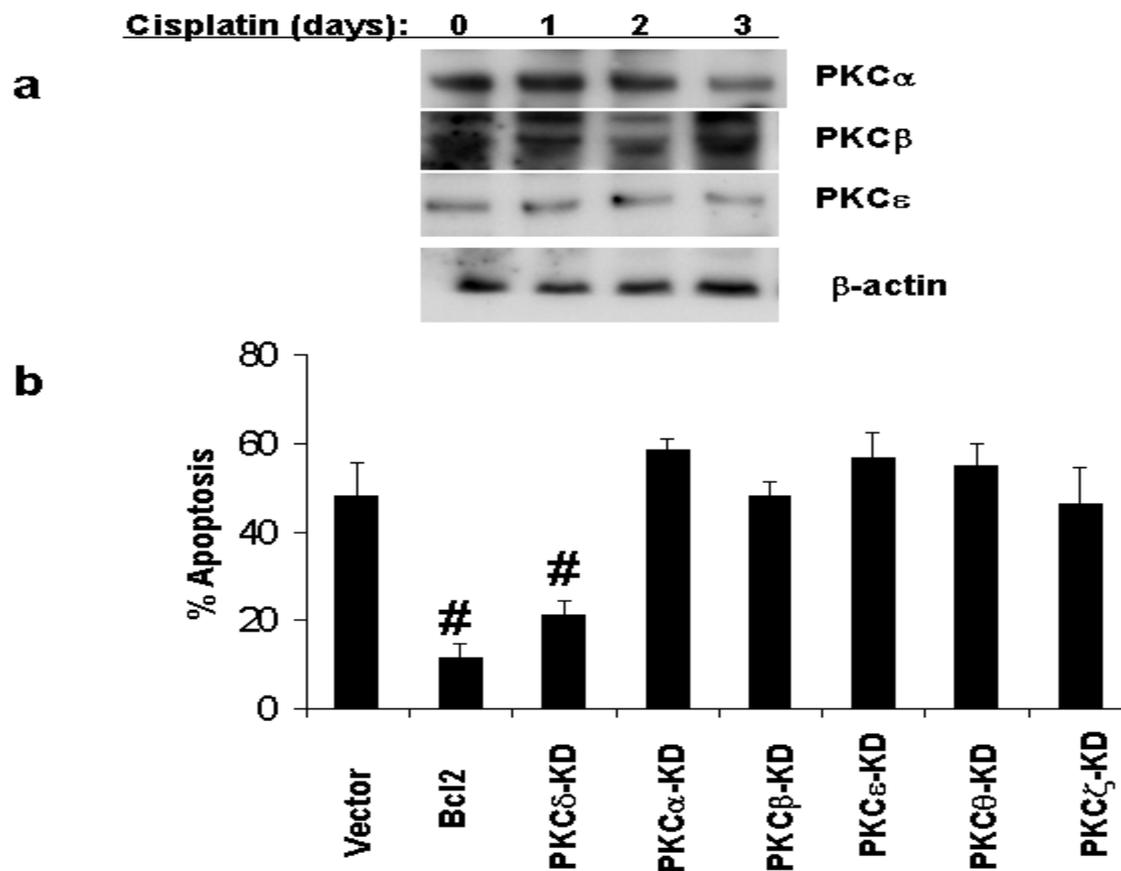
PKC δ activation during cisplatin treatment in renal tissues and cells.



(a) Representative autoradiograph of *In vitro* kinase assay of PKC δ activity. Male C57BL/6 mice of 8-10 weeks were injected with 30 mg/kg cisplatin to collect renal tissues at day 0, 1, 2, and 3. Whole tissue lysates were immunoprecipitated using an anti-PKC δ antibody for *In vitro* kinase assay with histone H1 and [γ -³²P]ATP. The reactions were subjected to electrophoresis and autoradiography. (b) RPTC cells were treated with 20 μ M cisplatin for 0- 4 hours to collect lysate for PKC δ immunoprecipitation, followed by immunoblot analysis using anti-phosphotyrosine (pY) and anti-PKC δ antibodies. (c) RPTC cells cell with or without cisplatin treatment were analyzed for PKC δ immunofluorescence. Arrows: PKC δ staining in nuclei.

Supplementary Figure 2

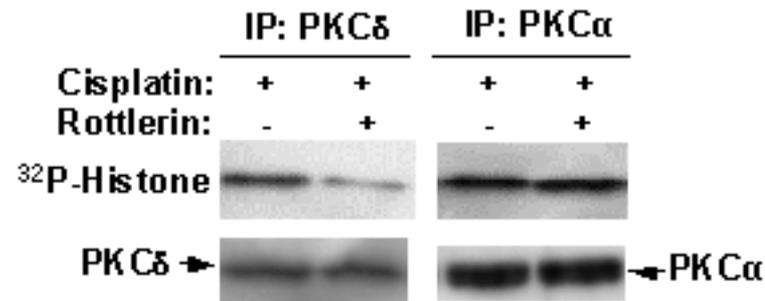
PKC isoform expression and role during cisplatin-induced renal cell death



(a) C57Bl/6 mice (male, 8 weeks) were treated with 30mg/kg cisplatin for 1-3 days to collect whole kidney lysate for immunoblot analysis of indicated PKC isoforms. (b) RPTC cells were transfected with indicated constructs and after 24 hours incubation the cells were treated with 20 μ M cisplatin for 20 hours to determine the percentage of apoptosis. Data: mean \pm SD, n=4. *, p<0.05 vs. Vector group.

Supplementary Figure 3

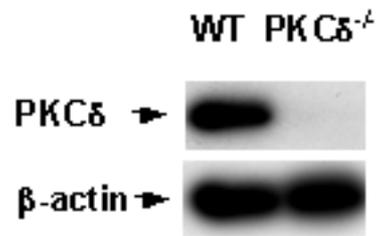
Rottlerin inhibits PKC δ , but not PKC α , during cisplatin treatment in mice



Male C57BL/6 mice of 8-10 weeks were injected with 30 mg/kg cisplatin or 30 mg/kg cisplatin + 10 mg/kg Rottlerin. Renal tissues were collected at day 3 and homogenized for immunoprecipitation of PKC δ and PKC α . The immunoprecipitates were added to kinase assay reactions containing [γ -³²P]ATP and histone H1. Histone phosphorylation was analyzed by autoradiography. Inputs were analyzed by immunoblot analysis of PKC δ and PKC α

Supplementary Figure 4

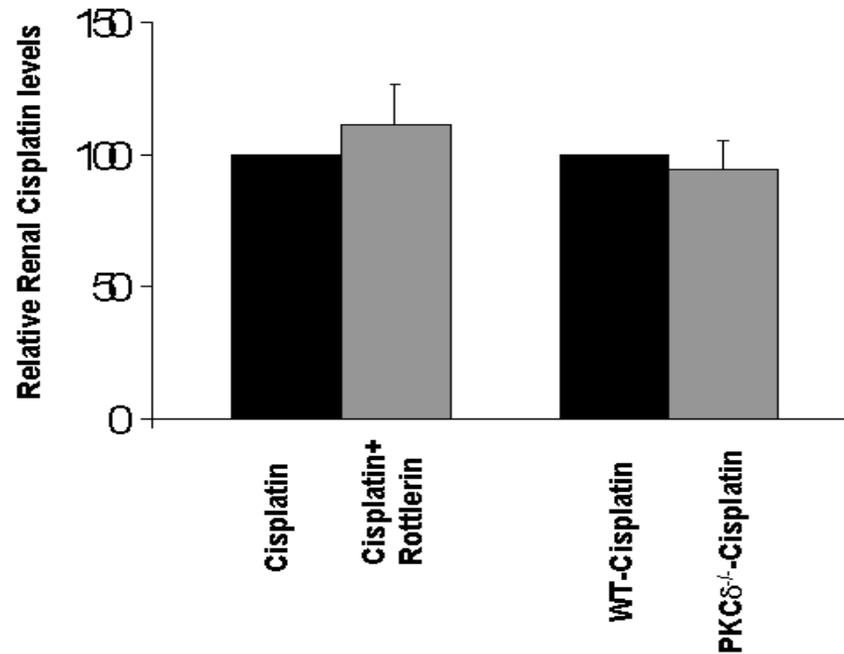
PKC δ deficiency in renal tissues of PKC δ -null mice



Kidney tissues were collected from PKC δ -null and wild-type littermate mice for immunoblot analysis.

Supplementary Figure 5

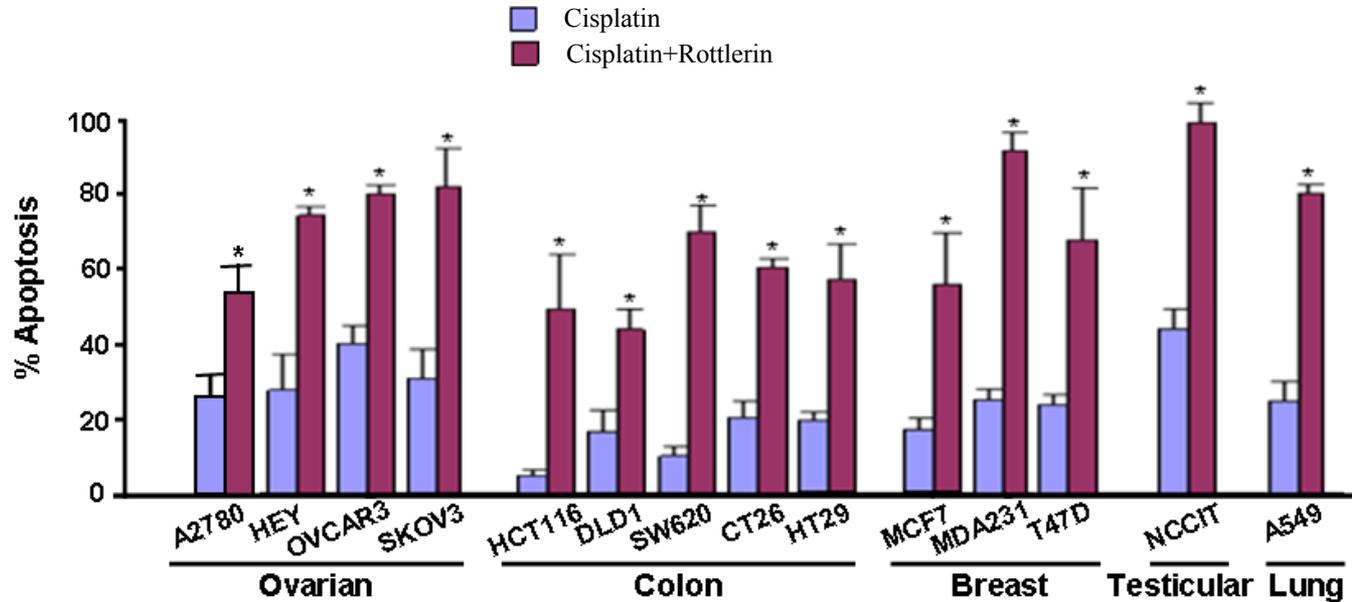
Renal uptake of cisplatin is not affected by PKC δ inhibition



Cisplatin levels were measured in the renal tissues collected 2 days after of cisplatin (30mg/dL) injection under the indicated conditions. Data: mean \pm SD, n=3.

Supplementary Figure 6

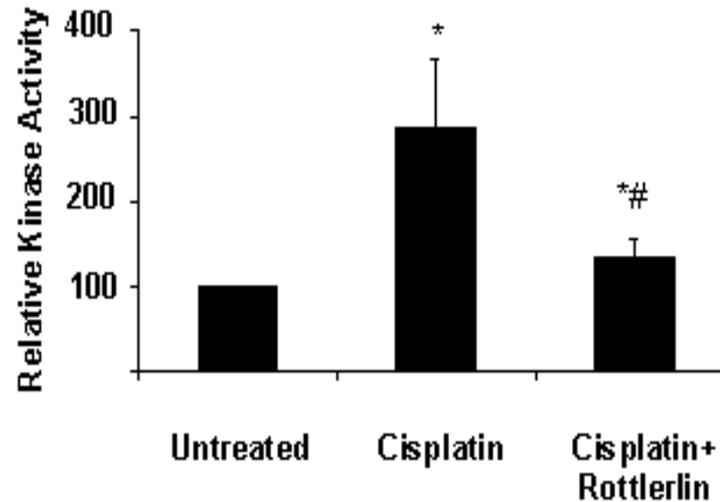
Effect of Rottlerin on Cisplatin-induced apoptosis in cancer cell lines



Fourteen cancer cell lines of indicated tumor origins were treated with 25 μ M cisplatin for 24 hours in the absence or presence of 10 μ M Rottlerin. % apoptosis was determined by counting the cells with typical apoptotic morphology. Data are means \pm SD n=4, * p<0.05 vs. cisplatin-only group.

Supplementary Figure 7

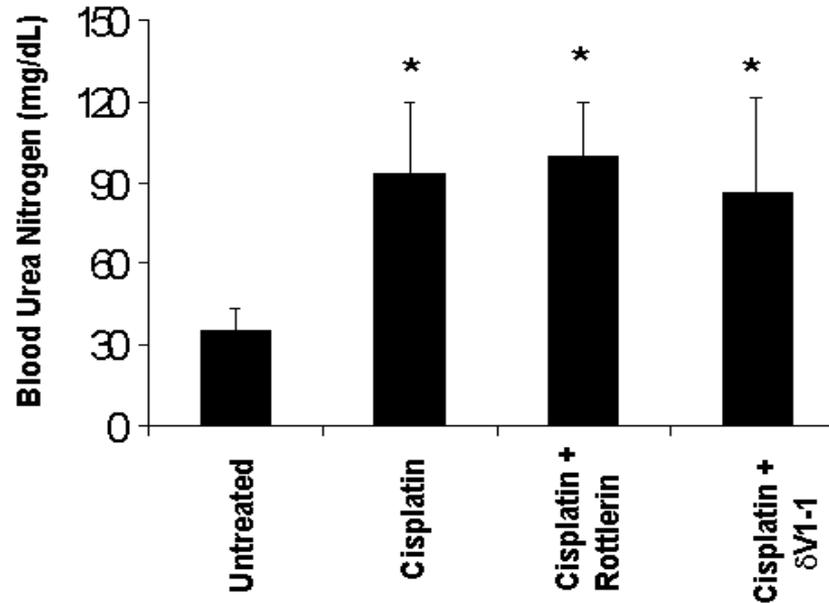
Rottlerin inhibits PKC δ activation during cisplatin treatment of A2780 ovarian cancer cells



A2780 ovarian cancer cells were untreated, treated with 25 μ M cisplatin, or treated with 25 μ M cisplatin and 10 μ M Rottlerin for 4 hours. Whole cell lysate was collected for immunoprecipitation of PKC δ for in vitro kinase activity assay. Data: mean \pm SD., n=4. * p<0.05 vs. Untreated group, # p<0.05 vs. Cisplatin-only group.

Supplementary Figure 8

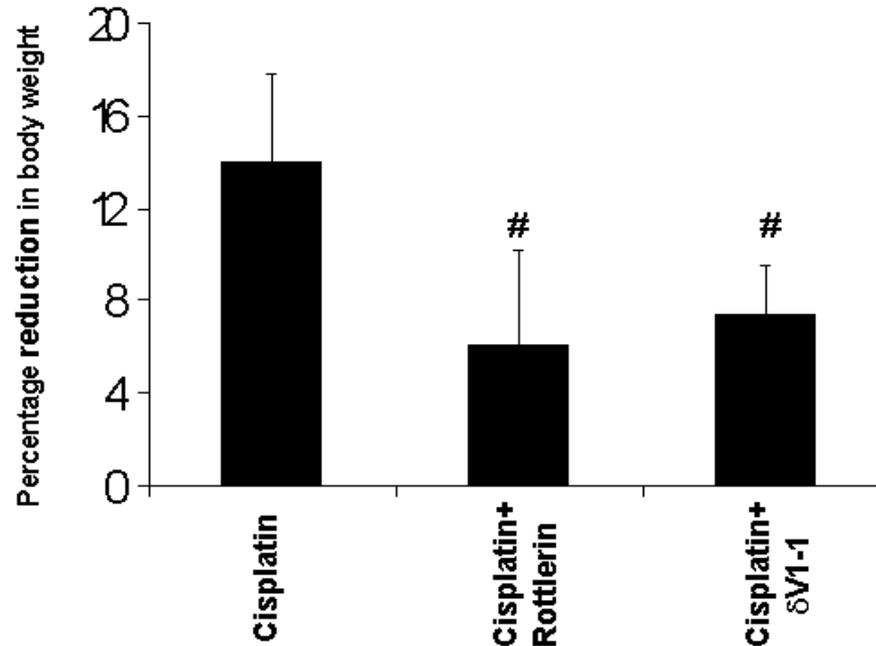
Rottlerin and $\delta V1-1$ do not have significant renoprotective effects in PKC δ knockout mice during cisplatin treatment



PKC δ -null mice (10 weeks) were injected with saline, 30 mg/kg cisplatin alone or in combination with Rottlerin (10 mg/kg) and $\delta V1-1$ (3mg/kg) and blood samples were collected on day 3 to measure BUN. Data: mean \pm SD, n=3. *, p<0.05 vs. Untreated.

Supplementary Figure 9

Effects of Rottlerin and $\delta V1-1$ on weight loss in mice during cisplatin treatment



The weight of mice was measured before and after indicated treatments to calculate the percentage reduction in body weight during cisplatin treatment in the absence or presence of Rottlerin and $\delta V1-1$. . Data: mean \pm SD., n=20. #, p<0.05 vs. Cisplatin group.