

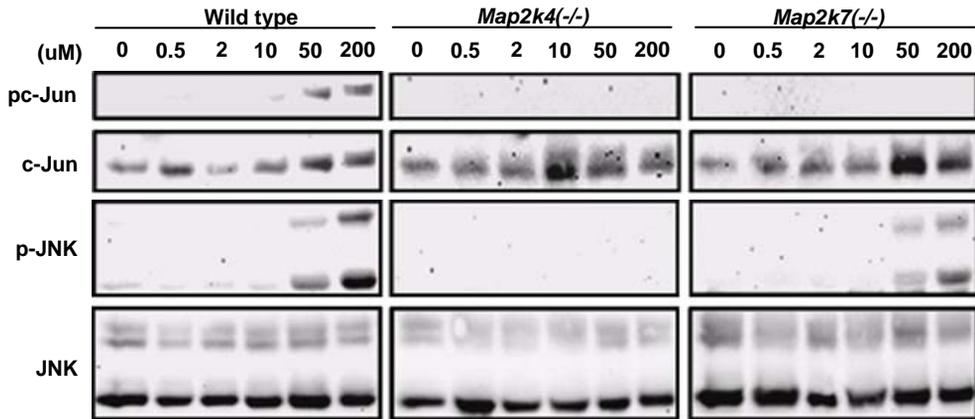
Supplemental Material.

Figure 1. Cr(VI) induces JNK pathway activation in wild type, *Map2k4* (-/-) and *Map2k7*(-/-) mouse ES cells. Wild type (WT), *Map2k4*(-/-) and *Map2k7*(-/-) cells were treated with Cr(VI) at various concentration for 6 h as indicated. Cell lysates were subjected to Western blot analysis for phosphorylation of c-JUN and JNK, and total c-JUN and JNK.

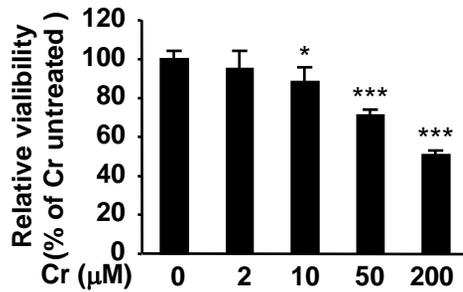
Figures 2 and 3. Cr(VI) induces cell death in a concentration and time dependent manner. Wild type mouse ES cells were treated with Cr (VI) (2) at various concentrations ranging from 0 to 200 μ M for 6 h, or (3) at 50 μ M for various times, ranging from 0 to 10 h. The cells were analyzed by the MTS assay. Cell survival rates were calculated as the ratio of absorbance in treated cells versus that in untreated cells. The values are shown as mean \pm S.D. from four repeats. *, $P < 0.05$; **, $P < 0.01$; ***, $P < 0.001$.

Figure 4. Cr(VI) induces ROS generation in *Map2k4*(-/-) and *Map2k7*(-/-) cells. *Map2k4*(-/-) and *Map2k7*(-/-) ES cells were treated with 50 μ M Cr(VI) for 6 h or 50 μ M H₂O₂ for 2 h. The cells were labeled with 10 μ M CM-H₂DCFDA for 30 min and were subjected to flow cytometric analysis. DCF positive cells were identified using Cell-Quest analysis.

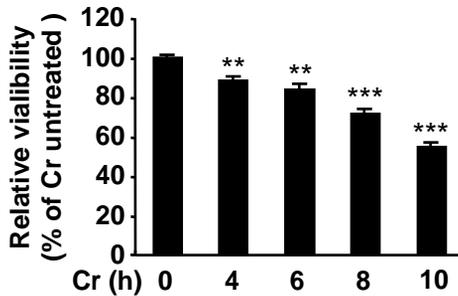
Supplemental Material, Figure 1



Supplemental Material, Figure 2



Supplemental Material, Figure 3



Supplemental Material, Figure 4

