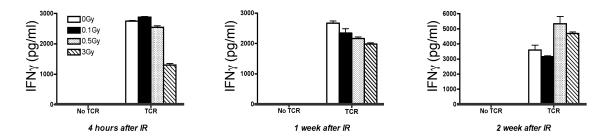
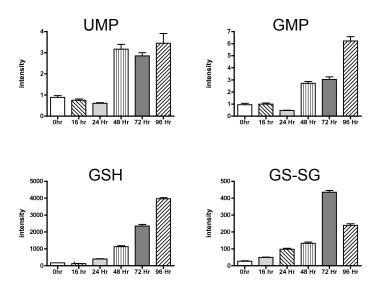


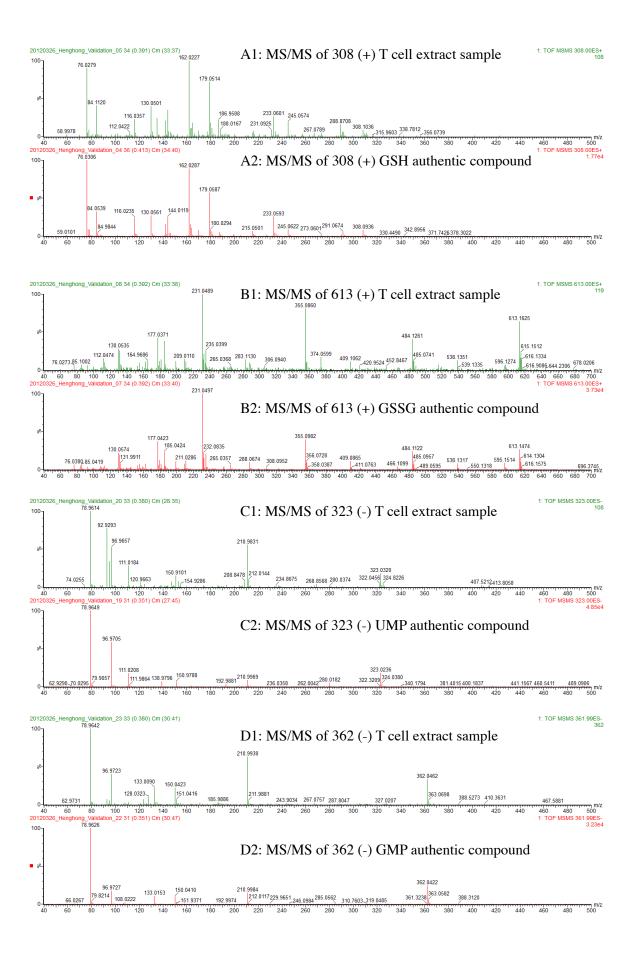
Supplementary Figure 1.Overlay of CFSE histogram of TCR activated T cells isolated from sham control and radiated mice at 4Hr post-radiation. T cells were subjected to *in vitro* TCR stimulation for 66 Hours.



Supplementary Figure 2. Levels of the representative cytokine, IFN γ , measured by ELISA in culture supernatant at 48 hours in the absence or the presence of TCR stimulation.



Supplementary Figure 3. Levels of representative metabolites that show remarkable changes after TCR activation. Y-axis represents the UPLC-QTOFMS intensity data with arbitrary unit.



Supplementary Figure 4. Examples of metabolites' ID verification. A1, B1, C1, and D1 are MS/MS spectra of authentic compounds of GSH, GSSH, UMP and GMP respectively. A2, B2, C2, and D2 are MS/MS spectra of the ions with corresponding m/z values obtained in T cell extract samples.