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Differential Gene Profiling of C Terminal P53 Mutants

The aim is to decipher the role of the C-terminal region of p53 (i.e. the terminal 30 amino acids) in regulating its transcriptional activity and thereby differential gene expression due to varying genotoxic stimuli. We have developed a first ever system for stably expressing p53 with partial loss of function C-terminal region mutations in p53-negative cell lines. Our system allows us to identify the role of these loss of function mutants in terms of selective apoptosis, cell cycle behavior, *in vivo* promoter binding specificity (DhIP assay), and differential gene expression (gene chip array).