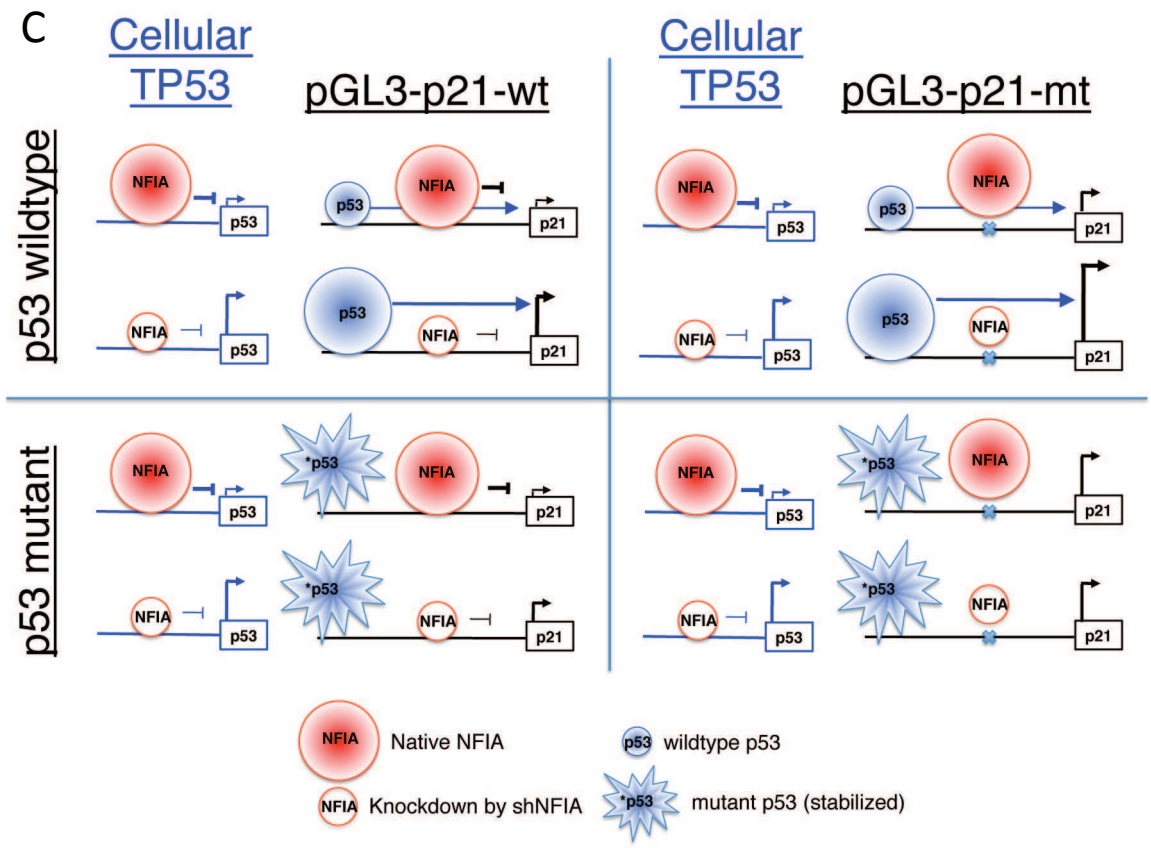

Fig S6. **(C)** Schematic figure of the p53-dependent and p53-independent effects of NFIA on the p21 promoter in GBM cells. In p53 wildtype GBM cells, native NFIA represses transcription of both p53 and p21 and knockdown of NFIA de-respresses both p53 and p21, which lead to increased p21 transcription. The wildtype p53 that is de-repressed by NFIA knockdown contributes to increased p21 transcription, indicating an indirect effect of NFIA on p21 (NFIA-p53-p21). In contrast, in p53-mutant GBM cells, mutant p53 protein does not affect p21, demonstrating that NFIA regulation of p21 also has a p53-independent component (NFIA-p21). When using a mutant p21 promoter (cannot bind to NFIA, right side), effect of NFIA on transcription of p21 is indirect, through NFIA regulation of p53 in p53 wildtype cells.