SUPPLEMENTARY MATERIAL

Figure S1

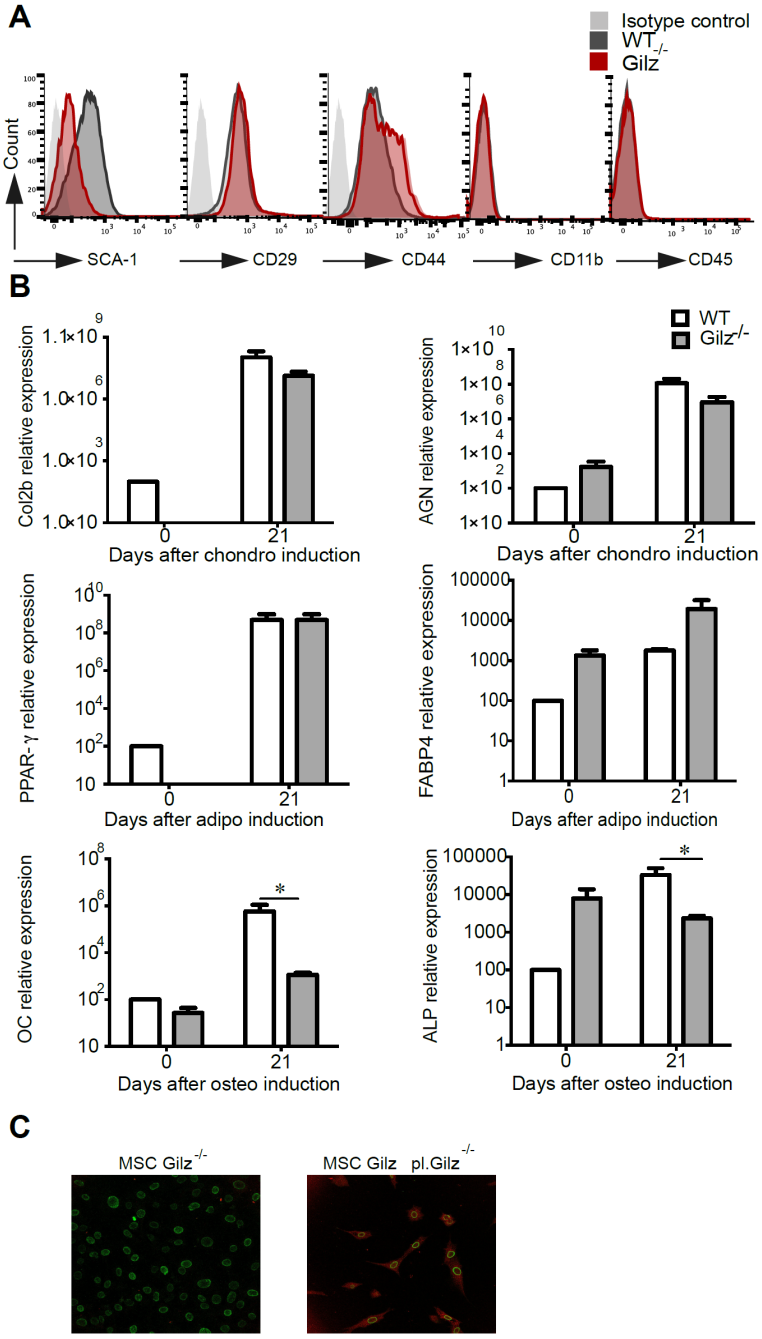

Figure S1. Phenotypic characterization and differentiation potential of WT MSC and Gilz$^{-/-}$ MSC. (A) Immunophenotype of WT MSC and Gilz$^{-/-}$ MSC. Cells were stained with antibodies directed against the indicated antigens and analysed by flow cytometry. Histograms are representative of three independent experiments with comparable results. (B) Differentiation potential of WT MSC and Gilz$^{-/-}$MSC. The differentiation potential towards the 3 lineages was analysed by the increase in mRNA expression levels of specific markers assessed by RT-qPCR, compared to the undifferentiated MSC at day 0. Results are representative of three independent experiments. *P* values referred to OC or ALP expression levels at day 21 of osteogenesis. (C) Immunodetection of Gilz in MSC by confocal microscopy. Gilz$^{-/-}$ MSC and Gilz$^{-/-}$ MSC transfected with the plasmid pCDNA3.1-GILZ were visualized and photographed by using a confocal microscope.

Figure S2

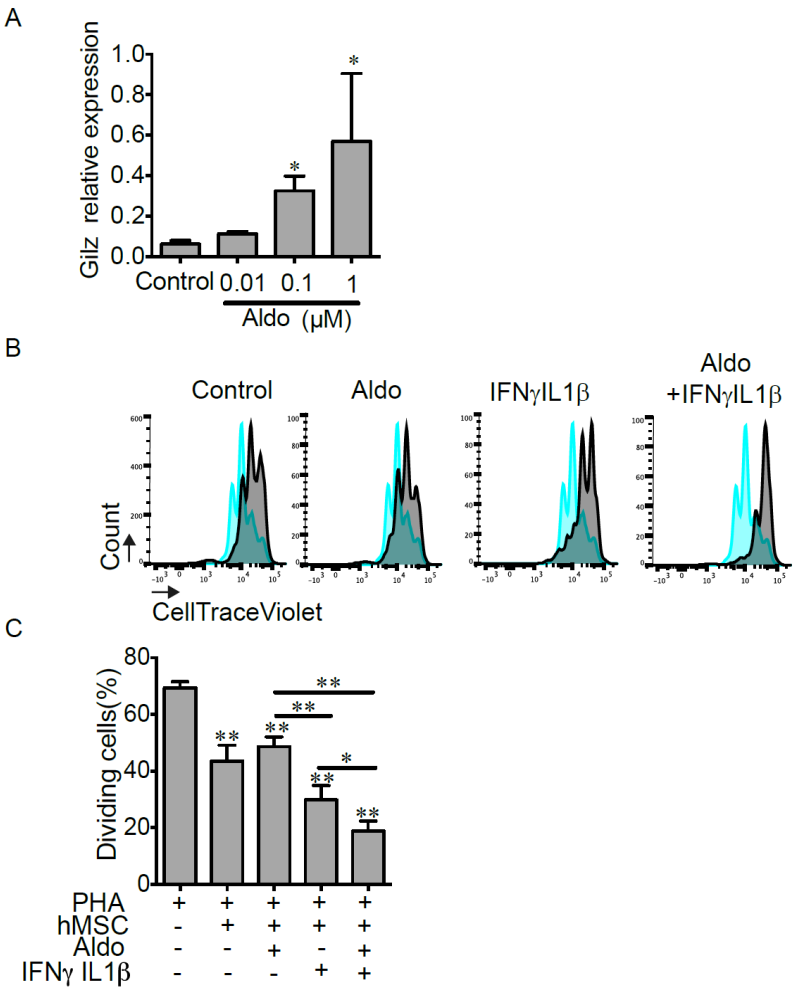

Figure S2. Role of aldosterone treatment on Gilz expression in MSC and their immunosuppressive effects. (A) Relative expression of Gilz was quantified by RT-qPCR in WT MSC in basal conditions (control) or in response to a 24h treatment with different concentrations of aldosterone (Aldo) form 0.01 to 1µM. (B-C) Cell Trace Violet-labelled PBMC were stimulated with PHA and the proliferation of cells was measured by CTV dilution. Results are expressed as the percentage of PHA-induced proliferation which was assigned the value of 100% or as the percentage of CTV^+ dividing cells. PHA-activated PBMC were cultured alone or in presence of untreated hMSC or hMSC pretreated with aldosterone alone or in combination with IFNγ and IL1β. When not indicated, *P* values referred to PHA-activated samples. Mean values of n≥3 independent experiments. * $P < 0.05$, ** $P < 0.01$. All error bars indicate SEM.