

Supplementary Information

Article

Cytokines Differently Define the Immunomodulation of Mesenchymal Stem Cells from the Periodontal Ligament

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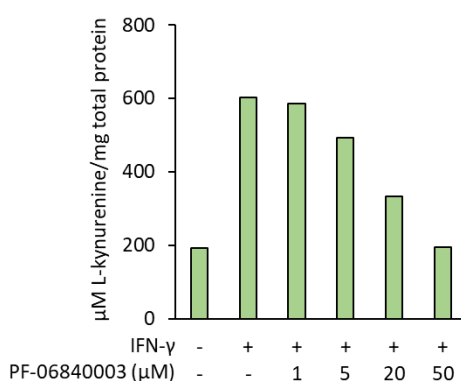


Figure S1. Effect of different PF-06840003 (IDO-1 inhibitor) concentrations on the IDO-1 enzymatic activity. Primary hPDLSCs were treated with 100 ng/ml IFN- γ in the absence or presence of PF-06840003 (1 μ M – 50 μ M). Unstimulated hPDLSCs served as control. IDO-1 enzymatic activity was measured by quantifying L-kynurenine concentration (μ M) in the conditioned media, normalized to the total protein amounts in mg. All data are presented as mean value $\pm$ S.E.M. and were received from one experiment with cells isolated from one individual.

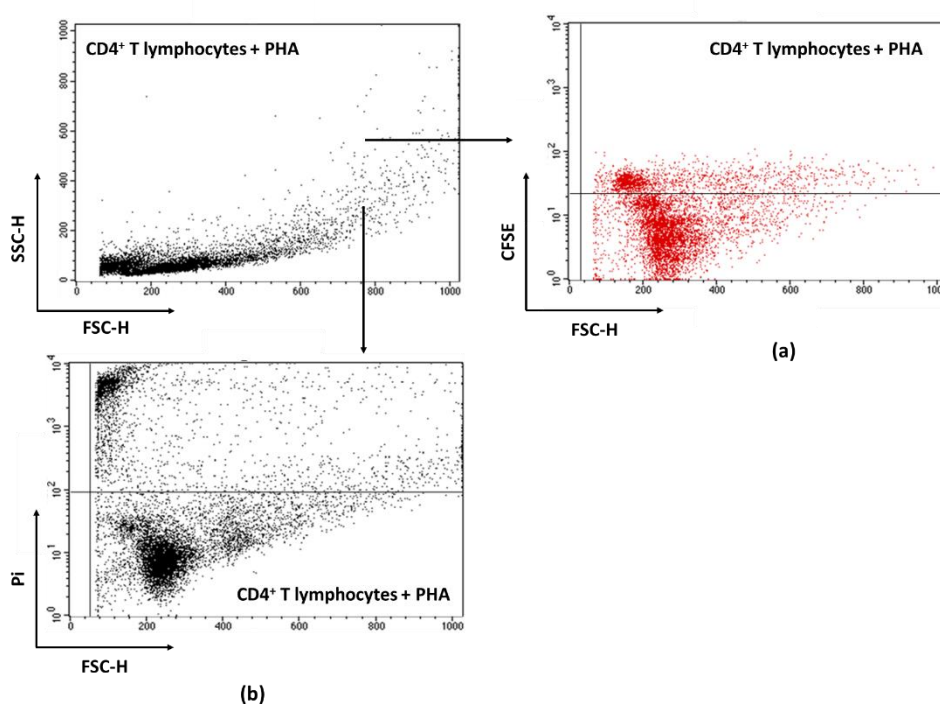


Figure S2. Representative dot plots which outline the gating / analysis strategy for CFSE proliferation (a) and Pi apoptosis (b) assays. From these dot plots the % of at least once divided CD4⁺ T lymphocytes and the % of Pi positive CD4⁺ T lymphocytes were calculated.

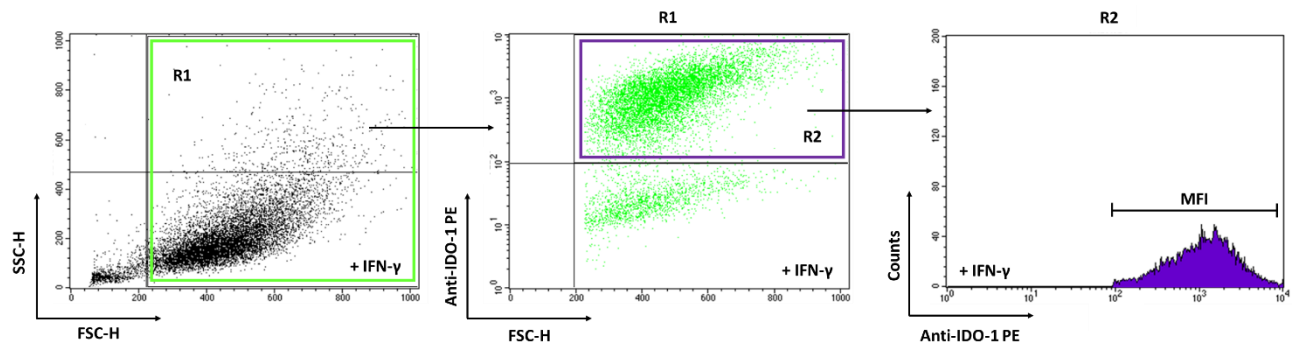


Figure S3. Representative dot plots and one-parameter histogram which outline the gating / analysis strategy for calculating the % of IDO-1 positive hPDLSCs and the corresponding m.f.i.

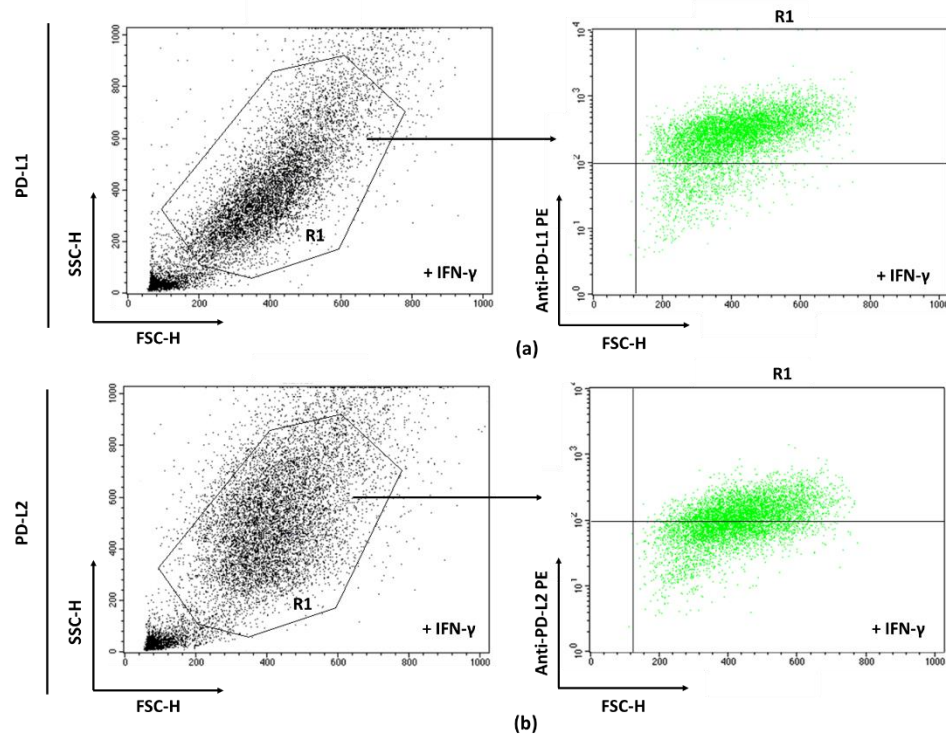


Figure S4. Representative dot plots with outline the gating / analysis strategy for calculating the % of PD-L1 (a) or PD-L2 (b) positive hPDLSCs.

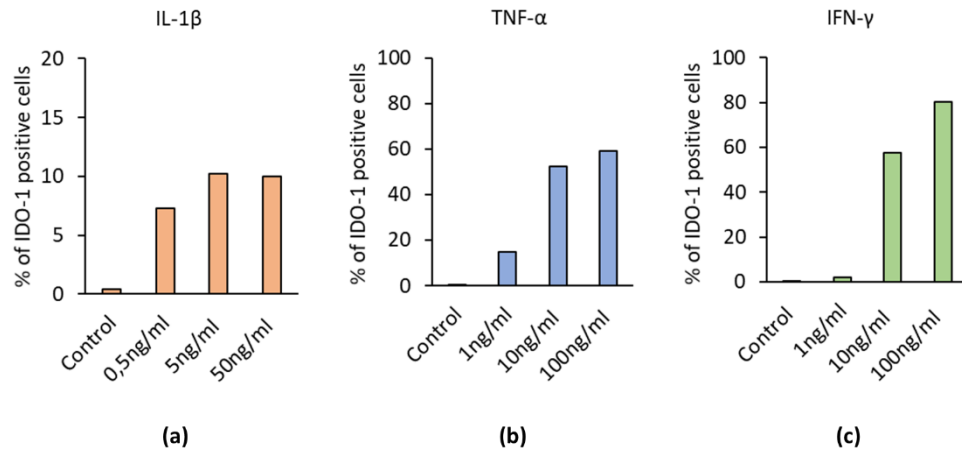


Figure S1. Effect of different IL-1 β , TNF- α and IFN- γ concentrations on the percentage of IDO-1 positive hPDLSCs. Primary hPDLSCs were treated with different (a) IL-1 β (0.5ng/ml – 50ng/ml), (b) TNF- α (1ng/ml – 100ng/ml) and (c) IFN- γ (1ng/ml – 100ng/ml) concentrations. Unstimulated hPDLSCs served as control. 48 hours after treatment, IDO-1 protein levels were quantified by intracellular immunostaining followed by flow cytometry analysis, determining the percentage of IDO-1 positive hPDLSCs. All data are presented as mean value $\pm$ S.E.M. and were received from one experiment with cells isolated from one individual.