materials

MDPI

Supplementary Materials

Acid Dentin Lysate Modulates Macrophage Polarization and Osteoclastogenesis In Vitro

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Table S1. Comparison of anti-inflammatory effect of ADL prepared from HCl 0.1 M and 1.0 M. ADL prepared from HCl 1.0 M shows a stronger anti-inflammatory effect through suppression of the respective gene expression in bone marrow derived stem cells.

Gene	LPS + ADL 1.0 M/LPS	LPS + ADL 0.1 M/LPS
IL1	0.007	0.201
IL6	0.079	0.415
COX2	0.2	0.3

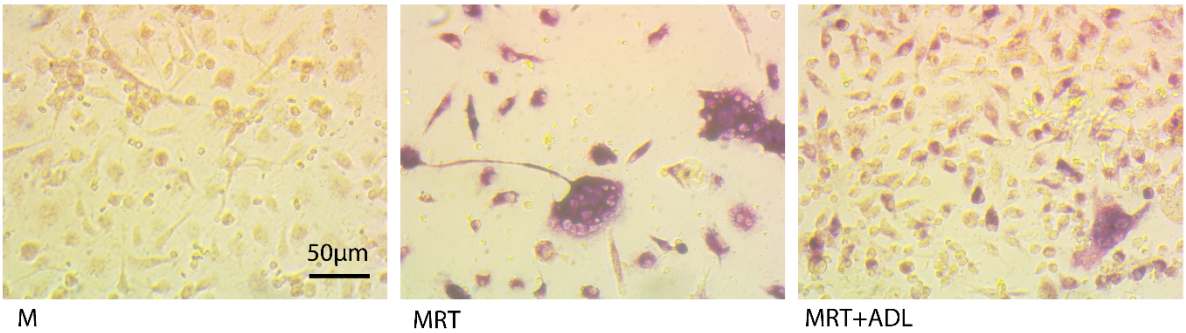

Figure S1. ADL suppresses osteoclastogenesis. Number of multinucleated cells stained positive for TRAP was decreased by ADL. M and MRT stand for MCSF and MCSF + RANKL + TGF-β, respectively.

ADL supports the M2 phenotype of macrophages

The M2 alternative form of the macrophages characteristically express arginase 1 and CD206+ as a cell surface marker. To evaluate whether ADL modulates M2 polarization of the macrophages, expression of CD206+ in murine bone marrow-derived macrophages and arginase-1 in murine bone marrow-derived macrophages and RAW 264.7 cells was determined by RT-PCR analysis. Results revealed an ADL-induced expression of arginase 1 and although not significant results in an increase of CD206+, suggesting that ADL pushes macrophages towards the M2 phenotype (Supplementary Figure S2).

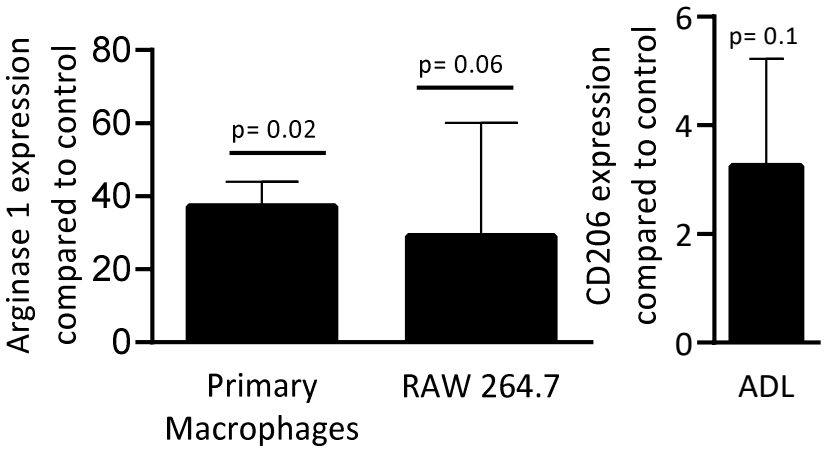

Figure S2. ADL increases arginase 1 expression in murine bone marrow-derived macrophages and RAW 264.7 cells. Bone marrow-derived macrophages and RAW 264.7 cells were exposed to ADL for overnight. Statistical analysis was based on Kruskal-Wallis test, and the P values indicate a comparison of each group to untreated control.