

Effects of resveratrol and viniferin on the hippocampal amyloid deposits after 9 months of treatment. The double transgenic APPswePS1dE9 mice were intraperitoneally treated with resveratrol, *trans* ε -viniferin or their vehicle (PEG 200 as control) at 20mg/kg from 3 to 12 months of age. The senile plaques were stained with antibody against amyloid peptide (clone WO2, green) and the nuclei with DAPI (blue). On each image, a magnification delineated by a white frame was added. Scale bars: 50 µm. The quantification of global signal WO2 and of WO2-positive amyloid deposits were represented. In each graph, the dotted line represents 100% and the results were expressed as percentage of control (rounds represent females and triangles represent males). To compare values between PEG- and polyphenol-treated-mice (by *trans* resveratrol or *trans* ε -viniferin), a Kruskal-Wallis test followed by Dunn's Multiple Comparison Test were used, (n = 13). **p < 0.01, *p < 0.05 compared to PEG-treated AD mice (control mice) and *p<0.05 compared to resveratrol-treated mice.