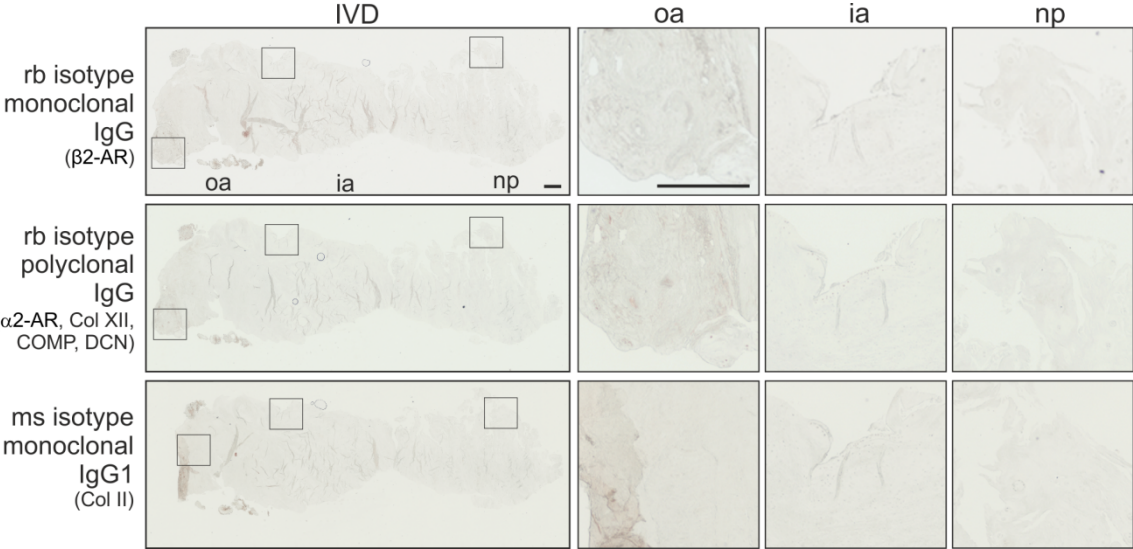
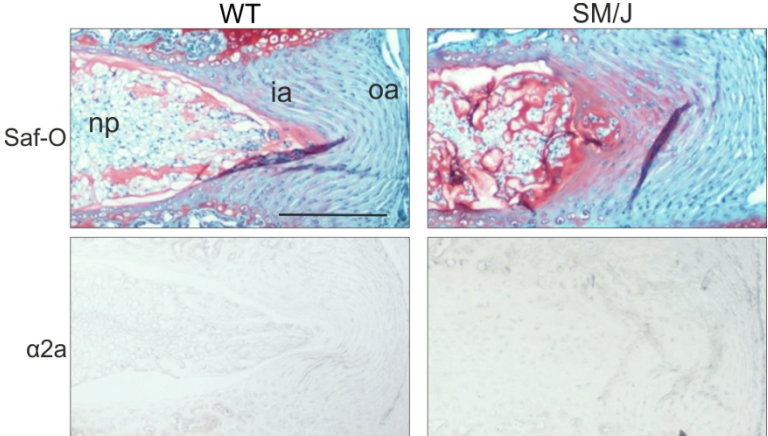


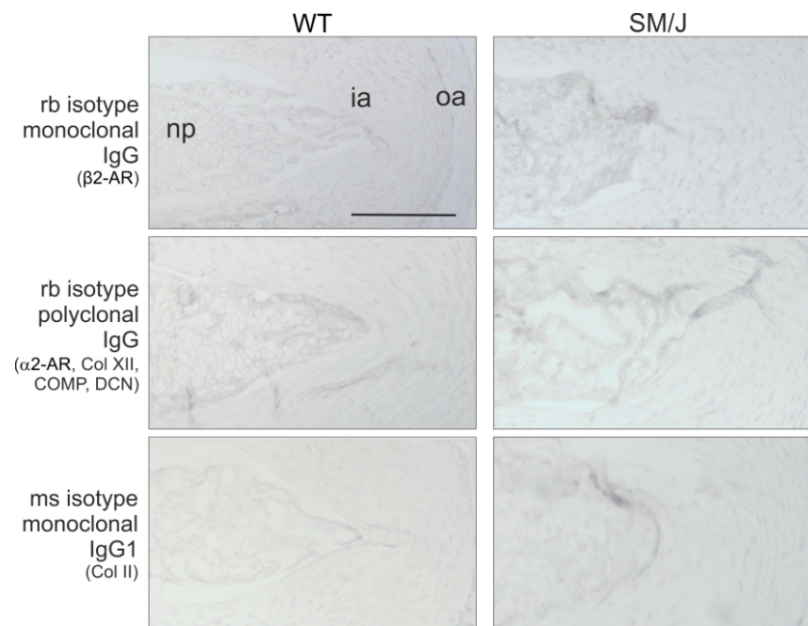
Supplementary Material - ijms-707703



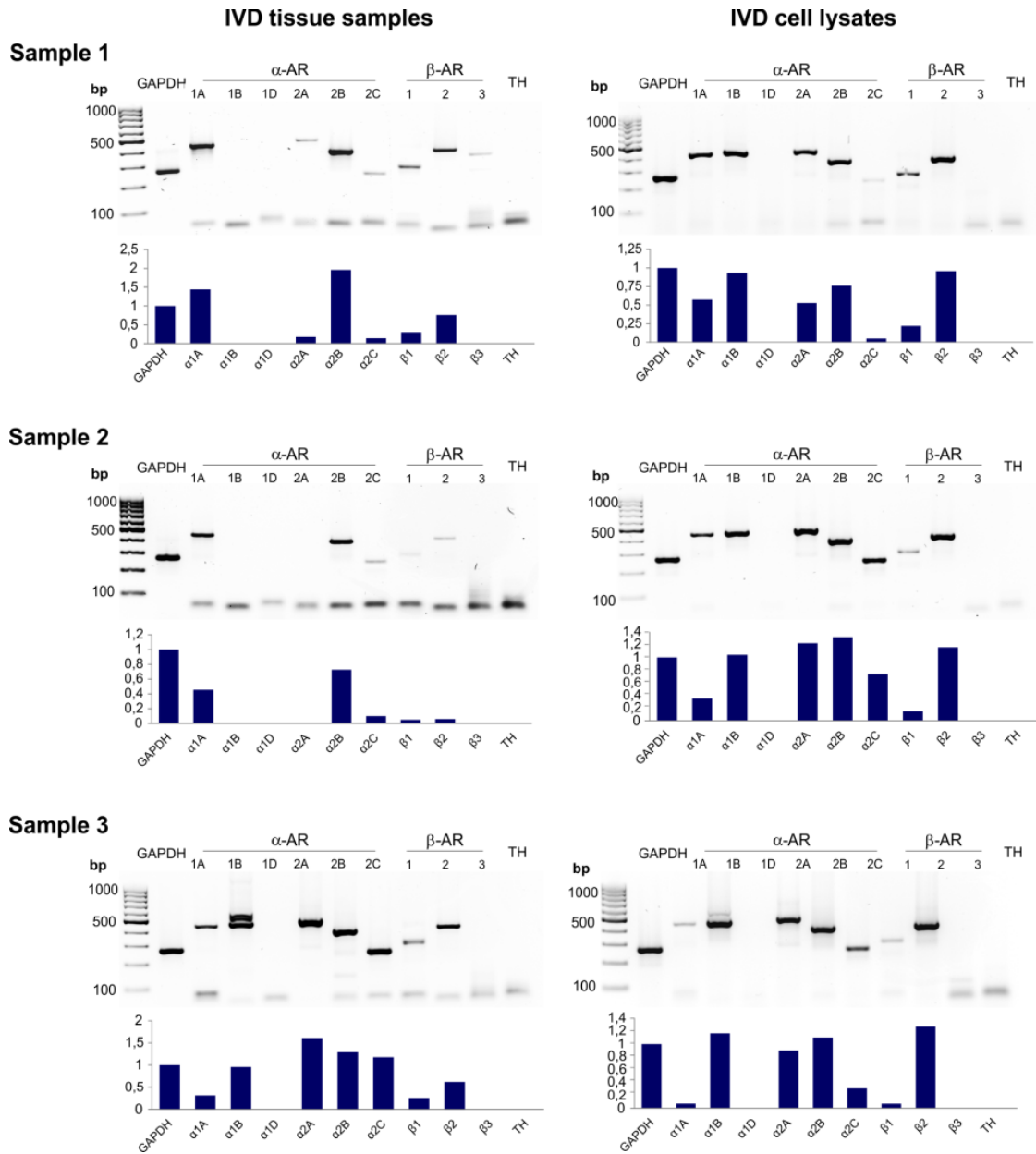
Supplementary figure 1. Isotype controls for the respective immunohistochemical staining in human IVD sections (bars 500 μ m). Squares in the left panel indicate further magnified regions shown to the right. Abbreviations: oa – outer annulus, ia – inner annulus, np – nucleus pulposus, Col II - type II collagen, Col XII - type XII collagen, COMP - cartilage oligomeric matrix protein, DCN - decorin



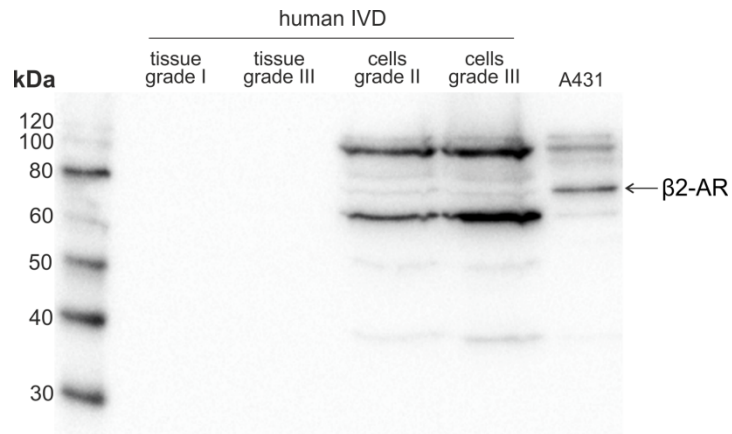
Supplementary figure 2. Immunohistochemical analysis of α 2a-AR in IVD sections of WT and SM/J mice (bars 500 μ m). Abbreviations: Saf-O – safranin-O staining, oa – outer annulus, ia – inner annulus, np – nucleus pulposus



Supplementary figure 3. Isotype controls for the respective immunohistochemical staining in murine IVD sections (bars 500 μ m). Col II - type II collagen, Col XII - type XII collagen, COMP - cartilage oligomeric matrix protein, DCN - decorin



Supplementary figure 4. Adrenoceptor (AR) and tyrosine hydroxylase (TH) gene expression in human IVD tissue and in corresponding isolated IVD cells analyzed by RT-PCR from three samples. Gene expression of all known AR subtypes as well as of TH in human IVD tissue samples (representative pictures of human IVD samples; grade II of degeneration, (n=3)). GAPDH band intensity of each individual patient was defined as „1“ and AR expression levels were calculated in relation to that value.



Supplementary figure 5. Protein expression of β 2-AR examined by western blot analysis. Immunoblot of β 2-AR protein in extracts from representative IVD tissue (grade I and III) and IVD cells (isolated from grade II tissues)(A431=positive control, see also <https://www.abcam.com/beta-2-adrenergic-receptor-antibody-epr707n-ab182136.htm>).