

# Modulation of androgen receptor protein by culture conditions of human skin fibroblasts

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Cultures of skin fibroblasts show variation of androgen binding with culture conditions; binding variations are usually avoided by using confluent cultures. In this work, we analysed the effect of cell density and mitogenic agents on the level of androgen receptor (AR) of cultured human skin fibroblasts. Results demonstrated that in cultures of human skin fibroblasts, cellular binding of dihydrotestosterone was higher in cells grown at low than at high cell density. The reduction in binding resulted from a decrease in the number of high affinity receptors and not from a change in receptor affinity. Immunocytochemistry for AR showed greater staining intensity in cells grown at low than at high cell density. Additionally, immunoblot analysis demonstrated more AR protein in low cell density cultures. On the other hand, it was observed that cells grown at low cell density showed diminished androgen binding capacity after 24 h of treatment with insulin-like growth factor (IGF-I), basic fibr