LETTER TO THE EDITOR

Function of human mineralocorticoid receptor splice variant

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In their recent paper, Pascual-Le Tallec et al. (1) state that a publication by Bloem et al. (2) describes that a mineralocorticoid receptor (MR) splice variant with a 12 bp insertion coding for a protein with four additional amino acids (MR+4) shows no functional difference to the MR without insertion. This evidence is not produced in the publication by Bloem et al. or to our knowledge anywhere else. On the contrary Bloem et al. propose that the additional four amino acid residues in the DNA binding domain could alter binding to a glucocorticoid response element (GRE) and transcription activation. Because this splice variant shows considerable concentrations in various human tissues (3), we have compared transactivation mediated by MR and MR+4. The plasmid pchMR+12 coding for hMR+4 was created by in vitro PCR mutagenesis of pchMR coding for hMR. Transactivation of both variants by aldosterone was analysed in CV-1 cells by measuring firefly luciferase activity of an inducible reporter gene normalised to the activity of constitutively expressed renilla luciferase (Fig. 1) (4).

References


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