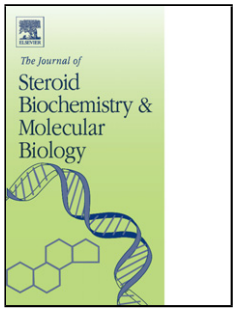

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PII: S0960-0760(17)30396-5
DOI: https://doi.org/10.1016/j.jsbmb.2017.12.014
Reference: SBMB 5091

To appear in: *Journal of Steroid Biochemistry & Molecular Biology*

Received date: 5-9-2017
Revised date: 17-12-2017
Accepted date: 19-12-2017

Please cite this article as: van Rooyen D, Gent R, Barnard L, Swart AC, The *in vitro* metabolism of 11β-hydroxyprogesterone and 11-ketoprogesterone to 11-ketodihydrotestosterone in the backdoor pathway, *Journal of Steroid Biochemistry and Molecular Biology* (2010), https://doi.org/10.1016/j.jsbmb.2017.12.014

The *in vitro* metabolism of 11β-hydroxyprogesterone and 11-ketoprogesterone to 11-ketodihydrotestosterone in the backdoor pathway

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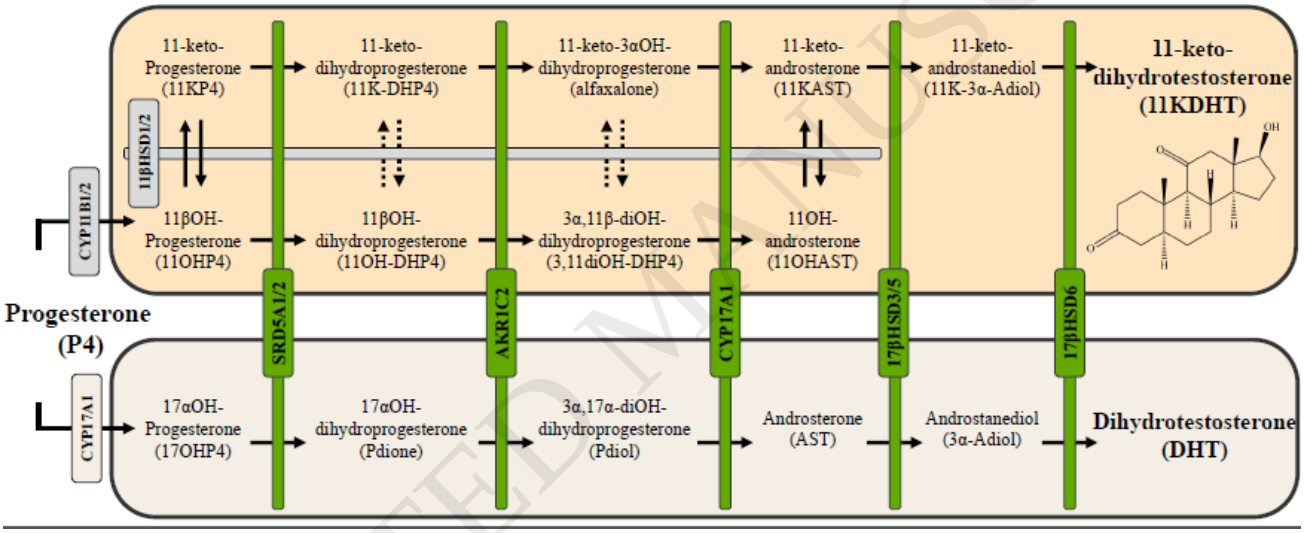
Graphical abstract



Highlights

- Adrenal CYP11B1 & B2 catalyse the production of 11β-hydroxyprogesterone (11OHP4).
- 11βHSD2 catalyses the conversion of 11OHP4 to 11-ketoprogesterone (11KP4).
- 11OHP4 & 11KP4 are metabolised to 11-ketodihydrotestosterone in the backdoor pathway.
- SRD5A & AKR1C2 reduce 11OHP4 & 11KP4 to their 3α,5α-reduced C_{21} steroids.
- CYP17A1 catalyses the 17α-hydroxylase and the 17,20-lyase reaction of alfaxalone.