

## **ProductInformation**

## RU 26752

Product Number **R 2153** Store at –20 °C

Cas # 76676-33-0

Chemical Name:  $17\alpha$ -Hydroxy-3-oxo- $7\alpha$ -propylpregn-4-

ene-21-carboxylic acid γ-lactone

**Product Description** 

Molecular Formula: C<sub>25</sub>H<sub>36</sub>O<sub>3</sub> Molecular Weight: 384.55

RU 26752 is a synthetic mineralocorticoid receptor antagonist, characterized by a C17  $\gamma$ -lactonic ring.

Aldosterone exerts its effects by acting through a ligand-activated transcription factor, the mineralocorticoid receptor (MR). MR is a member of the nuclear receptor (NR) family that includes receptors for steroid and thyroid hormones, vitamin D3, and retinoic acids as well as numerous orphan receptors. MR is implicated in maintaining electrolyte homeostasis and may also be

involved in metabolism and energy balance. RU 26752 administered with aldosterone prevented the hypertension produced by aldosterone alone; suggesting that long-term administration of the antimineralocorticoid RU 26752 *in vivo* to Sprague-Dawley rats prevents the aldosterone-induced hypertension.<sup>4</sup>

RU26752 may be used as a tool to evaluate receptor structure and function.

## Storage/Stability

Store at -20 °C

## References

- Lazar, G., and Agarwal, M.K., Evidence for an antagonist specific receptor that does not bind mineralocorticoid agonists. BBRC, 134, 261-265 (1986).
- Rauz, et al., Serum- and glucocorticoidregulated kinase isoform-1 and epithelial sodium channel subunits in human ocular ciliary epithelium. Invest. Ophthalmol. Vis. Sci., 44, 1643-1651 (2003).
- 3. Fagart, J., et al., Antagonism in the human mineralocorticoid receptor. EMBO J., **17**, 3317-3325 (1998).
- 4. Kalimi, M., et al., Effects of antimineralocorticoid RU 26752 on steroid-induced hypertension in rats. Am. J. Physiol., **258**, E737-E739 (1990).

KAA 06/04