# MCE MedChemExpress

# **Product** Data Sheet

## CGP-53153

 Cat. No.:
 HY-U00125

 CAS No.:
 149281-19-6

 Molecular Formula:
 C23H33N3O2

 Molecular Weight:
 383.53

Target: 5 alpha Reductase

Pathway: Metabolic Enzyme/Protease

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

#### **BIOLOGICAL ACTIVITY**

Description	CGP-53153 is a steroidal inhibitor of 5 alpha reductase with $IC_{50}$ s of 36 and 262 nM in rat and human prostatic tissue, respectively.
IC <sub>50</sub> & Target	IC50: 36 nM (rat 5 alpha reductase), 262 nM (human 5 alpha reductase) <sup>[1]</sup>
In Vitro	CGP-53153 competitively inhibits rat microsomal 5 alpha reductase from prostate with an IC $_{50}$ of 36 nM compared to the reference compound finasteride (IC $_{50}$ =11 nM). CGP 53153 is approximately one order of magnitude more potent in inhibiting rat compared to human 5 alpha reductase, with IC $_{50}$ values of 36 and 262 nM, respectively MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	CGP-53153 can significantly reduce T-propionate-mediated prostate growth at oral doses of 0.01 mg/kg. CGP-53153 significantly reduces prostate weight at 3 and 10 mg/kg by 31% and 37%, respectively. Treatment for 12 weeks with both CGP-53153 reduces prostate volume by more than 70% in individual dogs. Neither body weight nor the weight of any organ tested is affected by CGP-53153 <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **PROTOCOL**

Animal
Administration [1]

Rats: Adult male rats weighing 160-180 g at the start of the study are treated orally once daily for 14 consecutive days either with increasing doses of CGP-53153 (1, 3 and 10 mg/kg) or with 10 mg/kg finasteride in 20% HCD. Control rats are given 20% HCD. On the 14th treatment day, 4 h after the last application, the animals are randomized and rapidly killed. Trunk blood is collected in polystyrene tubes and serum obtained by centrifugation is stored at -20°C for hormone (T, DHT and rat-LH) determination at a later date. After decapitation, the following organs are excised and weighed after removal of adhering fat and connective tissue: ventral prostate, seminal vesicles, levator ani and bulbocavernosus muscle, testes, pituitary, adrenals, thyroid, thymus and liver<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

1]. H?usler A, et al. CGP-53153: a	a new potent inhibitor of 5alph	a-reductase. J Steroid Biochen	n Mol Biol. 1996 Feb;57(3-4):187-95.		
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