

# **Product** Data Sheet

# **Anipamil**

 Cat. No.:
 HY-U00044

 CAS No.:
 83200-10-6

 Molecular Formula:
 C<sub>34</sub>H<sub>52</sub>N<sub>2</sub>O<sub>2</sub>

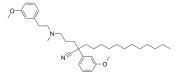
 Molecular Weight:
 520.79

Target: Calcium Channel

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

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

Analysis.



### **BIOLOGICAL ACTIVITY**

#### Description

Anipamil is a long-acting calcium channel blocker, used for the treatment of cardiovascular disease.

#### In Vivo

Anipamil (40 mg, p.o.)-treated 2K-1C rabbits reveal absent or negligible intimal thickening and a decrease of postnatal-type SMC from the underlying media. Anipamil inhibits the growth of SMC accompanied by the expression of SM-MyHC in all SMC, ie, the appearance of a more differentiated cell phenotype compared to control cultures [1]. In the arrhythmic assay, anipamil (1.0 mg/kg + 0.10 mg/kg/min infusion, n=8 or 5.0 mg/kg + 0.50 mg/kg/min infusion, n=12) reduces VT but not VF [2]. In rats with subtotal (five-sixths) nephrectomy treated with anipamil (0.5 mg/kg/day, p.o.), the mortality is less, and the mean arterial blood pressure is also more well controlled, and the serum creatinine concentration is lower than control group. The anipamil (2 mg/kg/day)-treated group exhibits significantly greater protection of renal function than does the hydralazine-treated group for the same level of blood pressure control [3].

 $\label{eq:mce} \mbox{MCE has not independently confirmed the accuracy of these methods. They are for reference only.}$ 

## **PROTOCOL**

# Animal Administration [3]

Preliminary studies are performed to determine the anipamil dose response. Anipamil is mixed with food to give a dose of 0.5, 2 or 5 mg/kg/day. One week after five-sixths nephrectomy, rats are paired according to renal function, blood pressure and body weight. Rats are then pair-fed and receive either the long-acting calcium channel blocker anipamil (2 mg/kg/day in food, n=20) or placebo (n=20).

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

## **REFERENCES**

- [1]. Pauletto P, et al. Anipamil prevents intimal thickening in the aorta of hypertensive rabbits through changes in smooth muscle cell phenotype. Am J Hypertens. 1996 Jul;9(7):687-94.
- [2]. Pugsley MK, et al. Effects of anipamil, a long acting analog of verapamil, in pigs subjected to myocardial ischemia. Life Sci. 1995;57(12):1219-31.
- [3]. Jarusiripipat C, et al. Effect of long-acting calcium entry blocker (anipamil) on blood pressure, renal function and survival of uremic rats. J Pharmacol Exp Ther. 1992 Jan;260(1):243-7.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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