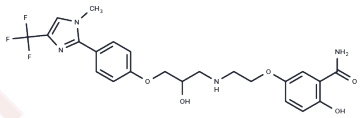
# Data Sheet (Cat.No.T30846)

TargetMol

## CGP-20712

### Chemical Properties



CAS No. : 137888-49-4

Formula: C23H25F3N4O5

Molecular Weight: 494.46

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | CGP-20712 is a selective β 1-adrenoceptor antagonist with an IC50 of 0.7 nM. |
| Targets(IC50) | Adrenergic Receptor |
| In vitro | In brown adipocytes, CGP-20712 (1 μM) significantly inhibited UCP1 gene expression induced by NE. However, CGP-20712 had no effect on lipolysis. These results suggested that β1-adrenoceptor mediated UCP1 gene expression.[4]<br>In neocortical membranes, CGP 20712 exhibited affinity for β1-adrenoceptor and β2-adrenoceptor with IC50 values of 0.7 and 6700 nM, respectively.[1] |
| In vivo | CGP 20712 (a selective beta 1-adrenergic receptor antagonist) (5 mg/kg; Pretreatment of 8-day-old rats) did not change the plasma ACTH response to insulin injection.[3] |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 45 mg/mL (91.01 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 2.0224 mL | 10.112 mL | 20.2241 mL |
| 5 mM | 0.4045 mL | 2.0224 mL | 4.0448 mL |
| 10 mM | 0.2022 mL | 1.0112 mL | 2.0224 mL |
| 50 mM | 0.0404 mL | 0.2022 mL | 0.4045 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Dooley DJ, et al. Quantitative assessment of central beta 1- and beta 2-adrenoceptor regulation using CGP 20712 A. J Pharmacol Methods. 1987 Sep;18(2):131-6.
Kitagawa Y, et al. Determination of beta-adrenoceptor subtype on rat isolated ventricular myocytes by use of highly selective beta-antagonists. Br J Pharmacol. 1995;116(1):1635-1643.
Grino M, et al. Ontogeny of insulin-induced hypoglycemia stimulation of adrenocorticotropin secretion in the rat: role of catecholamines. Endocrinology. 1992;131(6):2763-2768.
Chaudhry A, et al. Differential regulation of functional responses by beta-adrenergic receptor subtypes in brown adipocytes. Am J Physiol. 1999;277(1):R147-R153.