Rentiapril racemate

Cat. No.: HY-U00074

CAS No.: 72679-47-1

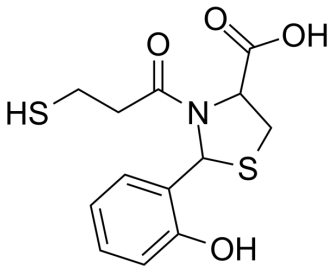
Molecular Formula: $C_{13}H_{15}NO_4S_2$

Molecular Weight: 313.39

Target: Angiotensin-converting Enzyme (ACE)

Pathway: Metabolic Enzyme/Protease

Storage: 4°C, sealed storage, away from moisture and light
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (319.09 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	3.1909 mL	15.9546 mL	31.9091 mL
	5 mM	0.6382 mL	3.1909 mL	6.3818 mL
	10 mM	0.3191 mL	1.5955 mL	3.1909 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Rentiapril racemate (SA-446 racemate) is the racemate of Rentiapril. Rentiapril is an angiotensin converting enzyme (ACE) inhibitor.

IC_{50} & Target

Angiotensin converting enzyme (ACE)[1]

In Vivo

A three-months toxicity study of an angiotensin converting enzyme (ACE) inhibitor, Rentiapril (CAS 80830-42-8), is performed in Sprague-Dawley rats by oral administration. The dose levels of 0, 30, 125, 500 and 1000 mg/kg are tested in both sexes, in which each experimental group comprised 10 rats. Another ACE inhibitor, captopril, is used as a reference compound. Rentiapril at the highest dose of 1000 mg/kg causes low food consumption and death of some animals with signs of bloody feces and anemia. In males and females receiving 500 and 1000 mg/kg, there are low body weight gain, increases in water intake, urine volume and serum BUN level, and decreases in levels of various erythrocytic parameters. Kidney weight is increased dose-dependently in both sexes. Histopathologically, renal changes in the 500 and 1000 mg/kg groups consist of proximal tubular degeneration, juxtaglomerular cell hyperplasia and interstitial cell infiltration. Similar, but mild, changes in proximal tubules are present in the female 125 mg/kg group. Dead animals from the highest dose groups further show gastrointestinal hemorrhagic erosion and/or ulcer, decrease bone marrow erythropoiesis and hepatocytic vacuolar degeneration. There is no pathological alteration in rats from other Rentiapril-treated groups, as well as in controls. These

results indicate that the no-effect dose of Rentiapril in rats by three months oral administration is 30 mg/kg in female and 125 mg/kg in male[1].

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

REFERENCES

[1]. Takase K, et al. Toxicity study of the angiotensin converting enzyme inhibitor rentiapril in rats. Arzneimittelforschung. 1995 Jan;45(1):15-8.

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