Ciclesonide

Cat. No.: HY-B0625

CAS No.: 126544-47-6

Molecular Formula: $C_{32}H_{44}O_7$

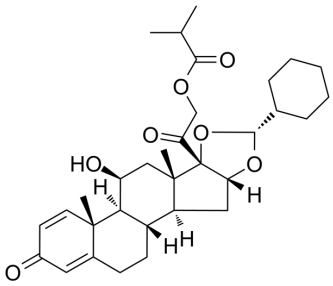
Molecular Weight: 540.69

Target: Glucocorticoid Receptor

Pathway: Immunology/Inflammation; Vitamin D Related/Nuclear Receptor

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (92.47 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.8495 mL	9.2474 mL	18.4949 mL
	5 mM	0.3699 mL	1.8495 mL	3.6990 mL
	10 mM	0.1849 mL	0.9247 mL	1.8495 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (4.62 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (4.62 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Ciclesonide (RPR251526) is a glucocorticoid with an potent anti-inflammatory activity. Ciclesonide can be used for asthma research[1].

In Vitro

Ciclesonide, the parent compound, undergoes hydrolysis by ester cleavage at the C21 position to the active metabolite, desisobutyryl-ciclesonide (des-CIC), followed by reversible formation of fatty acid esters within the lung cells. Ciclesonide (5 μM) is rapidly hydrolyzed by normal human bronchial epithelial (NHBE) cells (approximately 30% conversion at 4h), with almost complete conversion by 24 h[1].

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

CUSTOMER VALIDATION

- Drug Test Anal. 2020 Aug 27.

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REFERENCES

[1]. Mutch, E., et al., The role of esterases in the metabolism of ciclesonide to desisobutyryl-ciclesonide in human tissue. Biochem Pharmacol, 2007. 73(10): p. 1657-64.

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