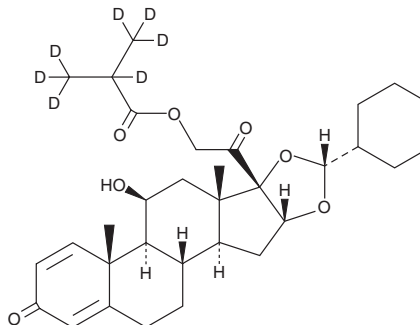


PRODUCT INFORMATION



Ciclesonide-d₇ Item No. 28527

CAS Registry No.: 1225382-70-6
Formal Name: (11β,16α)-16,17-[[[(R)-cyclohexylmethylene]bis(oxy)]-11-hydroxy-21-[2-(methyl-d₃)-1-oxopropoxy-2,3,3,3-d₄]-pregna-1,4-diene-3,20-dione
Synonym: CIC-d₇
MF: C₃₂H₃₇D₇O₇
FW: 547.7
Chemical Purity: ≥98% (Ciclesonide)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₇); ≤1% d₀
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Ciclesonide-d₇ is intended for use as an internal standard for the quantification of ciclesonide (CIC; Item No. 18227) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Ciclesonide-d₇ is supplied as a solid. A stock solution may be made by dissolving the ciclesonide-d₇ in the solvent of choice, which should be purged with an inert gas. Ciclesonide-d₇ is slightly soluble in chloroform and methanol.

Description

Ciclesonide (CIC) is a prodrug form of the glucocorticoid receptor agonist desisobutryl-CIC (des-CIC).¹ CIC binds to the glucocorticoid receptor with a K_i value of 37 nM.² It is selective for the glucocorticoid receptor over the estrogen, progesterone, and testosterone receptors. CIC inhibits eosinophil influx into the lung (ED₅₀ = 0.49 mg/kg) and reduces sephadex-induced lung edema (ED₅₀ = 0.72 mg/kg) in a rat model of ovalbumin-sensitized and -challenged airway inflammation. Formulations containing CIC have been used in the maintenance treatment of asthma and in the treatment of allergic rhinitis.

References

1. Derendorf, H., Nave, R., Drollmann, A., *et al.* Relevance of pharmacokinetics and pharmacodynamics of inhaled corticosteroids to asthma. *Eur. Respir. J.* **28(5)**, 1042-1050 (2006).
2. Belvisi, M.G., Bundschuh, D.S., Stoeck, M., *et al.* Preclinical profile of ciclesonide, a novel corticosteroid for the treatment of asthma. *J. Pharmacol. Exp. Ther.* **314(2)**, 568-574 (2005).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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