

PRODUCT INFORMATION



Drospirenone- $^{13}\text{C}_3$

Item No. 34008

Formal Name: (4aR,4bS,6aS,7S,7aS,8aS,8bS,8cR,8dR,9aR)-4a,6a-dimethyl-3',4,4a,4b,4',5,6,6a,7a,8,8a,8b,8c,8d,9a-hexadecahydro-5'H-spiro[cyclopropa[4,5]cyclopenta[1,2-a]cyclopropa[l]phenanthrene-7,2'-furan]-2,5'(3H)-dione-3',4',5'- $^{13}\text{C}_3$

Synonyms: 1,2-dihydro Spirorenone- $^{13}\text{C}_3$,
ZK 30595- $^{13}\text{C}_3$

MF: $\text{C}_{21}^{13}\text{H}_{30}\text{O}_3$

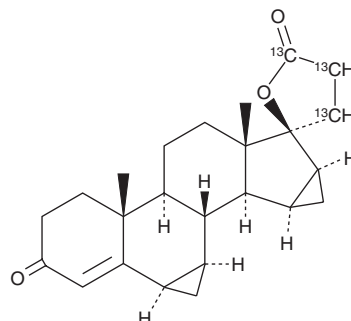
FW: 369.5

Purity: $\geq 95\%$

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

Drospirenone- $^{13}\text{C}_3$ is supplied as a solid. A stock solution may be made by dissolving the drospirenone- $^{13}\text{C}_3$ in the solvent of choice, which should be purged with an inert gas. Drospirenone- $^{13}\text{C}_3$ is soluble in DMSO and acetonitrile.

Description

Drospirenone- $^{13}\text{C}_3$ is intended for use as an internal standard for the quantification of drospirenone (Item No. 23347) by GC- or LC-MS. Drospirenone is a synthetic progestogen.¹ *In vivo*, drospirenone inhibits spontaneous ovulation in rats ($\text{ID}_{50}\text{s} = 0.3\text{-}1.0$ mg/day) when administered orally or subcutaneously.² Drospirenone (0.5 mg/animal) administered six times per day maintains pregnancy in ovariectomized pregnant rats. It reduces serum testosterone and luteinizing hormone (LH) in cynomolgus monkeys in a dose-dependent manner. Drospirenone (10 mg/animal per day) also inhibits testosterone-induced growth of the seminal vesicles and prostate in castrated rats. Formulations containing drospirenone have been used as oral contraceptives.³

References

1. Pollow, K., Juchem, M., Elger, W., *et al.* Dihydrospirorenone (ZK30595): A novel synthetic progestagen - characterization of binding to different receptor proteins. *Contraception* **46**(6), 561-574 (1992).
2. Muhn, P., Fuhrmann, U., Fritzemeier, K.-H., *et al.* Drospirenone: A novel progestogen with antimineralocorticoid and antiandrogenic activity. *Ann. N. Y. Acad. Sci.* **761**(1), 311-335 (1995).
3. Apter, D., Zimmerman, Y., Beekman, L., *et al.* Bleeding pattern and cycle control with estetrol-containing combined oral contraceptives: Results from a phase II, randomised, dose-finding study (FIESTA). *Contraception* **94**(4), 366-373 (2016).

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.

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