

PRODUCT INFORMATION



Raloxifene-d₄ (hydrochloride)

Item No. 22900

CAS Registry No.: 1188263-47-9
Formal Name: (6-hydroxy-2-(4-hydroxyphenyl)benzo[b]thiophen-3-yl)(4-(2-(piperidin-1-yl)ethoxy-1,1,2,2-d₄)phenyl)methanone hydrochloride

MF: C₂₈H₂₃D₄NO₄S • HCl
FW: 514.1

Chemical Purity: ≥98% (Raloxifene)

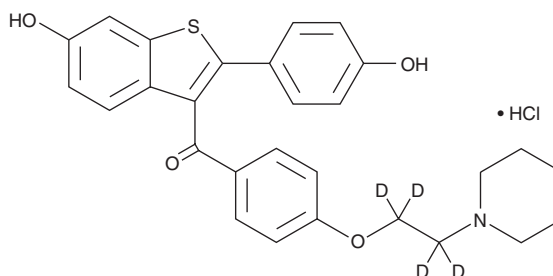
Deuterium

Incorporation: ≥99% deuterated forms (d₁-d₄); ≤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

Raloxifene-d₄ (hydrochloride) is intended for use as an internal standard for the quantification of raloxifene (Item No. 10011620) 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).

Raloxifene-d₄ (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the raloxifene-d₄ (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Raloxifene-d₄ (hydrochloride) is soluble in methanol and DMSO.

Description

Raloxifene is a selective estrogen receptor modulator (SERM) that exhibits estrogenic activity in bone cells without stimulating breast or uterine tissues.¹ Raloxifene guards endothelial cells obtained from rat aortic rings against oxidative insult (1 μM) and lowers serum cholesterol in ovariectomized rodents (ED₅₀ = 0.2 mg/kg).^{2,1} Formulations containing raloxifene have been shown to reduce bone resorption and promote bone formation in post-menopausal women.³

References

1. Black, L.J., Sato, M., Rowley, E.R., *et al.* Raloxifene (LY139481 HCl) prevents bone loss and reduces serum cholesterol without causing uterine hypertrophy in ovariectomized rats. *J. Clin. Invest.* **93**(1), 63-69 (1994).
2. Wong, C.M., Yung, L.M., Leung, F.P., *et al.* Raloxifene protects endothelial cell function against oxidative stress. *Br. J. Pharmac.* **155**(3), 326-334 (2008).
3. Özmen, B., Kirmaz, C., Aydin, K., *et al.* Influence of the selective oestrogen receptor modulator (raloxifene hydrochloride) on IL-6, TNF-α, TGF-β1 and bone turnover markers in the treatment of postmenopausal osteoporosis. *Eur. Cyto. Netw.* **18**(3), 148-153 (2007).

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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