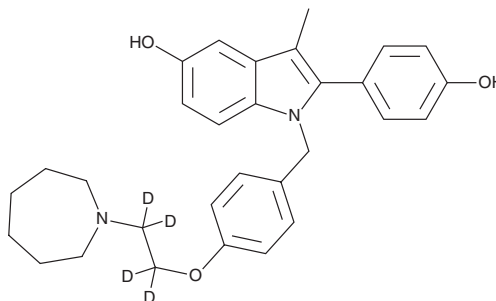


PRODUCT INFORMATION



Bazedoxifene-d₄ Item No. 22554

CAS Registry No.: 1133695-49-4
Formal Name: 1-[[4-[2-(hexahydro-1H-azepin-1-yl)ethoxy-1,1,2,2-d₄]phenyl]methyl]-2-(4-hydroxyphenyl)-3-methyl-1H-indol-5-ol
MF: C₃₀H₃₀D₄N₂O₃
FW: 474.6
Chemical Purity: ≥98% (Bazedoxifene)
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

Bazedoxifene-d₄ is intended for use as an internal standard for the quantification of bazedoxifene (Item No. 15005) 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).

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

Description

Bazedoxifene is a third generation selective estrogen receptor modulator (SERM). It is an indole-based ER ligand that binds to both ER α (IC₅₀ = 26 nM) and ER β (IC₅₀ = 99 nM).¹ Bazedoxifene antagonizes 17 β -estradiol-dependent MCF-7 and T47D breast cancer cell proliferation *in vitro* as well as hormone-independent growth of MCF-7:5C cells that are resistant to long-term estrogen deprivation (80% reduction with 10 nM).² It has been shown to arrest cell cycling by downregulating cyclin D1 and ER α .

References

1. Komm, B.S., Kharode, Y.P., Bodine, P.V.N., *et al.* Bazedoxifene acetate: A selective estrogen receptor modulator with improved selectivity. *Endocrinology* **146**(9), 3999-4008 (2005).
2. Lewis-Wambi, J.S., Kim, H., Curpan, R., *et al.* The selective estrogen receptor modulator bazedoxifene inhibits hormone-independent breast cancer cell growth and down-regulates estrogen receptor α and cyclin D1. *Mol. Pharmacol.* **80**(4), 610-620 (2011).

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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