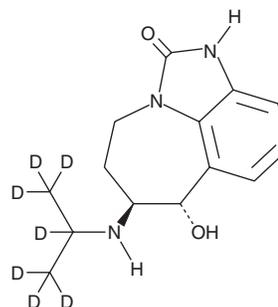


PRODUCT INFORMATION



Zilpaterol-d₇ Item No. 22903

CAS Registry No.: 1217818-36-4
Formal Name: (6S,7S)-6-hydroxy-7-((propan-2-yl-d₇)amino)-6,7,8,9-tetrahydro-2,9a-diazabenz[cd]azulen-1(2H)-one
MF: C₁₄H₁₂D₇N₃O₂
FW: 268.4
Chemical Purity: ≥95% (Zilpaterol)
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

Zilpaterol-d₇ is intended for use as an internal standard for the quantification of zilpaterol (Item No. 16484) 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).

Zilpaterol-d₇ is supplied as a solid. A stock solution may be made by dissolving the zilpaterol-d₇ in the solvent of choice. Zilpaterol-d₇ is slightly soluble in methanol and DMSO.

Description

Zilpaterol is a β-adrenergic receptor agonist that putatively, through activation of protein kinase A, increases protein synthesis in skeletal muscle fibers as well as reduces lipogenesis and increases lipolysis in adipose tissues.^{1,2} Formulations containing zilpaterol have been used to increase lean body weight and improve feed efficiency in commercial beef cattle.³

References

1. Avendaño-Reyes, L., Torres-Rodríguez, V., Meraz-Murullo, F.J., et al. Effects of two β-adrenergic agonists on finishing performance, carcass characteristics, and meat quality of feedlot steers. *J. Anim. Sci.* **84**(12), 3259-3265 (2006).
2. Miller, E.K., Chung, K.Y., Hutcheson, J.P., et al. Zilpaterol hydrochloride alters abundance of β-adrenergic receptors in bovine muscle cells but has little effect on de novo fatty acid biosynthesis in bovine subcutaneous adipose tissue explants. *J. Anim. Sci.* **90**(4), 1317-1327 (2012).
3. Delmore, R.J., Hodgen, J.M., and Johnson, B.J. Perspectives on the application of zilpaterol hydrochloride in the United States beef industry. *J. Anim. Sci.* **88**(8), 2825-2828 (2010).

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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