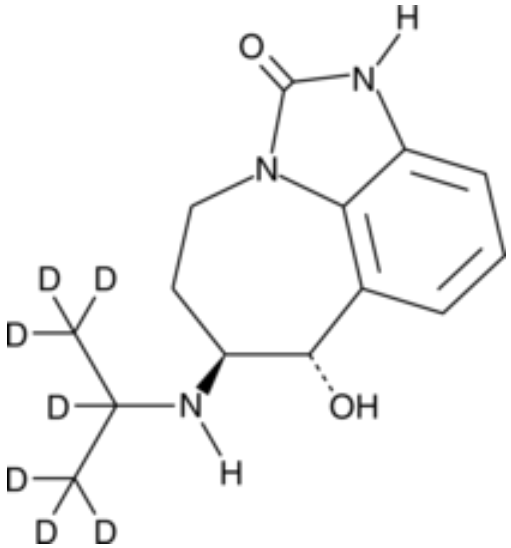
Product Data Sheet

Product Name: Zilpaterol-d7
Cat. No.: GC48269

Chemical Properties

Cas. No.	1217818-36-4		
SMILES	O=C1NC2=CC=CC3=C2N1CC[C@H](NC(C([2H])([2H])[2H])([2H])C([2H])([2H])[2H])[C@H]3O		
Formula	C14H12D7N3O2	M.Wt	268.4
Solubility		Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

Zilpaterol-d_7 is intended for use as an internal standard for the quantification of zilpaterol by GC- or LC-MS. 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

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increase lean body weight and improve feed efficiency in commercial beef cattle.[3]

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 steersJ. 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 explantsJ. 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 industryJ. Anim. Sci.88(8)2825-2828(2010)