

## Product Data Sheet

Product Name: Chlorzoxazone-d3

Cat. No.: GC49191

### Chemical Properties

Cas. No. 1185173-60-7

SMILES O=C1OC2=C([2H])C([2H])=C(Cl)C([2H])=C2N1

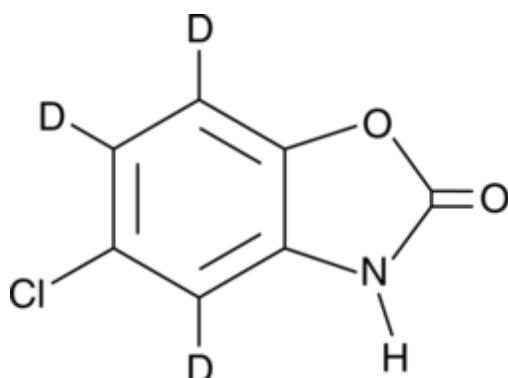
Formula C7HClD3NO2 M.Wt 172.6

Solubility DMSO :  $\geq 100$  mg/mL (579.44 mM) Storage -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

Chlorzoxazone-d3 is intended for use as an internal standard for the quantification of chlorzoxazone by GC- or LC-MS. Chlorzoxazone is a centrally acting muscle relaxant and an activator of small and intermediate conductance calcium-activated potassium channels ( $EC_{50}$ s = 87 and 98  $\mu$ M for  $K_{Ca2.2}$  and  $K_{Ca3.1}$ , respectively).<sup>1,2</sup> *In vivo*, chlorzoxazone (10 mg/kg) decreases alcohol, but not water, intake in a dose-dependent manner and reduces the propensity for rapid initial alcohol intake in rats with intermittent, but not continuous, access to alcohol.<sup>3</sup> Formulations containing chlorzoxazone have been used in the treatment of pain and stiffness caused by muscle spasm.

1. Pedarzani, P., and Stocker, M. Molecular and cellular basis of small- and intermediate-conductance,

**Caution: Product has not been fully validated for medical applications. For research use only.**

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calcium-activated potassium channel function in the brainCell. Mol. Life Sci.65(20)3196-3217(2008)  
2.Gao, Z., Todorov, B., Barrett, C.F., et al.Cerebellar ataxia by enhanced Cav2.1 currents is alleviated by Ca<sup>2+</sup>-dependent K<sup>+</sup>-channel activators in Cacna1aS218L mutant miceJ. Neurosci.32(44)15533-15546(2012) 3.Hopf, F.W., Simms, J.A., Chang, S.-J., et al.Chlorzoxazone, an SK-type potassium channel activator used in humans, reduces excessive alcohol intake in ratsBiol. Psychiatry69(7)618-624(2011)

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