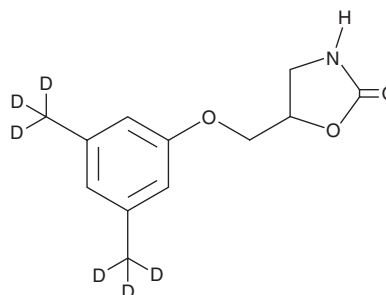


PRODUCT INFORMATION



Metaxalone-d₆ Item No. 33377

CAS Registry No.: 1189944-95-3
Formal Name: 5-[[3,5-di(methyl-d₃)phenoxy]methyl]-2-oxazolidinone
MF: C₁₂H₉D₆NO₃
FW: 227.3
Chemical Purity: ≥98% (Metaxalone)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₆); ≤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

Metaxalone-d₆ is intended for use as an internal standard for the quantification of metaxalone (Item No. 15777) 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).

Metaxalone-d₆ is supplied as a solid. A stock solution may be made by dissolving the metaxalone-d₆ in the solvent of choice, which should be purged with an inert gas. Metaxalone-d₆ is soluble in acetonitrile.

Description

Metaxalone is a skeletal muscle relaxant.^{1,2} It inhibits the proliferation of, and induces apoptosis in, RAW 264.7 cells *in vitro* when used at concentrations ranging from 1 to 100 μM.² Metaxalone also reduces LPS-induced increases in COX-1, COX-2, and NF-κB levels and inhibits LPS-induced production of TNF-α, IL-6, and prostaglandin E₂ (PGE₂; Item No. 14010) in RAW 264.7 cells. Formulations containing metaxalone have been used in the treatment of lower back pain.

References

1. Chou, R., Peterson, K., and Helfand, M. Comparative efficacy and safety of skeletal muscle relaxants for spasticity and musculoskeletal conditions: A systematic review. *J. Pain Symptom Manage.* **28(2)**, 140-175 (2004).
2. Yamaguchi, M. and Levy, R.M. Metaxalone suppresses production of inflammatory cytokines associated with painful conditions in mouse macrophages RAW264.7 cells *in vitro*: Synergistic effect with β-caryophyllene. *Curr. Mol. Med.* **20(8)**, 643-652 (2020).

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.

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