

Product Data Sheet

Product Name: Ochratoxin C-¹³C₂₀

Cat. No.: GC91779

Chemical Properties

Cas. No. N/A

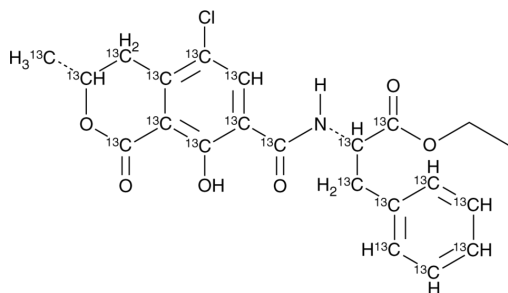
Formula C₂[¹³C]₂₀H₂₂ClNO₆ M.Wt 451.7

Solubility Methanol: soluble 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

Ochratoxin C-¹³C₂₀ (OTC-¹³C₂₀) is intended for use as an internal standard for the quantification of ochratoxin C by GC- or LC-MS. OTC is a mycotoxin that has been found in *Aspergillus* and is an active metabolite of OTA. [1],[2] It is formed from OTA by gut microbiota, however, OTA can also be formed from OTC *in vivo*.^{2,3} OTC inhibits the proliferation and differentiation of THP-1 monocytes (IC₅₀s = 126 and 91 ng/ml, respectively) and induces apoptosis in the same cells when used at concentrations of 100 or 1,000 ng/ml. [1] It induces mortality in zebrafish embryos (LC₅₀ = 0.32 nM). [4] OTC has been found in red wine. [5]

References:

[1].Müller, G., Rosner, H., Rohrmann, B., et al. Effects of the mycotoxin ochratoxin A and some of its metabolites on the human cell line THP-1 Toxicology 184(1)69-82(2003).

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

- [2].Galtier, P., and Alvinerie, M.In vitro transformation of ochratoxin A by animal microbial florasAnn. Rech. Vet.7(1)91-98(1976).
- [3].Fuchs, R., Hult, K., Peraica, M., et al.Conversion of ochratoxin C into ochratoxin A in vivoAppl. Environ. Microbiol.48(1)41-42(1984).
- [4].Csenki, Z., Garai, E., Faisal, Z., et al.The individual and combined effects of ochratoxin A with citrinin and their metabolites (ochratoxin B, ochratoxin C, and dihydrocitrinone) on 2D/3D cell cultures, and zebrafish embryo modelsFood Chem. Toxicol.158112674(2021).
- [5].Remiro, R., Ibáñez-Vea, M., González-Peñas, E., et al.Validation of a liquid chromatography method for the simultaneous quantification of ochratoxin A and its analogues in red winesJ. Chromatogr. A1217(52)8249-8256(2010).

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA