

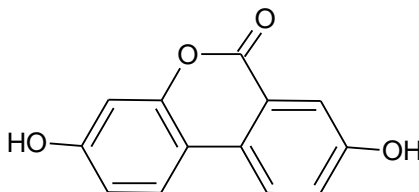


Test Report

Sample name: "Urolithin A sample"
Client: Hansen Sp. z o.o., ul. Zaborowska 8, 05-083 Zaborów, Poland
Purpose of test: Verification of delivered product
Sample description: Urolithin A
Brand name: Hansen Supplements

Description of substance:

Sample size: 2 g
Property: pale yellow-green powder
Formula: C₁₃ H₈ O₄
CAS number: 1143-70-0
Chemical name: 3,8-Dihydroxy-6H-benzo[c]chromen-6-one
Structure:



Batch No.: XJY16220701
Date received: 10.02.2023
Test items: Identification of substance, purity, heavy metals
Summary: The sample has been identified and found to be of high quality
Measured purity: **Above 98%** according to ¹H NMR analysis. Appropriate spectra are shown in (Fig. 1 and 2).

Authentication method: Standard and literature NMR shifts according to Yin, P., Zhang, J., Yan, L., Yang, L., Sun, L., Shi, L., ... & Liu, Y. (2017). Urolithin C, a gut metabolite of ellagic acid, induces apoptosis in PC12 cells through a mitochondria-mediated pathway. RSC advances, 7(28), 17254-17263. and ACDLABS database.



All values are within the relevant standards

Test results:

Purity:

Heavy metals: n.d.

Pb (Lead): n.d.

Hg (Mercury): n.d.

Cd (Cadmium): n.d.

As (Arsen): n.d.

Comments:

n.d. – not detected, below limit of detection on AAS spectr AA240FS + AA240Z + GTA120

Date: 2.05.2023

Tested by: Antoni Szumny

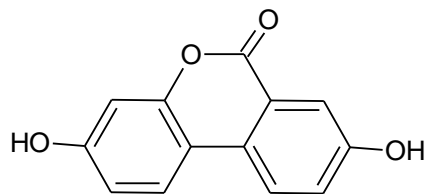


Figure 1. Chemical structure of Urolithin A

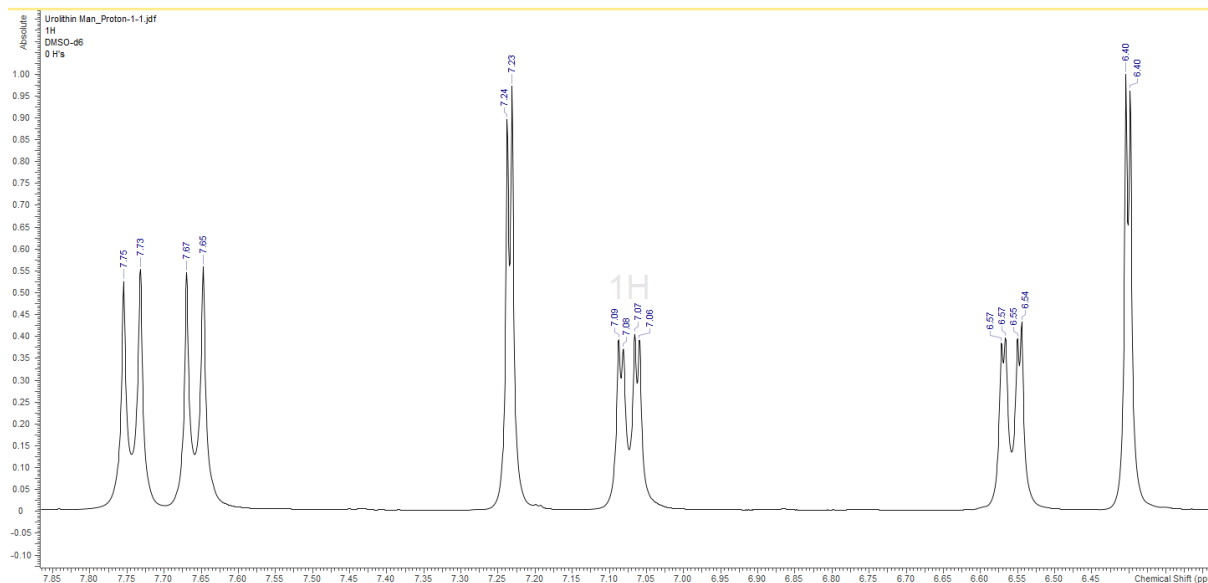


Figure 1. ^1H NMR of urolithin A, batch No. XJY16220701 of NMR (in DMSO) full spectrum;

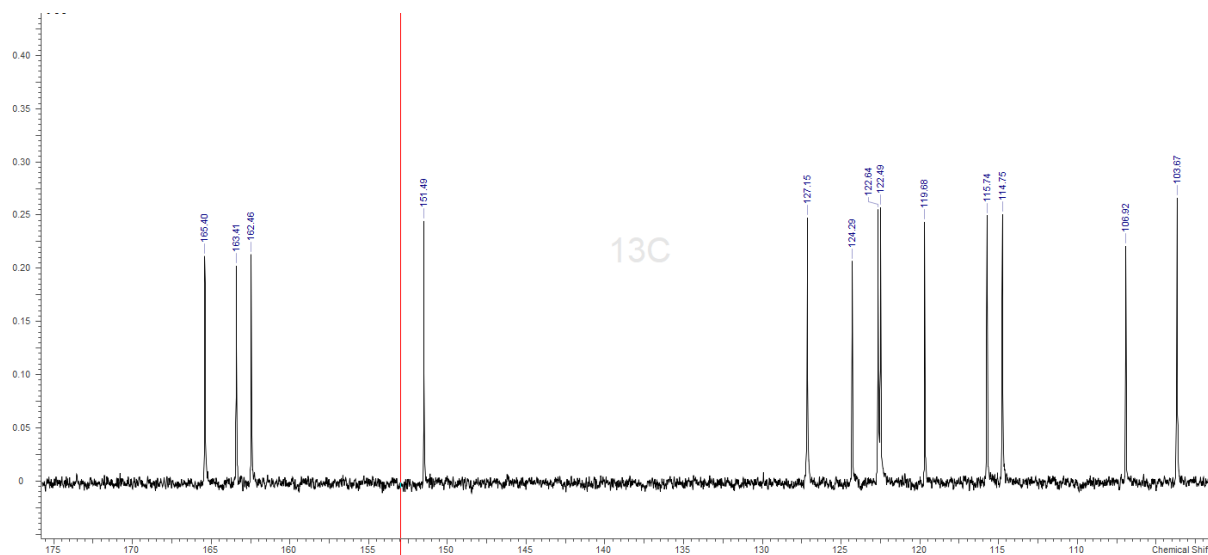


Figure 2 ^{13}C of urolithin A, batch No. XJY16220701 of NMR (in DMSO) full spectrum;;



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20.05.2022, Antoni Szumny



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