

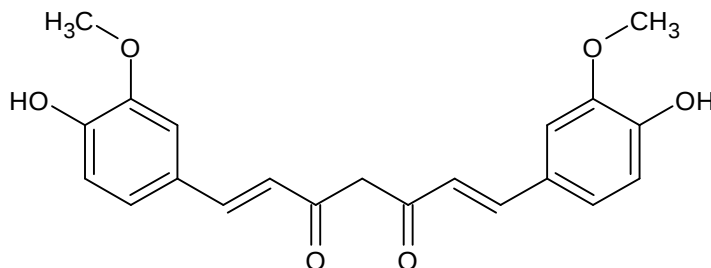


Test Report

Sample name: Curcumin
Client: Hansen Supplements
Purpose of test: Verification of delivered product
Sample description: "Pure curcumin"
Brand name: Hansen Supplements

Description of substance:

Sample size: 10g
Property: yellow powder
Formula: $C_{21}H_{20}O_6$
CAS number: 458-37-7
Structure:



Batch No.: E/2203/B-19
Date received: 03.04.2023
Test items: Identification of substance, purity, heavy metals
Summary: The sample has been identified and found to be of high quality
Measured purity: **Above 94%** as a sum of all tautomeric form according to 1H NMR analysis. Appropriate spectra are shown in (Fig. 2 and 3).
Authentication method: Standard and literature Curcumin: Synthesis optimization and in silico interaction with cyclin dependent kinase
All values are within the relevant standards

Test results:

Purity:

Heavy metals: n.d.



UNIWERSYTET PRZYRODNICZY WE WROCŁAWIU

KATEDRA CHEMII

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: 20.04.2023

Tested by: Antoni Szumny

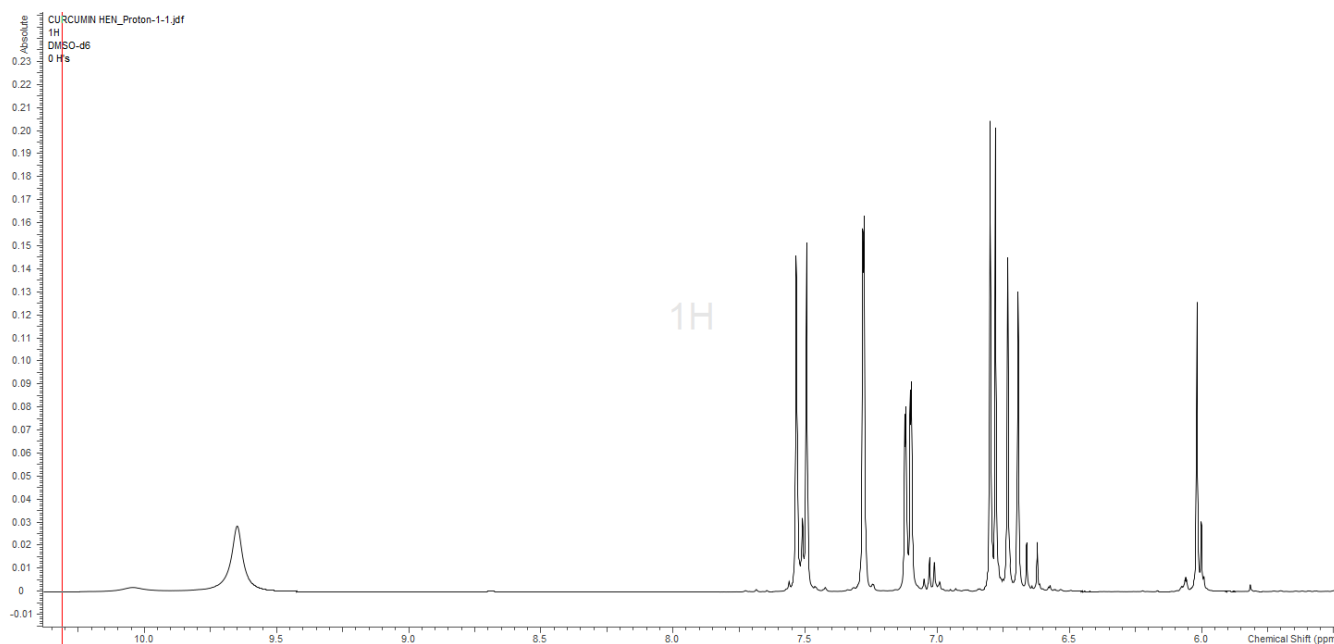


Figure 2. ^1H spectrum of curcumin (in DMSO);

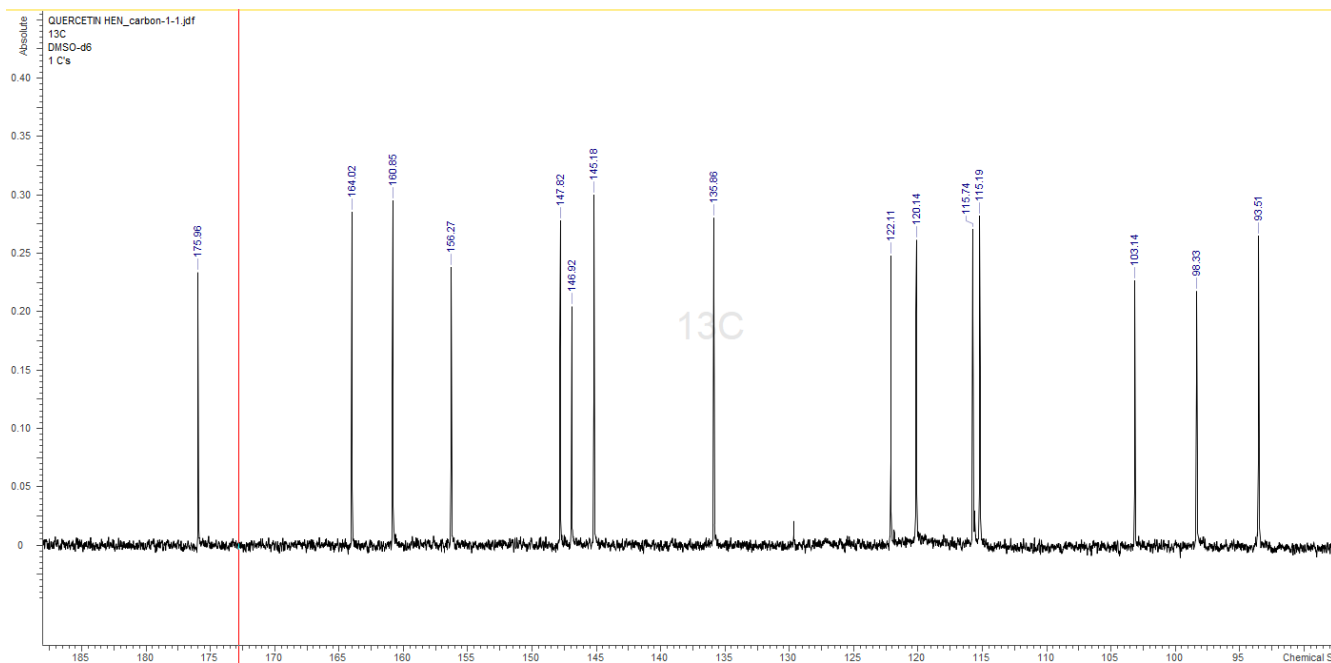


Figure 3. ^{13}C spectrum of curcumin (in DMSO);

20.04.2023

Antoni Szumny

