

SUPPLEMENTAL DATA

Griesser et al., Autoxidative and COX-2 catalyzed transformation of the dietary chemopreventive agent curcumin

Supplemental Fig. S1.

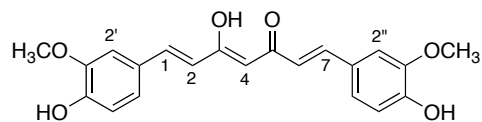
Nomenclature and carbon numbering of curcumin and its main oxygenated metabolite (**1**).

Supplemental Fig. S2.

MS2 spectra of the main oxygenated metabolite **1** of curcumin formed in unlabeled (MS2 of m/z 399, top) and ^{18}O -labeled buffer (MS2 of m/z 401, below).

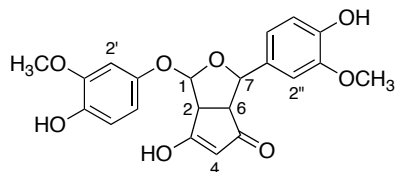
Supplemental Fig. S3.

Predicted product formation by autoxidative and COX-2 catalyzed transformation of 4'-methoxycurcumin. MS2 spectra of the main oxygenated metabolite **1** of 4'-methoxycurcumin formed in unlabeled (MS2 of m/z 413, middle) and ^{18}O -labeled buffer (MS2 of m/z 415, below).



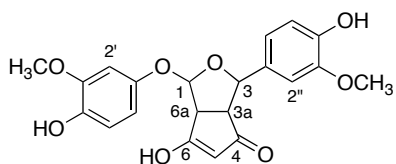
curcumin

(1*E*,4*Z*,6*E*)-5-hydroxy-1,7-*bis*(4-hydroxy-3-methoxyphenyl)hepta-1,4,6-trien-3-one



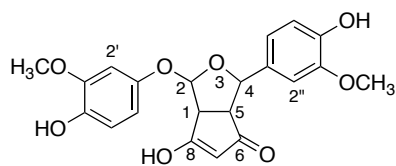
bicyclopentadione

(showing the curcumin-based numbering of carbons)



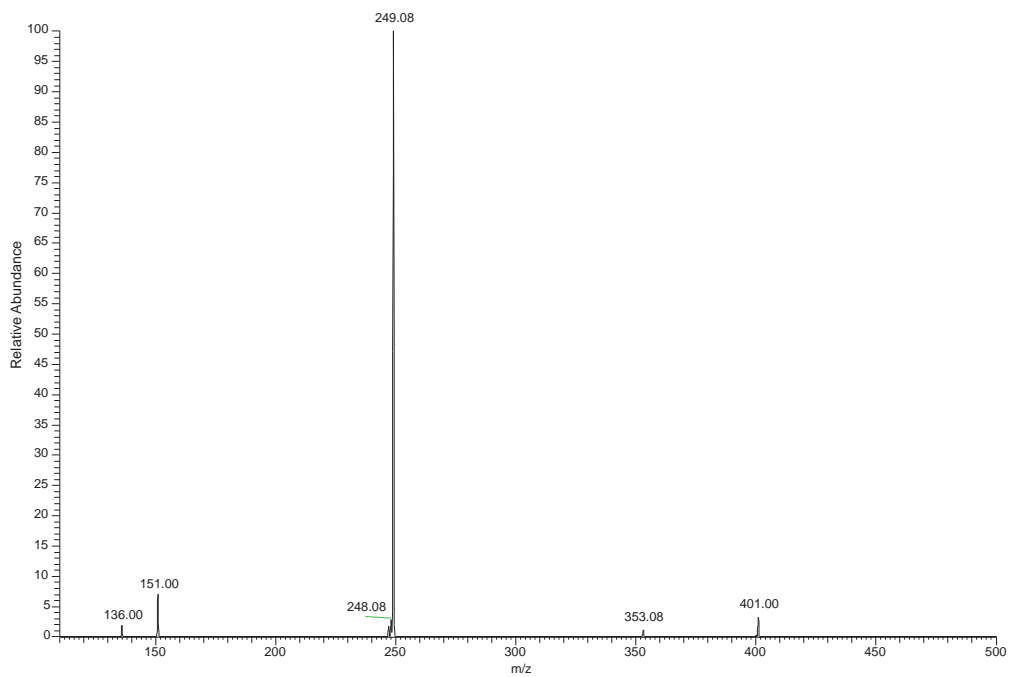
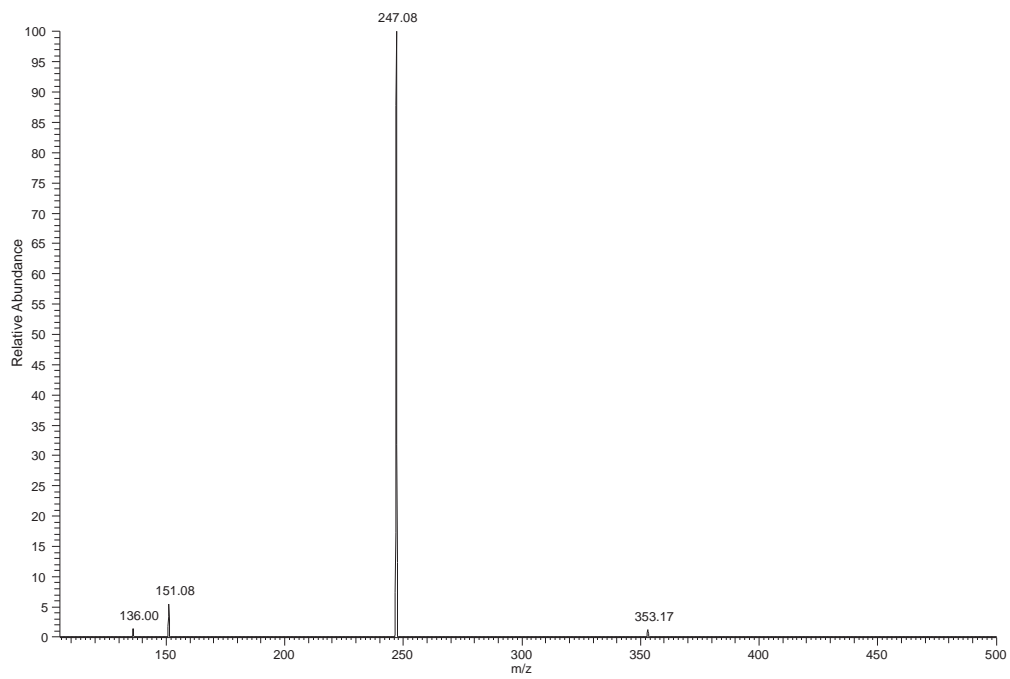
bicyclopentadione

(using chemically correct numbering of carbons)
6-hydroxy-1-(4'-hydroxy-3'-methoxyphenoxy)-3-(4''-hydroxy-3''-methoxyphenyl)-3,3a-dihydro-1*H*-cyclopenta[*c*]furan-4(6a*H*)-one



bicyclopentadione

(using alternative numbering of carbons, cf. Schneider et al. *J. Mol. Catal. B: Enzymatic*, 4 (1998), 219)
2-(4'-hydroxy-3'-methoxyphenoxy)-4-(4''-hydroxy-3''-methoxyphenyl)-8-hydroxy-6-oxo-3-oxa-bicyclo[3.3.0]-7-octene



Supplemental Fig. S2, Griesser et al.

