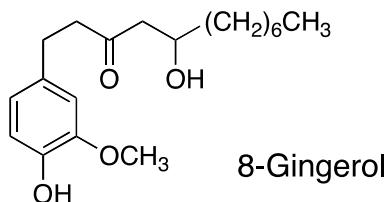


8-Gingerol



8-Gingerol

【化合物】8-Gingerol

【測定機器】HPLC

【対象】動物（ヒト、ラット）

【代謝実験】被験者に Pure Encapsulation's ginger を投与した後、経時的に血清中の gingerol および shogaol 濃度を HPLC で分析した。[Zick et al., *Cancer Epidemiol Biomarkers Prev.* 17: 1930–1936 (2008)]

【代謝パラメータ】

Pharmacokinetic parameters of 8-gingerol and other related compounds

	1000 mg (N=6)	1500 mg (N=3)	2000 mg (N=8)
AUC (μ g/L)	2.1±2.2	2.6±2.0	18.1±20.3
C _{max} (μ g/L)	0.1±0.1	0.1±0.1	0.23±0.16
t _{1/2} min			113.5±41.1
t _{max} min	52.5±8.7	60.0±0.0	73.1±29.4

Mean±SD

Pharmacokinetic parameters of 10-gingerol and other related compounds

	1000 mg (N=6)	1500 mg (N=3)	2000 mg (N=8)
AUC (μ g/L)	2.9±3.2	7.7±5.3	50.1±49.3
C _{max} (μ g/L)	0.1±0.1	0.1±0.02	0.53±0.4
t _{1/2} min			128.7±38.8
t _{max} min	60.0±0.0	80.0±34.6	75.0±27.8

Mean±SD

Pharmacokinetic parameters of 6-gingerol and other related compounds

	1000 mg (N=6)	1500 mg (N=3)	2000 mg (N=8)
AUC (μ g/L)	12.6±6.4	75.6±110.3	65.6±44.4
C _{max} (μ g/L)	0.4±0.2	1.69±2.31	0.85±0.43
t _{1/2} min			110.0±34.9
t _{max} min	55.0±7.7	60.0±0.0	65.6±22.6

Mean±SD

Pharmacokinetic parameters of 6-shogaol and other related compounds

	1000 mg (N=6)	1500 mg (N=3)	2000 mg (N=8)
AUC (μ g/L)	0.8±1.5	1.6±2.8	10.9±13.0
C _{max} (μ g/L)	0.1±0.1	0.04±0.08	0.15±0.12
t _{1/2} min			120.4±42.0
t _{max} min	55.0±8.7	60.0±0.0	65.6±22.6

Mean±SD

[Zick et al., *Cancer Epidemiol Biomarkers Prev.* 17: 1930–1936 (2008)]

【参考文献】

Yanke Yu, Suzanna Zick, Xiaoqin Li, Peng Zou, Benjamin Wright, and Duxin Sun, Examination of the pharmacokinetics of active ingredients of ginger in humans. *The American Association of Pharmaceutical Scientists Journal* 2011, DOI: 10.1208/s12248-011-9286-5

Marie -Lou Gauthier, Jennifer Douata, Pascal Vachona and Francis Beaudry Characterization of [6] -gingerol metabolism in rat by liquid chromatography electrospray tandem mass spectrometry. *Biomed Chromatogr.* 2011, DOI: 10.1002/bmc.1585.

Suzanna M. Zick, Zora Djuric, Mack T. Ruffin, Amie J. Litzinger, Daniel P. Normolle, Meihua Rose Feng, and Dean E. Brenner, Pharmacokinetics of 6-, 8-, 10-gingerols and 6-shogaol and conjugate metabolites in healthy human subjects. *Cancer Epidemiol Biomarkers Prev.* 17: 1930–1936 (2008). DOI:

10.1158/1055-9965.EPI-07-2934.