

Quantitative and qualitative analysis of the novel antitumor 1,3,4-oxadiazole derivative (GLB) and its metabolites using HPLC-UV and UPLC-QTOF-MS

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Supplementary data

Appendix Table 1. Plasma concentration - time courses of fructose-based 3-acetyl-2,3-dihydro-1,3,4-oxadiazole (GLB) and its two metabolites M1 and M2 after a single oral dose of 100 mg/kg in rat plasma (Mean \pm SD, n= 6).

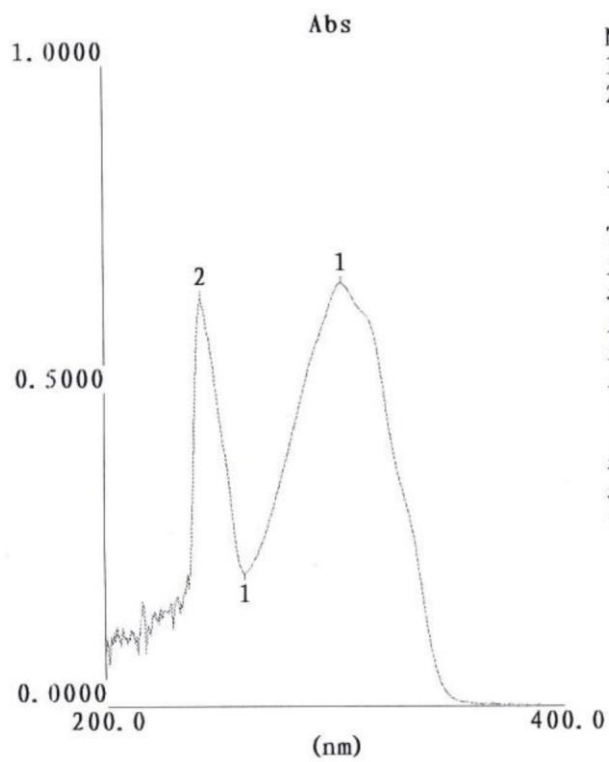
Time point (h)	Plasma concentration ($\mu\text{g/mL}$)		
	GLB	M1	M2
0.5	0.043 \pm 0.151	0.027 \pm 0.014	0.098 \pm 0.020
1	0.673 \pm 0.065	0.091 \pm 0.021	0.250 \pm 0.049
2	1.405 \pm 0.210	0.242 \pm 0.055	0.558 \pm 0.101
4	1.455 \pm 0.210	0.336 \pm 0.059	0.833 \pm 0.193
6	2.779 \pm 0.887	0.517 \pm 0.113	1.357 \pm 0.244
8	1.602 \pm 0.656	0.443 \pm 0.137	1.228 \pm 0.361
12	1.466 \pm 0.672	0.390 \pm 0.114	1.254 \pm 0.480
24	0.262 \pm 0.241	0.185 \pm 0.182	0.402 \pm 0.447
36	0.139 \pm 0.183	0.037 \pm 0.015	0.026 \pm 0.010
48	0.058 \pm 0.063	0.024 \pm 0.020	0.020 \pm 0.011
72	0.011 \pm 0.005	0.015 \pm 0.009	0.010 \pm 0.005
96	0.016 \pm 0.017	0.025 \pm 0.011	0.010 \pm 0.000

Appendix Table 2. The parameters of HPLC method optimization and validation for determination of fructose-based 3-acetyl-2,3-dihydro-1,3,4-oxadiazole (GLB) and megestrol acetate (internal standard, IS), including resolution, symmetry, retention time, and extraction efficiency in rat plasma.

Parameter	GLB	IS
Retention time (min)	9.8	8.0
Resolution	3.6	3.6
Symmetry	1.26	1.27
Extraction efficiency (%)	102	106
Theoretical plate number	6288	5234

Appendix Figure Legend.

Appendix Figure 1. Full wavelength ultraviolet scanning of fructose-based 3-acetyl-2,3-dihydro-1,3,4-oxadiazole (GLB).



—峰—		
No.	nm	Abs
1	303.50	0.646
2	242.00	0.624
—谷—		
1	261.00	0.201

TU-1901
 光度模式: Abs
 扫描速度: 快速
 光谱带宽: 2 nm
 采样间隔: 0.50 nm
 文件名:
 日期: 2010-4-30 10:33

样品: GLB
 操作者:
 注释: