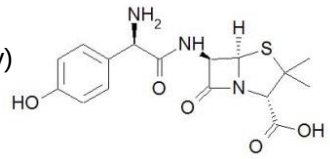
Amoxicillin Metabolites in Human Liver Microsomes

ACE®
Ultra-inert
UHPLC & HPLC Columns

Application #AN4400

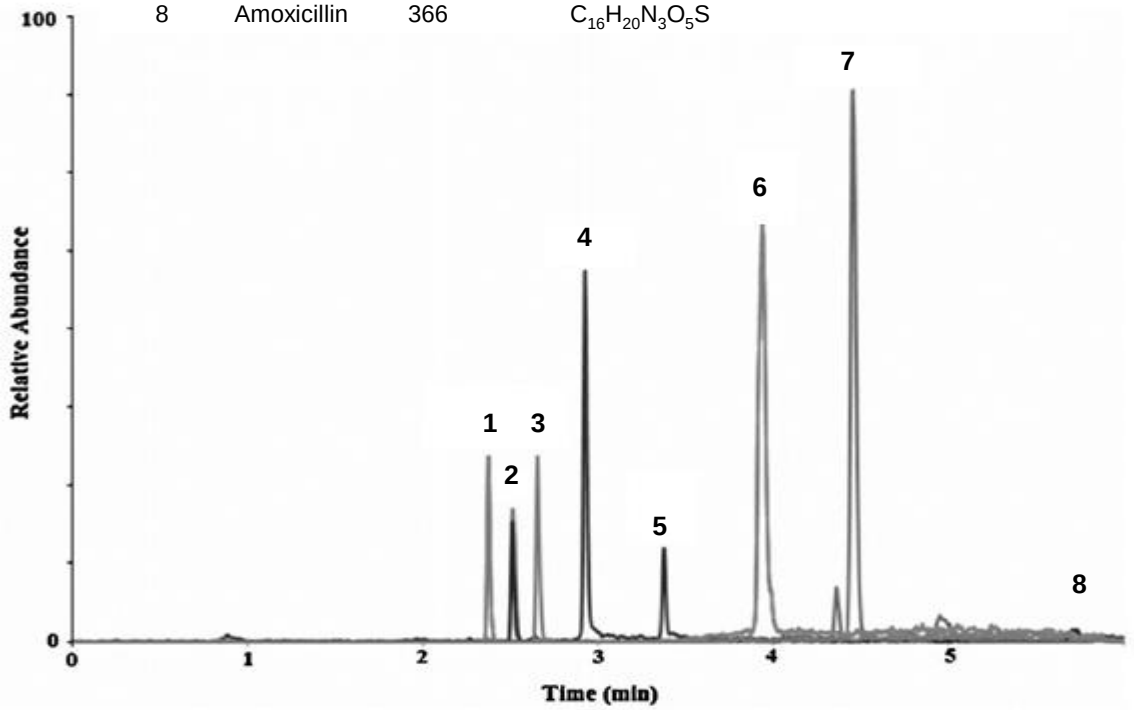
Conditions

Column:	ACE 5 C18-300
Dimensions:	150 x 4.6 mm
Part Number:	ACE-221-1546
Mobile Phase:	0.1% (v/v) formic acid in H_2O/MeCN (35:65 v/v)
Flow Rate:	0.4 mL/min
Injection:	15 µL
Temperature:	21 °C
Detection:	Agilent 6410 triple quad MS ESI in positive ion mode Full scan MS and MS/MS data obtained
Sample:	*In vitro* incubation of amoxicillin with human liver microsomes in the presence of NADPH



Amoxicillin

Peak	Analyte	[M+H]+	Elemental Composition	Metabolic Reaction
1	M1	382	$C_{16}H_{20}N_3O_6S$	Hydroxylation
2	M2	379	$C_{17}H_{19}N_2O_7S$	Oxidative deamination
3	M3	382	$C_{16}H_{20}N_3O_6S$	Oxidation of aliphatic chain
4	M4	380	$C_{16}H_{18}N_3O_6S$	Oxidation of aliphatic chain
5	M5	396	$C_{16}H_{20}N_3O_7S$	Oxidation of aliphatic chain
6	M6	322	$C_{15}H_{19}N_3O_3S$	Decarboxylation
7	M7	542	$C_{25}H_{28}N_3O_{11}S$	Glucuronidation
8	Amoxicillin	366	$C_{16}H_{20}N_3O_5S$	



Szultka M, Krzeminski R, Jackowski M, Buszewski B. (2014) Identification of in vitro Metabolites of Amoxicillin in Human Liver Microsomes by LC-ESI/MS, Chromatographia, 77 , 1027-1035. doi 10.1007/s10337-014-2648-2

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