

Chemical Information:

Name: alpha-Lipoic acid
CAS No.: 1077-28-7
Tox21_ID No.: Tox21_201808
NTP_CID No.: 1346

Supplier: Sigma-Aldrich
Lot No.: 055K1352
MW: 206.33 g/mol

Date of Analysis: 18 April 2007

Purity and Identity Results:

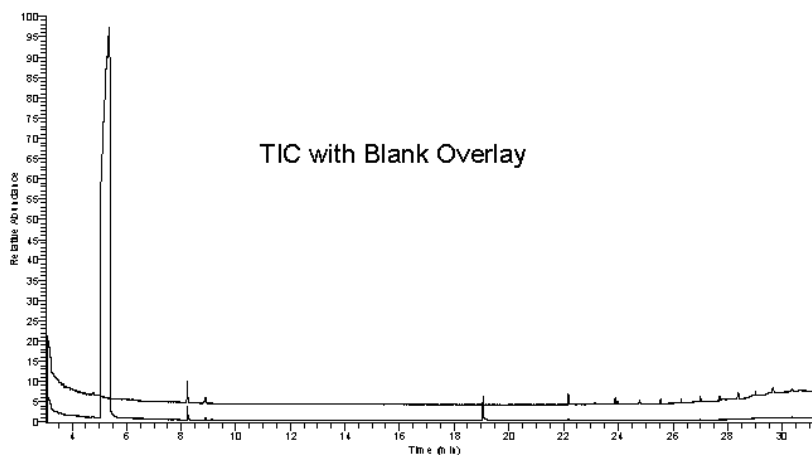
Peak Identity	Retention Time (min)	Purity (% Total Area) ^a
DMSO	5.38	Not applicable
unknown	11.35	1.21
alpha-Lipoic acid	19.05	98.79

^a Peaks comprising $\geq 0.5\%$ of total area.

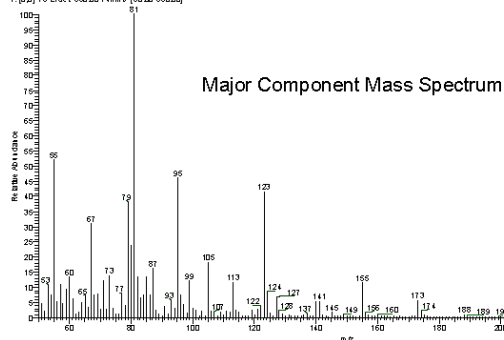
GC/MS Instrument Parameters:

Instrument / Ionization	ThermoFinnigan TraceGC with ThermoFinnigan TraceMS / Electron Impact
Solvent	Dichloromethane (100 mM in DMSO, diluted 1/1000 with dichloromethane)
Column	J&W Scientific HP-5MS, 30 m x 0.25 mm ID, 0.25- μ m film thickness
Carrier Gas	Helium at 1.0 mL/min
Oven Program	35°C, hold 2 min; ramp @ 10°C/min to 310°C, hold 2 min
Source Temperature	250°C
Auxiliary Temperature	250°C
Scan Range	50 – 250 amu
Injector Temperature	250°C
Injection Volume / Mode	2 μ L / Splitless
Run Time	31.5 minutes
Data Analysis Software	Xcalibur, v 1.2 and NIST Library v 1.7, build 11/5/1999

RT: 3.05 - 31.49 SM: 3G



071806 #1926 RT: 19.05 MS: 1 NL: 12085
T: (0.0) +0.000-350.00 File: s [50.00-350.00]



NIST Reference Mass Spectrum

