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# A combination risk assessment of paracetamol: electrochemical oxidation behavior and cytotoxicity evaluation effects of paracetamol in the presence of $N^1$ , $N^2$ -dibenzylethane-1,2-diamine

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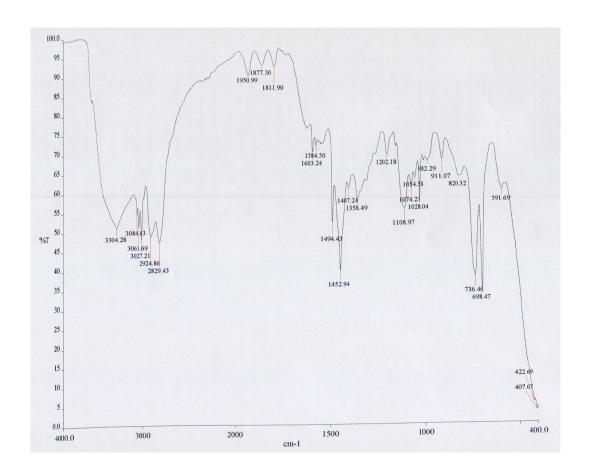
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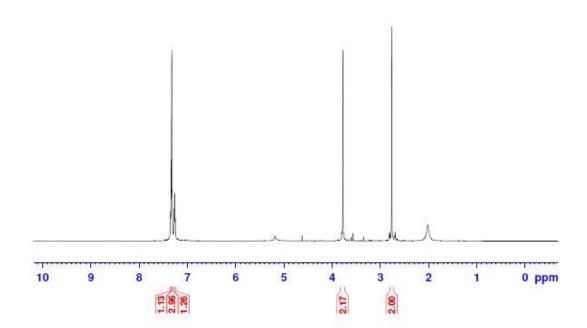
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FT-IR SPECTRUM OF 3	<u> </u>
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# FT-IR spectrum of 3



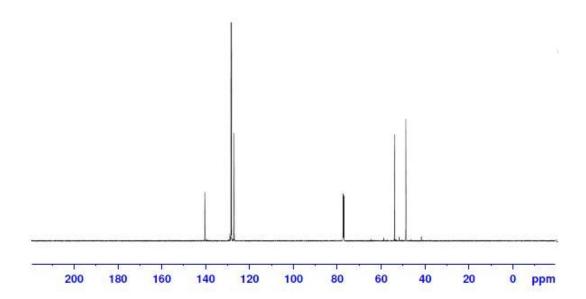
# <sup>1</sup>H-NMR spectrum of 3



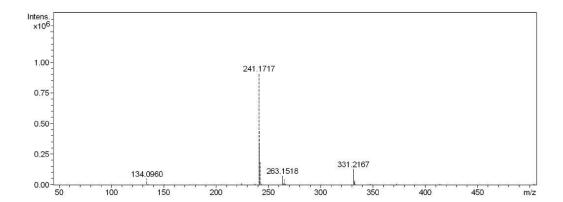


# <sup>13</sup>C-NMR spectrum of 3

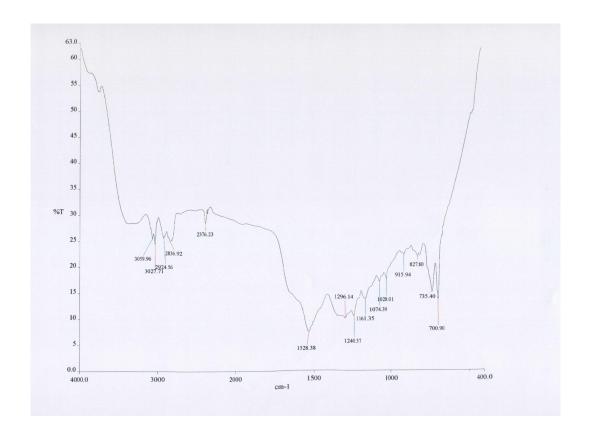




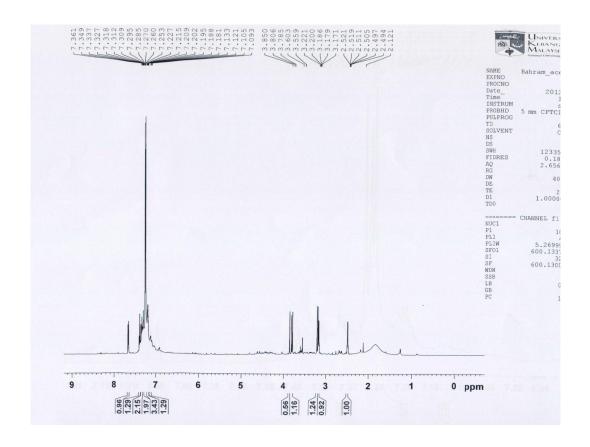
# ESI-MS<sup>2</sup> spectrum of 3



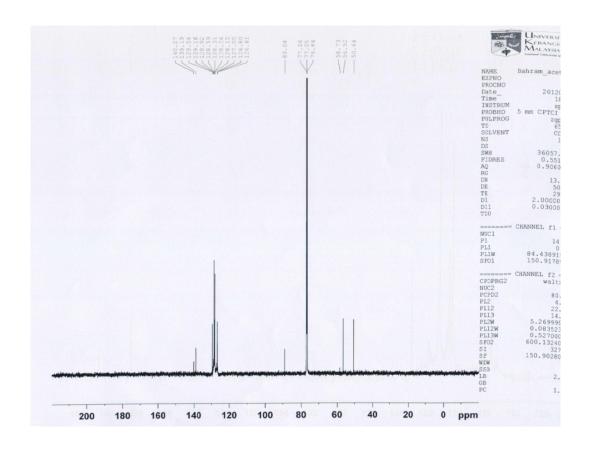
# FT-IR spectrum of 11



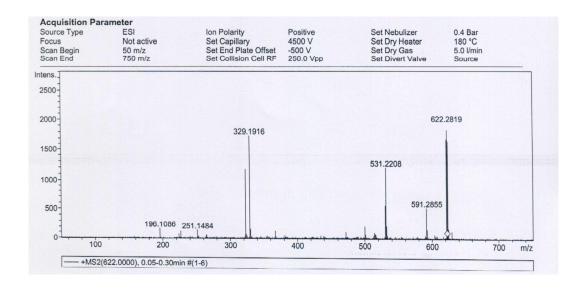
### <sup>1</sup>H-NMR spectrum of 11



### <sup>13</sup>C-NMR spectrum of 11



### ESI-MS<sup>2</sup> spectrum of 11



#### CYTOTOXICITY TEST REPORTS

### **Cytotoxicity Test of Paracetamol**



Makmal Bioserasi

Centre for Research and Instrumentation Management

#### **TEST REPORT**

STUDY REPORT NUMBER: MB-TC-04-D-45-12

Study Completion Date:

0 8 MAR 2013

**Title: TEST FOR CYTOTOXICITY** 

(MTT ASSAY)

#### **Paracetamol**

#### **Study Sponsor**

#### Prof. Dr. Mohamed Rozali Othman

Department of Chemistry, Faculty of Science and Technology, Universiti Kebangsaan Malaysia 43600 UKM Bangi Selangor, Malaysia.

#### **Testing Facility**

#### Makmal Bioserasi

**CRIM** 

Universiti Kebangsaan Malaysia 43600 UKM Bangi Selangor Malaysia.

**Study Director** 

Assoc Prof Dr Nor Fadilah Rajab

**Quality Assurance Personnel** 

Nurhafizah Zam

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- This report contains 13 pages.
- This test report concerns only the product being tested.

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#### 14.0 VERIFICATION

I the undersigned declare that the methods, results and data contained in this report faithfully reflect the procedures used and raw data collected during the study.

Assoc. Prof. Dr Nor Fadilah Rajab

Study Director

0 8 MAK 2013

Date

#### 15.0 QUALITY ASSURANCE INSPECTIONS STATEMENT

This study has been inspected by the Quality Assurance Personnel, and the findings have been reported to Study Director and Principal Investigator on the following dates:

Dates of Inspection	Procedures Inspected	Date Reported to Study Director & Principal Investigator
25 Feb 2013	Preparation of cell culture	6 Mar 2013
26 Feb 2013	Preparation of test material dilutions	6 Mar 2013
26 Feb 2013	Exposure of test material to cell culture	6 Mar 2013
5 Mar 2013	Data & Report	6 Mar 2013
6 Mar 2013	Data & Report	6 Mar 2013

Nurhafizah Zam

Numanzan Zam

Quality Assurance Personnel

0 8 MAR 2013

Date

### **Cytotoxicity Test of Product 11**



Makmal Bioserasi

Centre for Research and Instrumentation Management

### **TEST REPORT**

STUDY REPORT NUMBER: MB-TC-04-D-43-12

Study Completion Date:

0 8 MAR 2013

**Title: TEST FOR CYTOTOXICITY** 

(MTT ASSAY)

#### Aceta 1

#### **Study Sponsor**

#### Prof. Dr. Mohamed Rozali Othman

Department of Chemistry, Faculty of Science and Technology, Universiti Kebangsaan Malaysia 43600 UKM Bangi Selangor, Malaysia.

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4 Mar 2013	Data & Report	4 Mar 2013
5 Mar 2013	Report	5 Mar 2013

Nurhafizah Zam

Quality Assurance Personnel

0 8 MAR 2013

Date