



한국기초과학지원연구원
KOREA BASIC SCIENCE INSTITUTE

6-7, Incheon-ro 22-gil, Seongbuk-gu, Seoul, Korea,
Seoul, 136-701, KOREA

ICP-AES DATA SHEET

Date:2017.07.14

R#:SA-01306

To: Kim, Young Bok, Waters Co. Ltd

From: Korea Basic Science Institute, Seoul Center(Pages:1)

FAX: (02)6943-4108 TEL:(02)6943-4183 (4192)

Table 1. Concentration of Elements from total samples(ppm).

Sample	Ca	K	Mg	Na	Si	P	S
	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.	Conc.
Ace Bio Plus	2.875	28.776	2.230	60.35	0.760	1.866	5.245

- . Resolution: 0.005nm(UV) and 0.05nm(Visible)
- . detection limit: sub ppm
- . Samples were analyzed three times and averaged.

※ Any use of the results in this report for the purposes of propaganda, advertisement or for lawsuits is prohibited by law.



Record of test results

Registration No	SA-01306
Registration Date	2017-07-06

Applicant	Name	Young Bok Kim		Position	Manager	Tel.	82-10-9003-6597	
	Company	Waters Co. Ltd		Dept		Fax		
	Address	187, Aegibong-ro, Wolgot-myeon, Gimpo-si, Gyeonggi, Korea				E-mail	zerobok67@hanmail.net	
Proxy	Name			Tel.		E-mail		
Analysis Type	<input checked="" type="checkbox"/> General <input type="checkbox"/> CSR, Urgent <input type="checkbox"/> General, Urgent <input type="checkbox"/> Research Equipment Joint Use Project							
Test Details	Test Conductor	Yoon, Cheolho		Dept	Seoul Center		Position	Researcher
	Test Date	Jul. 14	Sample Name	Ace Bio Plus	Sample No.	1	Time Required	3hr
	Equipment Name	Inductively Coupled Plasma Atomic Emission Spectrophotometer					Code Name	SD311
	Test Conditions and Remarks							
	Test Results							
			Attached report					
Usage Fees	Member Status	General		Institution				
	Usage Fee							
	Details							
	Ca, K, Mg, Na, Si, P, S Elements							
1. When using data derived from equipment use, the user must record the name of the person conducting the test and the content of research (equipment used, test method, acknowledgement, names of co-authors, etc.) and must report the results to the KBSI. 2. Upon registration for the best membership program for joint use of advanced equipment which is operated by the KBSI (http://use.kbsi.re.kr) and submission of the acknowledged results, the results will be reviewed at the end of the year and various benefits (usage fee discount and other relevant information) will be provided. 3. Your comments and suggestions regarding the use of equipment are welcomed. Please access the "Online Feedback" section of the KBSI website (http://www.kbsi.re.kr), so that your experience may have a direct and positive bearing on the future operations of the KSBI. 4. Any use of the results in this report for the purposes of propaganda, advertisement or for lawsuits is prohibited by law.								

2017 09 04

President, Korea Basic Science Institute



To: Kim, Young Bok, Waters Co. Ltd

From: Korea Basic Science Institute, Seoul Center(Pages:2)



한국기초과학지원연구원
KOREA BASIC SCIENCE INSTITUTE

ICP-MS Data Sheet

Korea Basic Science Institute

Seoul Center

6-7 INCHON-RO 22 GIL, SUNGBUK-KU,

SEOUL, 02855, KOREA

TEL : (02) 6943-4193, FAX(02)6943-4109

E-mail: chyoon@kbsi.re.kr

Date : 2017.08.16

File I.D.:M170816-03

R#:SA-01313

Table 1. The concentration of trace elements in a water sample (ppb).

Sample ID	Ace Bio Plus
Elements	Conc.
Li	0.53
Be	<0.10
Al	30.67
Sc	0.90
Ti	6.12
V	0.76
Cr	1.08
Mn	<0.10
Fe	1.25
Co	<0.10
Ni	0.14
Cu	0.29
Zn	<0.10
Ga	0.15
Ge	<0.10
As	0.31
Se	<0.10
Rb	67.23
Sr	23.96
Y	<0.10
Zr	<0.10
Nb	0.12
Mo	3.41
Ag	0.11

Pd	0.12
Cd	<0.10
Sn	<0.10
Sb	0.79
Te	<0.10
Cs	0.72
Ba	0.99
La	<0.10
Ce	<0.10
Pr	<0.10
Nd	<0.10
Sm	<0.10
Eu	<0.10
Gd	<0.10
Tb	<0.10
Dy	<0.10
Ho	<0.10
Er	<0.10
Tm	<0.10
Yb	<0.10
Lu	<0.10
Hf	<0.10
W	2.62
Pt	<0.10
Au	<0.10
Tl	<0.10
Pb	<0.10
Th	<0.10
U	<0.10

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Record of test results

Registration No	SA-01313
Registration Date	2017-07-07

Applicant	Name	Young Bok Kim		Position	Manager	Tel.	82-10-9003-6597	
	Company	Waters Co. Ltd		Dept		Fax		
	Address	187, Aegibong-ro, Wolgot-myeon, Gimpo-si, Gyeonggi, Korea				E-mail	zerobok67@hanmail.net	
Proxy	Name			Tel.		E-mail		
Analysis Type	<input checked="" type="checkbox"/> General <input type="checkbox"/> CSR, Urgent <input type="checkbox"/> General, Urgent <input type="checkbox"/> Research Equipment Joint Use Project							
Test Details	Test Conductor	Yoon, Cheolho		Dept	Seoul Center		Position	Researcher
	Test Date	Aug. 16	Sample Name	Ace Bio Plus	Sample No.		Time Required	2hr
	Equipment Name	Inductively Coupled Plasma Mass Spectrometer					Code Name	SD313
	Test Conditions and Remarks							
	Test Results		Attached report					
Usage Fees	Member Status	General		Institution				
	Usage Fee							
	Details							
	Trace Elements							
<p>1. When using data derived from equipment use, the user must record the name of the person conducting the test and the content of research (equipment used, test method, acknowledgement, names of co-authors, etc.) and must report the results to the KBSI.</p> <p>2. Upon registration for the best membership program for joint use of advanced equipment which is operated by the KBSI (http://use.kbsi.re.kr) and submission of the acknowledged results, the results will be reviewed at the end of the year and various benefits (usage fee discount and other relevant information) will be provided.</p> <p>3. Your comments and suggestions regarding the use of equipment are welcomed. Please access the "Online Feedback" section of the KBSI website (http://www.kbsi.re.kr), so that your experience may have a direct and positive bearing on the future operations of the KSBI.</p> <p>4. Any use of the results in this report for the purposes of propaganda, advertisement or for lawsuits is prohibited by law.</p>								

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