EUROPEAN COMMISSION
JOINT RESEARCH CENTRE
Institute for Reference Materials and Measurements

CERTIFIED REFERENCE MATERIAL
BCR® – 304

CERTIFICATE OF ANALYSIS

HUMAN SERUM			
	Amount of substance concentration		Number of accepted sets of data p
	Certified value [1] [mmol/L]	Uncertainty [2] [mmol/L]	
Calcium	2.201	0.019	12
Magnesium	1.85	0.03	10
Lithium	0.985	0.029	12

1) Unweighed mean value of the means of p accepted sets of data, each being obtained in a different laboratory and/or with a different method of determination. The certified values are traceable to the SI.
2) The uncertainty is taken as the half width of the 95% confidence interval of the mean of means.

This certificate is valid for one year after purchase.

Sales date:

The minimum amount of sample to be used is 5 mL.

NOTE

This material has been certified by BCR (Community Bureau of Reference, the former reference materials programme of the European Commission). The certificate has been revised under the responsibility of IRMM.

Brussels, April 1986
Latest revision: November 2007

Signed: 

Prof. Dr. Hendrik Emons
Unit for Reference Materials
EC-JRC-IRMM
Retieseweg 111
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DESCRIPTION OF THE SAMPLE

The CRM is supplied in lyophilized form and equivalent to about 5.3 mL of serum. The lyophilized serum is kept under vacuum in rubber stoppered vails. The mass of lyophilized material in a vial is approximately 0.4 g. The residual water content is below 0.02 (mass fraction).

ANALYTICAL METHOD USED FOR CERTIFICATION

Flame atomic absorption spectrometry, Inductively coupled plasma atomic spectrometry, Isotope dilution mass spectrometry, Radiochemical neutron activiation analysis, Inductively coupled plasma mass spectrometry, Flame emission spectrometry.

PARTICIPANTS

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- University of Reading, Reading (GB)

SAFETY INFORMATION

This material has been tested for the presence of Hepatitis B surface antigen and for HIV1 antibodies and found negative. However, the material is of human origin and should be handled with adequate care. For in vitro analysis only.

INSTRUCTIONS FOR USE

To make it ready for use, the material has to be reconstituted according to the procedure described in section 11 of the certification report.

STORAGE

Upon arrival the material shall be stored at 4 °C for no more than 12 months until use.
However, the European Commission cannot be held responsible for changes that happen during storage of the material at the customer's premises, especially of opened samples.

LEGAL NOTICE

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NOTE

A technical report on the production of BCR®-304 is available on the internet (http://www.irmm.jrc.be). A paper copy can be obtained from IRMM on request.

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