Xell is now part of Sartorius	Waldweg 21 33758 Schloss Holte- Stukenbrock	Analysis Report
Date: 13.01.2022 Edition: 02		AR-Youth&Earth-2022-01

Project	Youth & Earth - Polyamines	
Order	23.12.2021	
Customer	Youth & Earth	
Author	Dr. Tim Steffens	
Responsible lab staff	Alina Köhler	
Sample reception	05.01.2022	
Date of analyses	11.01.2022 - 25.01.2022	

## 1 Samples

Number	Sample	Sample amount	Sample storage
1	CEUTICS Buckmidine	1 Aligout	RT
	(TSB202135002)	1 Angout	

ID code: V-XELL-AN-046 V.06 Page 1 of 3

Xell is now part of Sartorius	Waldweg 21 33758 Schloss Holte- Stukenbrock	Analysis Report
Date: 13.01.2022 Edition: 02		AR-Youth&Earth-2022-01

## 2 Polyamine analysis by LC-MS/MS

Prior to the sample preparation, polyamine extraction as described by Minocha *et al.*, 1994, was performed. The amount depicted in Table 1 was used for extraction.

The depicted results were obtained by LC-MS/MS measurements on an Agilent 1290 UHPLC system coupled to an Agilent 6470 Triple Quadrupole system after derivatization of amino groups. System Suitability Tests (SSTs) were measured along with the samples to verify the calibration.

The amount depicted in Table 1 was used for hydrolysis. Concentrations were calculated to mg of polyamines per g of sample. Sample preparation was considered during calculations.

Table 1: Amount of sample used for extraction.

Sample number	Sample name	Sample amount (mg)
1	CEUTICS Buckmidine	1000

Xell is now part of Sartorius	Waldweg 21 33758 Schloss Holte- Stukenbrock	Analysis Report
Date: 13.01.2022 Edition: 02		AR-Youth&Earth-2022-01

Table 2: Polyamine concentrations as measured by LC-MS/MS.

Sample number	Sample name	Concentration (mg/g)		
		Putrescine	Spermidine	Spermine
1	CEUTICS Buckmidine	0.09	3.83	0.04